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## Affective polarization and the salience of elections

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### Abstract

In this paper we analyze the effects of election salience on affective polarization. Campaigns and elections epitomize the moment of maximum political conflict, information spread, mobilization, and activation of political identities and predispositions. We therefore expect that affective polarization will be higher just after an election has taken place. By the same token, as elections lose salience, affective polarization will diminish. We analyze this question using CSES data from 99 post-electoral surveys conducted in 42 countries between 1996 and 2016. Our identification strategy exploits variation in the timing of survey interviews with respect to the election day as an exogenous measure of election salience. The empirical findings indicate that as elections lose salience affective polarization declines. The paper further contributes to the debate on the origins of affective polarization by exploring two mechanisms that may account for this relationship: changes in ideological polarization and in the intensity of party identification. Both are relevant mediators, with ideological polarization seemingly playing a more important role.

**Keywords:** Affective polarization; Elections; Ideological polarization; Partisanship; Salience; Attitudes;

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## Introduction

Affective polarization has become one of the main concerns for the health and quality of contemporary democracies. Feelings of dislike towards political parties other than the preferred one (i.e. affective polarization) appear to be acutely present in most countries (Reiljan, 2019). Attempts to explain apparently unprecedented increases in inter-party hostility in some countries, such as the US, consider this a consequence of complex social processes such as the expansion of social media (Barberá, 2015), increasing media incivility (Mutz, 2015), negative campaigning (Iyengar, Sood, & Lelkes, 2012) or growing inequality (Gidron, Adams, & Horne, 2019). In this paper, we take a different stand and explore the short-term temporal dynamics that drive affective polarization. We argue that affective polarization is partially the consequence of electoral dynamics that are inherent to democracy. Because elections heighten and increase the visibility of political conflict and activate partisan identities (Michelitch & Utych, 2018), we expect that election salience will lead to higher levels of affective polarization.

We analyze this question drawing on data from 99 post-electoral surveys conducted in 42 countries between 1996 and 2016 through the Comparative Study of Electoral Systems (CSES). Our identification strategy exploits variation in the timing of survey interviews with respect to the election as an exogenous measure of election salience (for a similar approach see Singh & Thornton, 2019). The empirical findings indicate that as elections lose salience, affective polarization declines. After an election has taken place the degree of interparty animosity progressively decreases, at least up to nine months after citizens casted their votes. Our analysis also explores the role of two mechanisms that have been related to increasing levels of affective polarization: stronger partisan identities and ideological polarization. We find that the relationship between election salience and

affective polarization is mediated by both mechanisms, but changes in ideological polarization seem to slightly more relevant than changes in party identification in order to explain the effects of election salience on affective polarization.

These findings provide valuable comparative evidence about the mechanisms that drive changes in affective polarization in advanced democracies, at least in the short-term. Therefore, our analysis contributes to the understanding of the nature of affective polarization, which is, in part, a byproduct of the electoral dynamics that are inherent to democracies. These dynamics activate strong partisan identities and make political options be perceived as ideologically differentiated, which ultimately lead to higher levels of polarization. Importantly, at the same time, our findings indicate that levels of affective polarization can also be significantly reduced in short span of time after an election has taken place. These results, showing how individuals depolarize after elections, are aligned with recent findings about how citizens become more polarized during election campaigns (Hansen & Kosiara-Pedersen 2017). However, it is still an open question whether the process of post-electoral depolarization that we uncover in this paper allows to compensate for the increases in polarization that we might observe during election campaigns.

## Theory

### *Election salience and affective polarization*

Increasing affective polarization is considered to be one of the main challenges faced by contemporary democracies (Dryzek et al., 2019; Gidron et al., 2019; McCoy & Somer, 2019). Citizens seem to be increasingly prone to profoundly dislike the parties they do not identify with, which puts a strain in the pluralistic values of respect for diversity that democracies are expected to protect and promote.

The question has been researched extensively in the US, where the increasing trend of affective polarization is well documented (Iyengar et al., 2012; Lelkes, 2016; Westwood, Iyengar, Malhotra, Lelkes, & Levendusky, 2018). In a broader comparative perspective, though, it is harder to find evidence of such an increasing trend (but see Boxell et al. 2020 and Reiljan, 2019). Efforts outside the US concentrate on the conceptualization and measurement of polarization in multiparty systems (Lauka, McCoy, & Firat, 2018; Reiljan, 2019; Rodden, 2019; Wagner, 2019), and on the analysis of case studies (see the special issue of *American Behavioral Scientist*, 2018, Vol. 62, No. 1). Only a few works have analyzed and attempted to explain affective polarization adopting a broad comparative perspective (Gidron et al., 2019; Reiljan, 2019), and in those cases the cross-national dimension seems to be privileged over the longitudinal one. The evidence available is still limited to provide a compelling account of whether today we live in societies with higher levels of affective polarization than ever before.

However, beyond a potential monotonic increase in polarization, there are other facets of the temporal dynamics of affective polarization that should be considered. Whether or not affective polarization varies along time in response to specific contextual situations gives us a sense of the extent to which it may respond to structural factors and hence become itself a stable characteristic of some party systems, or rather, whether it fluctuates in response to specific short-term political situations and events.

With this dynamic perspective in mind, affective polarization may be expected to increase at different moments in time. Specifically, we expect affective polarization to be higher at those times when political conflict is particularly salient, the richness of the information environment peaks, and political predispositions are being activated by political entrepreneurs. A context that is clearly characterized by these features are election

campaigns. In addition, the use of negative campaign strategies, which should reinforce political conflict during campaigns, seems to be expanding (Nai, 2018). Social media and online content also exacerbate party identities by increasing the emotional load of political messages and partisan appeals on days close to election day (Aragón, Kappler, Kaltenbrunner, Laniado, & Volkovich, 2013), and by reinforcing online interactions among co-partisans (Gruzd, 2014). After such intense political moments (i.e. when the election campaign has finished), affective polarization is expected to decline. As elections lose salience after the campaign, individuals' animosity towards other parties should decline.

In most democracies, elections epitomize the moment of maximum political conflict, information spread, mobilization, and activation of political identities and predispositions. Previous studies have shown how elections and campaigns lead to higher levels of partisanship (Grant, Mockabee, & Monson, 2010; Michelitch & Utych, 2018; Singh & Thornton, 2019) and political information (Ferrín, Fraile, & García-Albacete, 2019; Freedman, Franz, & Goldstein, 2004). However, there remains a paucity of evidence on the effect of the salience of elections on affective polarization. Although recent research is indicative in this direction (see Hansen & Kosiara-Pedersen 2017 study showing an increase in Danes polarization before elections), it is not yet clear whether and to what extent elections promote affective polarization. This is an important question because, while party attachments or political information are considered as indicators of a healthy democratic political system, affective polarization tends to be considered as highly problematic.

The key question is whether we can have the desirable consequences of elections (citizens with well-informed and clear political preferences) without the less desirable ones (citizens that have both strong positive in-group affects and strong negative out-group

affects). We propose that affective polarization is a predictable outcome of election salience, as campaigns and elections provide the necessary ingredients for citizens to develop not only informed policy preferences, but also greater political animosity towards parties and candidates of the opposite camp. We hence expect to find a *positive effect of election salience on the levels of affective polarization (H1)*.

The connection between election salience and affective polarization confronts us with a paradoxical situation. The very institution that lies at the core of liberal democracy (competitive free elections) becomes also a source of a strain for democratic politics by promoting affective polarization. This is why it is important to understand which are the mechanisms that might drive the expected increase in affective polarization as a result of elections and election salience.

#### *Mechanisms: partisan identities and ideological polarization*

By focusing on the consequences of the salience of elections on affective polarization we are able to elaborate on the micro-level mechanisms that may be at work and mediate the effects of election salience on affective polarization. The burgeoning literature on affective polarization offers two main explanations for the apparent rise in inter-party animosity (see Lelkes, 2019; Westwood et al., 2018). While some argue that affective polarization can be linked to the increasing relevance of partisanship as a social identity (Iyengar et al., 2012), others contend that polarization is the consequence of rising political extremism and ideological divides between parties and elites (Rogowski & Sutherland, 2016).

Affective polarization may, first, be the result of stronger partisan identities, which are, in turn, expected to strengthen as a result of election salience (Michelitch & Utych,

2018; Singh & Thornton, 2019). This theory of affective polarization considers partisanship as an essential social identity that should drive changes in affective polarization. This explanation for affective polarization is related to the social identity theory of partisanship (Huddy, Mason, & Aarøe, 2015), that considers partisanship as a long standing expressive identity rather than as an attitude based on the performance or issue positions of parties. Iyengar et al. (2012) shifted the focus from policy or ideological polarization to affective polarization precisely emphasizing the importance of partisanship as a social identity that requires both the definition of an in-group and an out-group. The process of social and partisan sorting that has taken place in the US has paved the way to the definition of clear in-groups/out-groups that eventually generate higher levels of inter-party animosity (Mason, 2018). Increasing social homogeneity among the voters of parties, and a greater alignment of partisan and social identities, lead to more emotionally reactive and affectively polarized voters (Mason, 2016). The US case, therefore, suggests that the key explanatory element behind increasing affective polarization is related to an increasing relevance of party identification considered as a social identity (Abramowitz & Webster, 2016, 2018; Abramowitz & McCoy, 2019; Klar, 2018).

This process of partisan sorting is quite peculiar to the US, but we do not know if the same social identity mechanism can be generalized to other countries that, rather than sorting, are currently experiencing processes of partisan dealignment, realignment or detachment (Kitschelt & Rehm, 2015). In any case, in as far as the social identity theory is applicable from a comparative perspective (Bankert, Huddy, & Rosema, 2017), we would expect that partisan identities would be activated as elections become salient. In fact, Michelitch & Utych (2018) comparative study has shown how partisanship fluctuates during the election cycle, with citizens attachment to their preferred party being stronger

just before and after elections (see also Singh & Thornton, 2019). Therefore, *party identification is expected to mediate the relationship between election salience and affective polarization (H2)*. That is, election salience might exacerbate affective polarization by strengthening the attachment individuals' feel towards their in-group (their preferred party).

An alternative, but not necessarily incompatible, explanation of the origins of affective polarization locates the focus of attention on ideological differences. From this perspective, polarization would arise from the perception of increasing ideological differences between political parties. In the US, the extent to which ideological mass polarization has increased remains a matter of controversy (Fiorina & Abrams, 2008). From a comparative perspective most studies have focused on analyzing cross-country variation (Dalton, 2006), and findings about the longitudinal trends in ideological polarization are mixed (Dalton, 2008; Schmitt & Freire, 2012). But even if a clear upward polarization trend has not been identified, survey experiments have found that ideological polarization partially accounts for increasing levels of affective polarization in the US (Rogowski & Sutherland, 2016). In fact, ideological differences between candidates seem to be more important for affective polarization than partisanship (Lelkes, 2019). Beyond the US case, the emergence and success of new (and populist) parties with ideologically extreme positions (Kriesi & Pappas, 2015) would lead us to think that the ideological polarization brought into the system by these parties can be an important trigger of affective polarization (Mudde & Kaltwaser, 2018: 16-17).

We argue that perceptions about the ideological differences between parties become more visible as the salience of elections increases. During election campaigns citizens are more likely to learn about the “brand” that parties represent and where those stand on

different issues (Arceneaux, 2006; Lupu 2013: 8). These heightened perceptions about the ideological differences between parties might, therefore, account for increasing levels of affective polarization during election time. Under an assumption of vote maximization, parties often have an incentive to emphasize their ideological identities and programmatic differences in order to attract voters during campaigns. Moreover, even if parties do not directly campaign on their policy discrepancies, for most citizens these should become more apparent than ever during the pre-election and campaign periods (Arceneaux, 2006). We therefore expect that *ideological polarization will mediate the relationship between election salience and affective polarization (H3)*. By increasing ideological polarization, election salience is expected to increase affective polarization.<sup>1</sup>

## **Data and identification strategy**

To test these hypotheses, we draw on data from the CSES Integrated Module Dataset (IMD), complemented with data from CSES modules 1-4. The IMD includes data from 174 post-electoral surveys fielded in 59 countries. In our analyses, we rely on data for 99 of these post-electoral surveys. We exclude those post-election studies conducted in non-democratic countries,<sup>2</sup> those for which there is no data for at least one of the variables considered in our analyses, and those that present no variation in the timing of survey interviews.<sup>3</sup> The resulting dataset includes data for parliamentary/legislative and

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<sup>1</sup> Note that, although our measure of ideological polarization more closely captures the symbolic aspect of the left-right dimension, the argument applies to substantive ideology as well as to ideology as an identity marker (Malka & Lelkes 2010; Vegetti & Sirinić 2019).

<sup>2</sup> Countries with a value lower than 6 in the Polity IV index at the time (year) of the election.

<sup>3</sup> In 11 election studies there is no variation in our key independent variable, i.e. the timing of interviews after election day. Apparently, all survey interviews were conducted during one single day in these studies.

presidential elections held between 1996 and 2016 in 42 countries.<sup>4</sup> Figure A1 in the Appendix provides further information about the elections and countries considered in this paper.

To measure affective polarization at the individual-level we rely on the measures developed by Wagner (2019), which are based on the 0-10 like-dislike scores each respondents assigns to each of the parties considered in the CSES. This indicator has the advantage of being widely available for a large number of elections and of being a suitable measure of this type of polarization in multiparty contexts. While this indicator takes parties as objects, and hence does not distinguish whether this like-dislike attitudes relate to party elites or voters, Druckman and Levendusky (2019) find that affective polarization seems to reflect mostly perceptions of party elites.

Wagner proposes two different approaches to operationalize affective polarization: a measure based on the spread of like-dislike scores for all the parties (*spread* measure), and a measure based on the distance from the most liked party to all other parties in the party system (*distance* measure). In this paper, we privilege the former. The spread measure is more applicable to multiparty systems, which are more common in our sample (Wagner, 2019). In any case, we also replicate all of our analyses using the alternative *distance* measure (see Appendix C for further information about the operationalization of the distance measure and the results obtained through this alternative operationalization).

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<sup>4</sup> The average Polity IV score of the countries included in the sample is 9.38. In 81.82 percent of the elections analyzed voting was not compulsory, in 9.09 percent it was compulsory but it was not sanctioned, and in 9.09 percent it was compulsory and enforced. The electoral formula in these elections was: plurality in 13 percent, majority in 66 percent, and proportional in 21 percent.

The spread measure is operationalized as the weighted average party like-dislike difference relative to each respondent's average party like-dislike score. Following Wagner's (2019) notation, the equation for parties  $p$  and voter  $i$  is as follows:

$$SPREAD_i = \sqrt{\sum_{p=1}^P v_p (like_{ip} - \overline{like}_i)^2} \quad (1)$$

where  $like_{ip}$  is the like-dislike score assigned to a given party  $p$ , and  $v_p$  is the vote share for each party (normalized to range between 0 and 1).<sup>5</sup>

The mean of affect  $\overline{like}_i$  is also weighted so that it reflects party size. The  $\overline{like}_i$  parameter is therefore calculated as follows:

$$\overline{like}_i = \sum_{p=1}^P (v_p * like_{ip}) \quad (2)$$

The resulting measure has a theoretical range from 0 to 10, with higher values indicating higher levels of affective polarization. In our sample the spread index ranges between 0 and 7.6, and the average and standard deviation are 2.4 and 1.1, respectively (see Wagner (2019) for further details about the calculation of this measure). The two countries with the lowest average levels of affective polarization in our sample are Taiwan and the Netherlands, while the two countries with the highest levels are Hungary and Romania.

To operationalize the salience of elections we exploit individual-level variation in the timing of survey interviews after election day (see Singh & Thornton (2019) for an application of this identification strategy to the study of party identification). One could directly operationalize the salience of elections across countries and elections by measuring

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<sup>5</sup> The vote share of each party in the lower house is taken from the election of the CSES survey. However, the IMD does not provide information on the vote shares of parties in the lower house. We have, therefore, incorporated this data to the IMD drawing on data from CSES modules 1-4. Country-elections for which data on the vote shares of parties in the lower house is not available in the corresponding CSES module are excluded from the analyses. This implies that CSES post-electoral surveys fielded after a presidential election that was not held concurrently with a legislative/parliamentary election are excluded.

the degree of competitiveness of a given election, the level of partisan conflict during the campaign, or the campaign tone. However, these measures are likely to be endogenous to the levels of affective polarization in each country and election. In this paper, instead, we use the number of days that passed between the election day and the day when each respondent was interviewed as an exogenous measure of the salience of elections.<sup>6</sup> We assume that as time passes since the day citizens went to the polls, elections and electoral competition will become less salient (Singh & Thornton, 2019). As time goes by, people will lose interest, the media will devote less time to politics, and the levels of partisan conflict will decrease. To illustrate this point, Figure A2 in the Appendix shows how the relative number of Google searches about the main national political parties and candidates sharply decrease after election day in multiple countries. It seems clear that right after election day most citizens lose interest in political competition. While the decline in Google searches is quite pronounced on the day just after the election, we expect that, many times, elections and partisan competition will lose salience in a more gradual way. Many times, elections are followed by transition periods that last a few months (e.g. in the US) or coalition bargaining that might take even longer (e.g. in Belgium). Therefore, during this post-election period the media will still pay some significant attention to political competition, although this media attention, as well as people's interest on it, should be less intense than during the campaign period. In any case, the decline in election salience might be more pronounced soon after the election than months later (Singh & Thornton, 2019).

This identification strategy hinges on the assumption that the timing of survey interviews is independent from potential outcomes of affective polarization. That is, that

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<sup>6</sup> In countries with two election rounds we measure the number of days between the second-round election day and the day when each respondent was interviewed.

those interviewed early and late during the survey fieldwork are comparable, so that any differences we might find in levels of affective polarization can be attributed to variation in election salience. For this to be the case, assignment of the day at which each respondent is interviewed should be *as good as random*. However, in most surveys this is an assumption that is unlikely to hold unless one makes further adjustments (Muñoz, Falcó-Gimeno, & Hernández, 2020).

First, as shown in Figure A3 in the Appendix, the timing of survey interviews after elections varies considerably across countries and elections. While in some election studies all respondents are interviewed a few days after election day, in some other studies most respondents are interviewed months after the election. Since this variation in the starting date and the duration of the survey fieldwork across studies might be related to contextual differences that could, in turn, influence affective polarization, we conduct all our analyses through hierarchical models that include country-election random-intercepts for each CSES post-electoral survey.

Second, some respondents are more elusive to interviewers and require greater time and effort to be reached for a survey interview (Muñoz et al., 2020). This might generate differences in the characteristics of those interviewed early and late during the fieldwork. To check for this possibility, we fit a series of hierarchical models that regress the time at which each respondent was interviewed on covariates known to affect the *reachability* of respondents.<sup>7</sup> The models, summarized in Figure 1, indicate that there are some differences between those interviewed early and late during the fieldwork.<sup>8</sup> For example, those who are

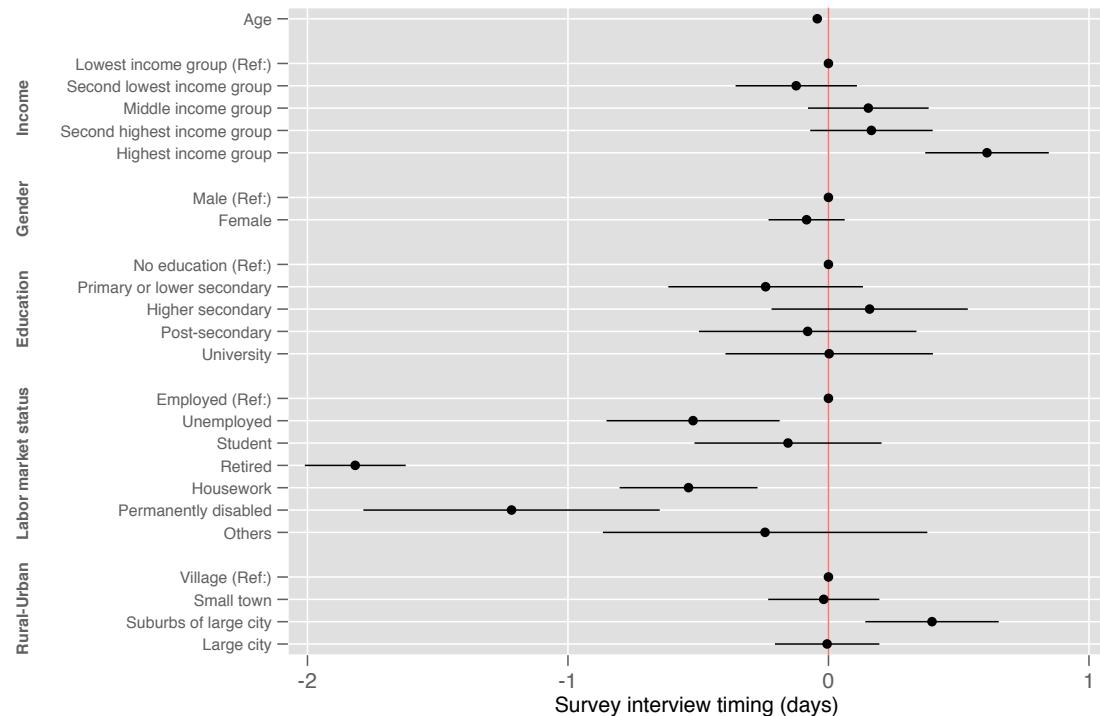
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<sup>7</sup> All these models are estimated through mixed-effects linear models with country-election random intercepts. We estimate one independent model for each of the covariates.

<sup>8</sup> All figures in the main text and appendixes were generated using the *plotting* Stata schemes (Bischof, 2017)

older and out of the labor market are more likely to be interviewed earlier during the fieldwork. While the differences in the timing of interviews are small (e.g. those who are retired are interviewed, on average, just 2 days earlier than those who are employed) in all our models we control for all these respondents' characteristics. It is much more plausible to assume that the timing of interviews is orthogonal from potential outcomes once we account for country-election differences and the characteristics of respondents related to their *reachability*.

**Figure 1: Respondents' characteristics and timing of survey interviews (95% confidence intervals)**



To analyze the mechanisms linking election salience and affective polarization we rely on measures of party attachment and ideological polarization. Party attachment is operationalized through a direct question that asks respondents how close they feel to the party they identify with. The variable ranges from 0 to 3, with 0 indicating that the

respondent does not identify with any party and 3 indicating that the respondent feels very close to that party. Measures of partisan identity that better tap into identity importance and sense of group belonging (see for instance Huddy et al 2015) would have been better if available. Our indicator is likely to lead to poorer predictions (Bankert, Huddy and Rosema, 2017), which in any case would run against our hypothesis. If our mediation hypothesis holds for our measure of party attachments, it should hold as well for measures of party identity. The measure of ideological polarization is based on each respondent placement of each of the parties included in the CSES on the 0-10 left-right scale. Like Wagner (2019), we estimate individual-level ideological polarization following the operationalization of affective polarization. That is, in equation (1) we substitute  $like_{ip}$  and  $\overline{like}_i$  with  $position_{ip}$  (the position assigned to a given party  $p$  by individual  $i$  in the 0-10 left-right scale) and  $\overline{position}_i$  (the weighted mean left-right position of all the parties positioned by each respondent).<sup>9</sup>

Our main analyses are based on hierarchical linear models with country-election random intercepts. To facilitate the interpretation of the results we rescale numeric covariates (*time since election day* and *age*) by subtracting their mean and dividing them by two times their standard deviation. By doing so the magnitudes of the coefficients for these covariates are comparable among themselves and to untransformed categorical predictors (Gelman, 2008). To analyze the mechanisms linking election salience and affective polarization we fit a series of generalized structural equation models.

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<sup>9</sup> Further details about the coding and distribution of all variables can be found in Table A2 in the Appendix. Moreover, Table A1 in the Appendix summarizes the correlation between all the variables.

## Results

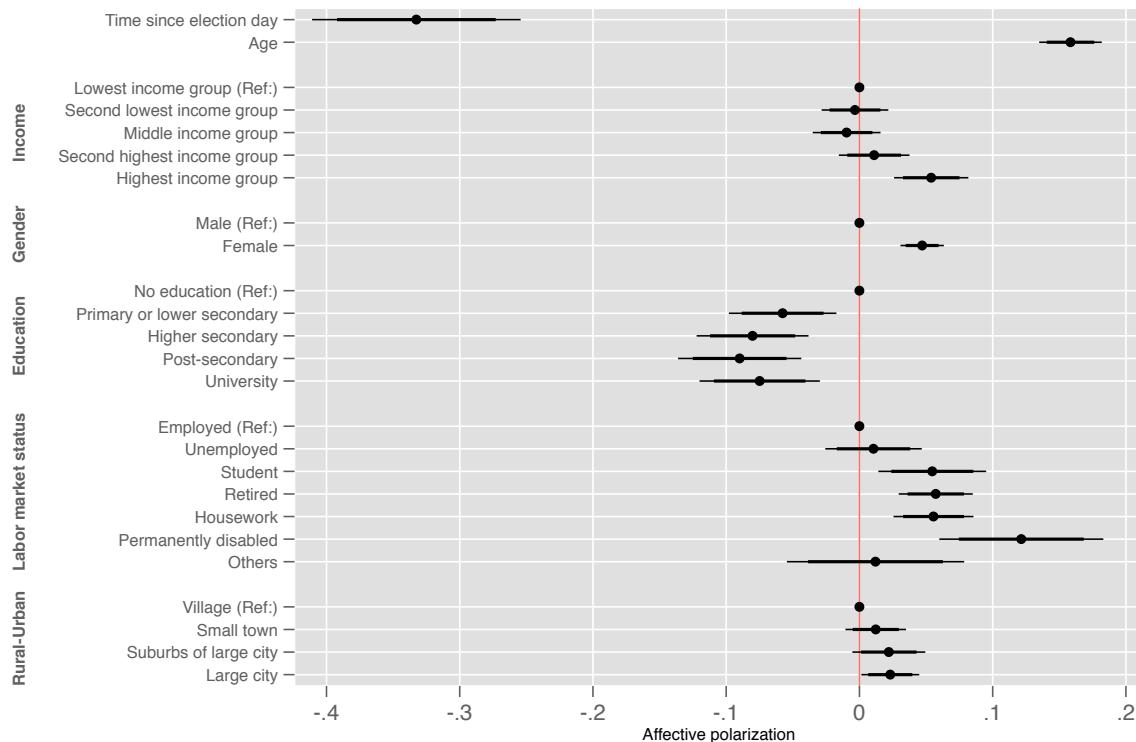
To test our hypotheses, we begin by analyzing the effect of election salience on individuals' levels of affective polarization. Figure 2 summarizes the results of a hierarchical linear model with country-election random intercepts in which affective polarization is regressed on the time that has passed since election day, as well as all the covariates reported in Figure 1. Consistent with our theory, the results indicate that time since election day has a significant negative effect on affective polarization. As we move away from the day the election was held citizens become less affectively polarized. A change in two standard deviations in the variable measuring the days since the election (equivalent to a change of approximately 125 days) reduces the levels of affective polarization by 0.33 points, on average.<sup>10</sup> Therefore, approximately 4 months after the election, individuals' levels of interparty animosity are substantially lower than just after the election campaign. Judging by the comparison with the other covariates included in the model, the effect of the reduction in election salience on affective polarization is substantial. For example, a two standard deviation change in age is just associated with a 0.16 increase in affective polarization. Similarly, the difference in affective polarization between the least and most educated just amounts to 0.07 points. Using a non-parametric model, which makes no assumption about the functional form of the relationship between the time since the election and affective polarization, also leads us to conclude that the reduction in election salience

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<sup>10</sup> To assess whether this finding might be driven by particular observations (countries or elections), in Appendix B we replicate all our models excluding one country at a time (Figure B2) and one election at a time (Figure B3). These robustness checks indicate that the findings are not driven by a particular observation. The effect of election salience ranges from -0.35, when all the Danish and UK elections are excluded, to -0.31, when all the German elections are excluded. Similarly, when focusing on particular elections, the effect of election salience ranges between -0.35, when the 2015 UK election and the 2007 Danish elections are excluded, and -0.32, when the 2013 Australian, 2013 German, 2002 Hungarian, 1997 Norwegian, 2004 Romanian, and 2002 Swedish elections are excluded.

as we move away from election day has a substantial negative effect on affective polarization.<sup>11</sup> Using this alternative modelling strategy, the estimated average marginal reduction in affective polarization for a two standard deviation change in the time since election day variable is 0.62 points.<sup>12</sup>

**Figure 2: Summary of results**



*Note: Figure 2 summarizes the results from Model 2 of Table B1 in the Appendix. The model is estimated with country-election random intercepts. The model includes 99 elections and 116,027 individuals. Thick and thin lines represent 95 and 99 percent confidence intervals, respectively.*

<sup>11</sup> The estimation is based on a non-parametric series regression model, which includes all the covariates summarized in Figure 1 and country-election fixed effects. Further details about this model can be found in Tables B1-B2 in Appendix B.

<sup>12</sup> Figure B5 in the Appendix summarizes the results obtained through a quantile regression that estimates the effect of the time since election day variable on affective polarization at different points (quantiles) of the distribution of affective polarization. The results indicate that there is no significant variation on the estimated effect at different quantiles of the distribution of affective polarization. That is, the effect of time since election day on affective polarization is similar independently of the level of polarization.

While these results indicate that affective polarization diminishes as the salience of elections declines, we do not know whether this reduction in interparty animosity is driven by an improvement in the evaluation of people's previously disliked parties or, instead, by a decrease in people's positive evaluation of previously liked parties. In the absence of individual-level panel data it is not possible to analyze how the evaluations of the same individual change through time. However, we can examine this question by analyzing how the evaluations of respondents' most and least liked parties change as the salience of elections declines. For this purpose, we specify two additional hierarchical linear models in which the highest and the lowest party evaluations of each respondent are regressed on the time that has passed since election day, as well as all the covariates reported in Figure 1. The results (summarized in models 1 and 2 of Table B3 in Appendix B), indicate that the reduction in affective polarization is driven both by an improvement in the evaluations of the least liked parties, as well as a reduction in the extent to which respondents evaluate positively the party they like the most. A change in two standard deviations in the variable measuring the days since the election increases the evaluation of the least liked parties by 0.38 points and reduces such evaluation of the most liked parties by 0.45 points.<sup>13</sup> For the former this implies a change equivalent to 0.21 standard deviations in the variable measuring the evaluation of the least liked parties, while for the latter this change is equivalent to a decrease in 0.23 standard deviations in the variable measuring the evaluation of the most liked parties. This decomposition of the effects of election salience,

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<sup>13</sup> Using the natural logarithm of the variable measuring the days since the election leads to the same conclusion (models 5 and 6 of Table B2 in Appendix B). In fact, when using the log transformed variable the size of the positive/negative effect of election time is exactly the same for the two dependent variables. Models 3 and 4 of Table B3 in Appendix B also include a quadratic term of the days since the election. The results indicate that while the effect of days since the election on the extent to which respondents like their preferred parties is linear, this is not the case for the improvement in the evaluations of the least liked parties.

indicates that the reduction in affective polarization appears to be caused both by people lowering their evaluation of their preferred parties, as well as by an improvement of their evaluations of their least-liked parties.

To gain further insight into the effects of election salience on affective polarization, Figure 3 plots the predicted levels of affective polarization as a function of the days after election day when respondents were interviewed, using a model that includes the quadratic term of the days since the election as an additional covariate. The figure reveals that we find the highest levels of polarization just after election day, with citizens becoming less affectively polarized as times goes by.<sup>14</sup> However, this effect is not linear. Just after the election, we see the sharpest decrease in affective polarization. At this point, a two standard deviation increase in the time since election day variable leads, approximately, to a 0.44 reduction in the level of affective polarization. However, as we move away from the day citizens casted their ballots, the effect of the passage of time weakens. For example, five months after the election an equivalent change in the time since election day variable just leads to a 0.20 reduction in affective polarization, and approximately 276 days after the election there is no longer decrease in affective polarization. Overall, though, the pattern depicted in Figure 3 clearly indicates that affective polarization declines as elections lose salience. Approximately nine months after the election the average levels of affective polarization have been reduced by 0.44 points (from 2.50 to 2.06). This reduction is equivalent to a change of 0.40 standard deviations in the affective polarization index. We reach a similar conclusion using the log transformation of the variable measuring the time since election day. Using this alternative operationalization, we estimate a reduction of 0.42

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<sup>14</sup> The plot was generated using the *marhis* Stata command (Hernández, 2016)

points in the levels of affective polarization, from 2.61 just after the elections to 2.19 almost one year after the election (see Model 4 in Table B1 and Figure B1 in the Appendix).

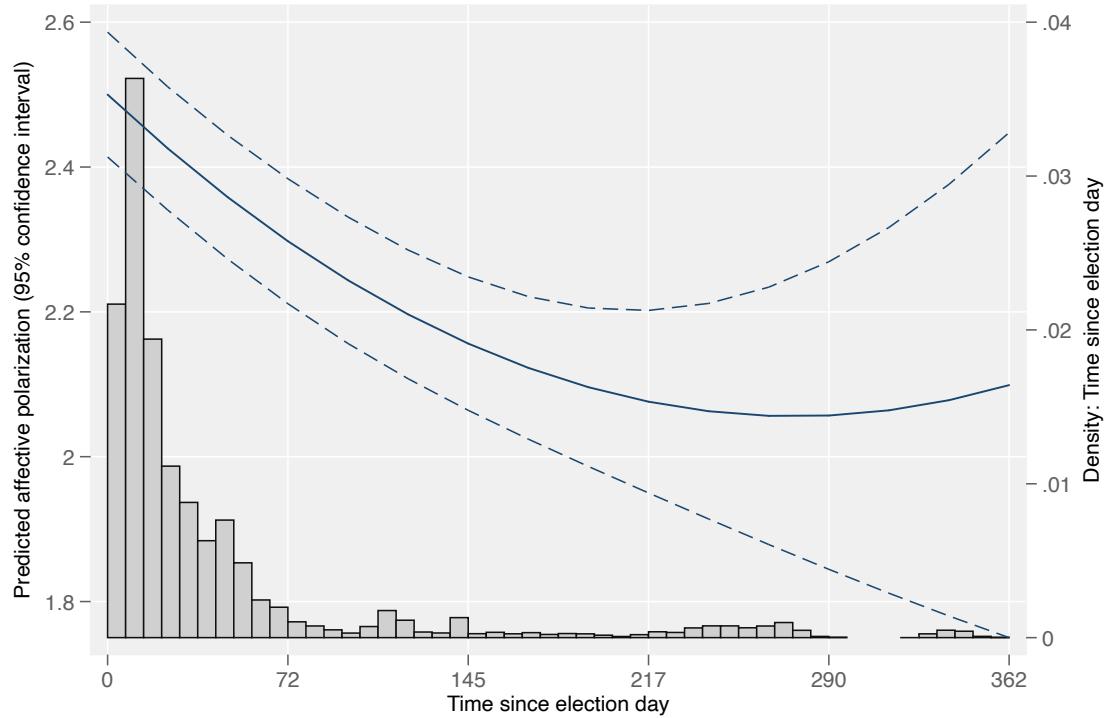
Therefore, as elections lose salience citizens progressively depolarize. These results provide support for our first hypothesis, albeit with a caveat. Interparty animosity clearly decreases as we move away from the day citizens went to the polls, although it appears to stabilize around nine months after the election.<sup>15</sup>

We now turn to analyze whether and how ideological polarization and positive party identification mediate the relationship between election salience and affective polarization. For this purpose, we fit a multilevel generalized structural equation model. This model includes country-election random intercepts for the equation predicting the outcome variable (affective polarization), as well as for each of the mediators' equations predicting ideological polarization and party attachment. Moreover, the equations predicting the outcome variable and each of the mediators also include all the covariates reported in Figure 1. The full results of this generalized structural equation model can be found in Table B4 in the Appendix.

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<sup>15</sup> To further assess the robustness of this conclusion we have conducted a sensitivity analysis that involves re-estimating the main model using multiple restricted windows of days after the election. This allows us to analyze whether the observations at different points of the distribution of the time since election variable might be driving the results and/or bias the estimation. Specifically, we have estimated 356 models, starting with the full sample and reducing one day after the election in each subsequent model, until reaching a final model that only includes individuals interviewed 10 days after the election (we consider a minimum of ten days, since that means that at least 25 percent of the sample is always included in the estimation). The results of these analyses, summarized in Figure B4 in Appendix B, indicate that, independently of the number of days after the election included in the estimation, there is always a negative effect of the time since election day on affective polarization. However, this effect is stronger when the estimation only includes the period of time closer to the election (although in this case the estimate of the effect of the salience of elections is less precise due to the smaller number of observations considered).

**Figure 3: Time since election day and affective polarization**

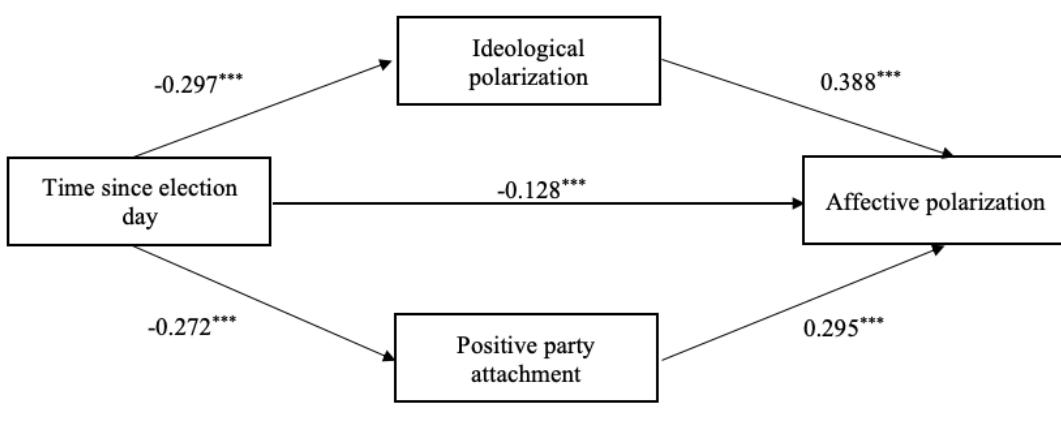


*Note: Based on Model 4 of Table B2 in the Appendix. The histogram in the background summarizes the distribution of the variable measuring the number of days that passed between the election day and the day when each respondent was interviewed.*

Figure 4 summarizes the main results of this model. The coefficient for the direct effect of election timing on affective polarization indicates that, when accounting for the influence of ideological polarization and positive party attachment, the direct effect of the time since the election day shrinks from 0.33 points (see Figure 2) to 0.128 points. At the same time, Figure 4 indicates that, as elections lose salience, citizens become less ideologically polarized and less strongly attached to political parties. This is the first requirement for these variables to effectively mediate the effects of election salience on affective polarization. It is worth pointing that, comparing these results with those for affective polarization summarized in Figure 2, the effect of a two standard deviation change on the time that has passed since the election day is slightly weaker for ideological polarization (-0.297) than for affective polarization (-0.33). A second requirement for the

proposed mechanism to drive the effects of election salience is that they should be significantly related to the outcome of interest (i.e. affective polarization). The results summarized in Figure 4 indicate that there is a significant correlation between ideological and affective polarization (see Reiljan, 2019), as well as between the strength of one's attachment to a given party and affective polarization (see Wagner, 2019).

**Figure 4: Main paths from generalized structural equation model.**



*Note Based on the model summarized in Table B4 in the Appendix \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$*

Table 2 summarizes the extent to which the effects of election salience on affective polarization are mediated by changes in ideological polarization and positive party attachments. The results reveal that both mediators are relevant to explain the reduction in the animus generated by other parties due to the decrease in election salience. However, the effects of election salience are mediated to a greater extent by changes in levels of ideological polarization than by changes in the extent to which individuals feel positively attached to parties. While 36 percent of the effect of the passage of time since election day on affective polarization is mediated via ideological depolarization, the reduction in

individuals' attachment to a given party mediates 25 percent of this effect.<sup>16</sup> Additionally, we have identified a remaining direct effect of election salience that is not accounted by changes in ideological polarization or positive party attachment. The results, therefore, indicate that 40 percent of this effect is driven by mechanisms other than ideological polarization and positive partisanship.

**Table 2: Mediation analysis: Total, direct and indirect effects of time since election day on affective polarization**

	Effect	p-value	Proportion of total effect
Total effect	-0.32	-10.37	
Direct effect	-0.13	-4.67	0.40
Mediated by ideological polarization	-0.11	-9.83	0.36
Mediated by positive party attachment	-0.08	-8.57	0.25

*Note: Based on the model summarized in Table B4.*

The results summarized in Table 2 provide support for both the second and third hypotheses that we put forward in this paper. Most of the effect of election salience on affective polarization (60 percent) is mediated via changes in ideological polarization and the strength of positive party identification. However, it appears that changes in the perceptions of the ideological divides between parties are slightly more relevant than political identities related to one's in-group (i.e. one's own party).<sup>17</sup> This evidence is

<sup>16</sup> As we describe in Table A2 in Appendix A, the coding of the strength of positive party attachments is based on multiple questions asked in the CSES. However, in some election studies one of these questions (question IMD3005\_2) that aims to capture party leaners, who do not feel close but closer to a given party, was not included (this was the case in 13 of the 99 election studies considered in this paper). We have, therefore, replicated the mediation analyses excluding these 13 elections altogether. The results obtained with this restricted sample of 86 country-elections do not alter our conclusions about the mediating role of positive party attachment for the effects of election salience. Using this restricted sample specification, the strength of PID mediates 27 percent of the effects of election salience. In addition, we also have also replicated our mediation analyses using the full sample of country-elections, but only coding as partisans those who feel close to a party. That is, those who do not feel close to a party, but in the follow up question admit that they feel *closer* to a party, are coded as non-partisans and take the value 0 in the variable measuring the strength of positive party attachment. Using this alternative operationalization, the results of the mediation analysis reveal that the strength of PID mediates 21 percent of the effects of election salience.

<sup>17</sup> A test of the difference of the effect of time since election day mediated by ideological polarization (-0.11) and by party attachment (-0.08) reveals that the difference (-0.03) is statistically significant at the 5 percent

consistent with recent experimental findings in the US, where ideological differences between candidates, rather than partisan labels, were shown to be more relevant to explain affective polarization (Lelkes, 2019). Our findings, therefore, provide valuable comparative and observational evidence about the mechanisms that drive changes in affective polarization in advanced democracies, at least in the short-term. At the same time, though, these results point that the ideological and the identity explanations of affective polarization should not be considered rival but rather complementary. Both processes seem to be operating in parallel to explain the depolarization of citizens after elections.

To account for the fact that the decline in election salience could be more pronounced soon after the election than months later (Singh & Thornton, 2019), we replicate all the mediation analyses using the log transformation of the variable measuring the time since the election day. These analyses are summarized in Tables B5-B6 and Figure B6 in the Appendix. Using this alternative specification, we obtain results that are very similar to those summarized on Table 2. In this case, 36 percent of the negative effects of the time since election day on affective polarization are mediated by a decrease in ideological polarization, while the reduction in the strength of individuals' party identification mediates 23 percent of this negative effect.

All the results discussed so far are based on a measure of affective polarization operationalized through the spread of like-dislike scores that individuals assign to all parties. As we point out above, Wagner (2019) proposes an alternative measure based on the distance from the most liked party to all other parties in the party system (*distance* measure). In Appendix C we replicate our analyses using this alternative measure. The

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level (p-value = 0.019). It should be noted however that a different measure of partisan attachment (such as party identity) could lead to a stronger effect.

results obtained through the distance measure with regard to the total effect of election salience on affective polarization are very similar to our original findings (Table C1). A two standard deviation change in the time since the election reduces affective polarization by 0.38 (compared to 0.33 when using the spread measure). The conclusion we reach about the extent to which these effects are mediated by ideological polarization and positive party attachment are also very similar through this alternative operationalization (Table C2). These two variables still mediate most of the effects of election salience on affective polarization, and a greater proportion of the effect is mediated via ideological polarization. However, when relying on this alternative operationalization of polarization the mediation effects are stronger. Overall, these two variables mediate 76 percent of the effects of election salience on polarization (compared to 60 percent with the original spread measure). Specifically, ideological polarization mediates 43 percent of the effect of election salience, and positive party attachment mediates 33 percent of this effect.

## **Discussion**

Our analyses show that affective polarization declines significantly after an election has taken place, and that this effect is partially explained by a reduction in the strength of positive party identification and, particularly, by decreasing levels of ideological polarization. Election salience makes ideological differences between parties more visible, and this heightened ideological polarization enhances affective polarization. Election salience also activates partisan identities, which in turn reinforce affective polarization. When the votes have been casted, the campaign is over and elections lose salience citizens become less strongly attached to parties and they perceive less ideological differences between parties. As a consequence, individuals' moderate their affect for their preferred

party and their animosity towards other parties. In other words, citizens progressively depolarize after elections.

Future research should inquire in other aspects of the relationship between election salience and affective polarization that we do not address in this paper. We can identify at least three of them. First, further research should explore the dynamics of polarization before the election and during the electoral campaign. This question would involve a research design based on the analysis of pre-electoral surveys with varying degrees of proximity with respect to the election date (see Hansen & Kosiara-Pedersen 2017). This would allow to assess to what extent the process of polarization/depolarization due to electoral dynamics is balanced, or whether the process of post-electoral depolarization does not allow to compensate for pre-electoral increases in polarization. Second, partisans of the losing party might see a decrease in their partisan attachments while those of winning parties might strengthen their party identification (due to higher self-esteem derived from electoral victory). Further research should, therefore, analyze whether depolarization after elections is contingent on the winner/loser status of individuals. Third, further research should explore under what conditions polarization more likely to change along time as a response to electoral dynamics. That is, whether some institutional arrangements allow depolarization to happen faster and deeper, and what kind of contextual factors facilitate ideologically based vs identity based affective (de)polarization. For example, the baseline levels of polarization in a given country, the closeness of the election, or the formation of a government coalition that cuts across some ideological divides might moderate the process of depolarization that we have uncovered in this paper. This is a relevant question, since, it might provide clues in order to engineer electoral (and campaign) reforms that aim to overcome the polarizing effects of elections. The key issue would be whether one can

design a system that retains all the desirable properties and consequences of elections without increasing affective polarization.

Our results, however, stand on their own to suggest some relevant implications for our expectations regarding the functioning of contemporary democracies. Affective polarization can be reduced. In fact, it can be reduced quite significantly and quickly. The most effective mechanism to reduce affective polarization seems to be to reduce ideological polarization. The normative concern for polarization in contemporary democracies was already discussed by Dahl (1971), Sartori (1976) and Linz and Stepan (1978), who pointed about the dangers for democracy of political polarization around highly antagonistic groups. But such concerns were not always shared. In the US, the two party-system was considered to be not working properly precisely because the two parties were not as distinctive as they should (American Political Science Association, 1950). Excessive ideological convergence among parties was also considered a problem, as it reflects a lack of real choice between differentiated alternatives (Levendusky, 2010), which may eventually reduce attachment to established parties (Lupu, 2015, 2016), turnout (Hobolt & Hoerner, forthcoming), and eventually, facilitate the rise of more extreme alternatives.

In light of our findings, it appears difficult to increase the distinctiveness between political alternatives without raising levels of affective polarization, as both ideological and affective polarization are closely related (Reiljan, 2019). By the same token, it is hard to argue that a democracy would work better if its citizens did not have any degree of party identification, even if that involved a low level of affective polarization. In short, affective polarization is the consequence of electoral dynamics that activate strong partisan identities and make political options be perceived as ideologically differentiated. A well-functioning democracy requires a delicate balance between different, and sometimes contradictory

goals. Our paper highlights one of such challenges that contemporary democracies face: simultaneously guaranteeing the presence of distinct ideological options, meaningful partisan identities, and tolerance towards alternatives we dislike.

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**Supporting information for:  
Affective polarization and the salience of elections**

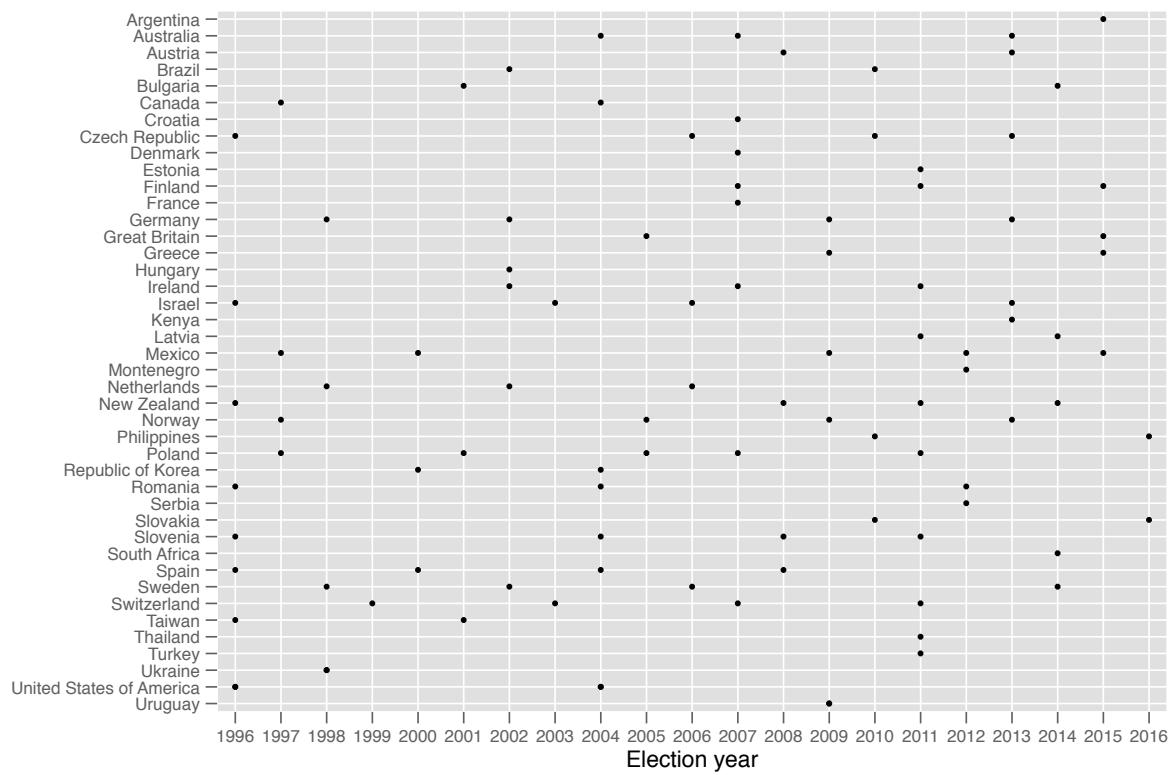
Electoral Studies

Enrique Hernández, Eva Anduiza and Guillem Rico  
Universitat Autònoma de Barcelona

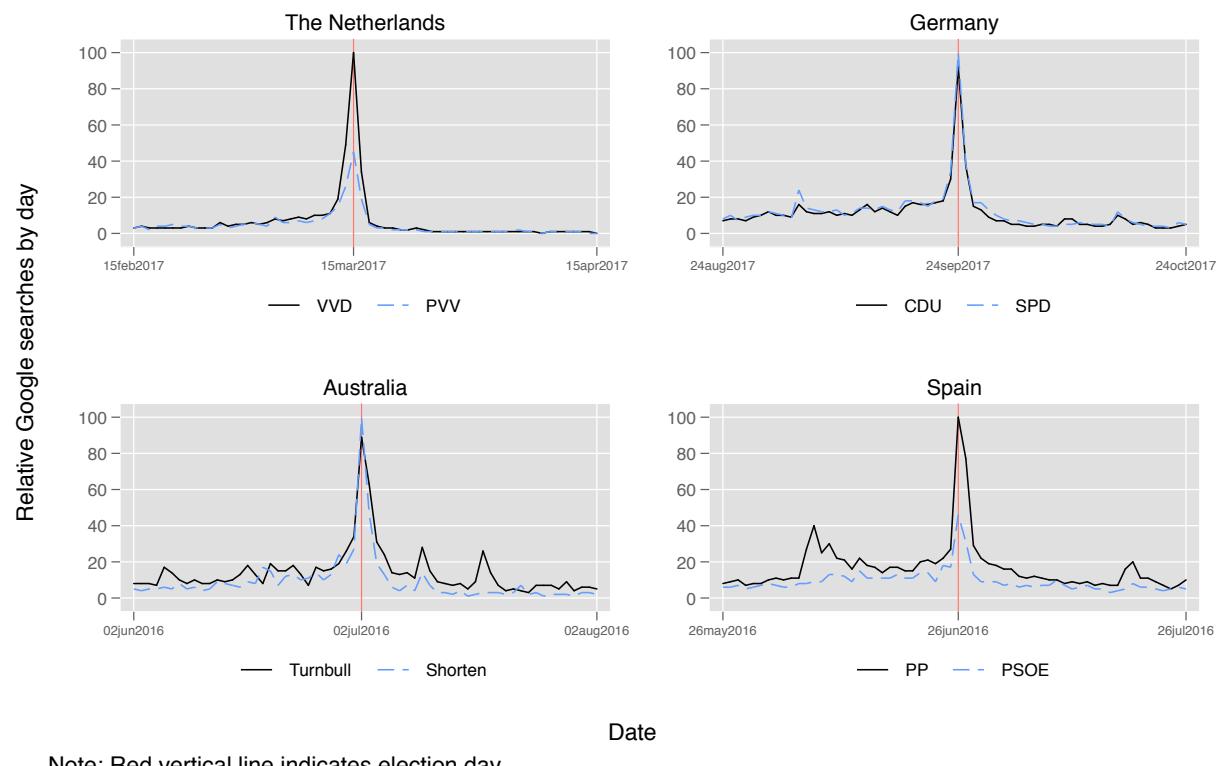
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## APPENDIX A: Operationalization and descriptive data

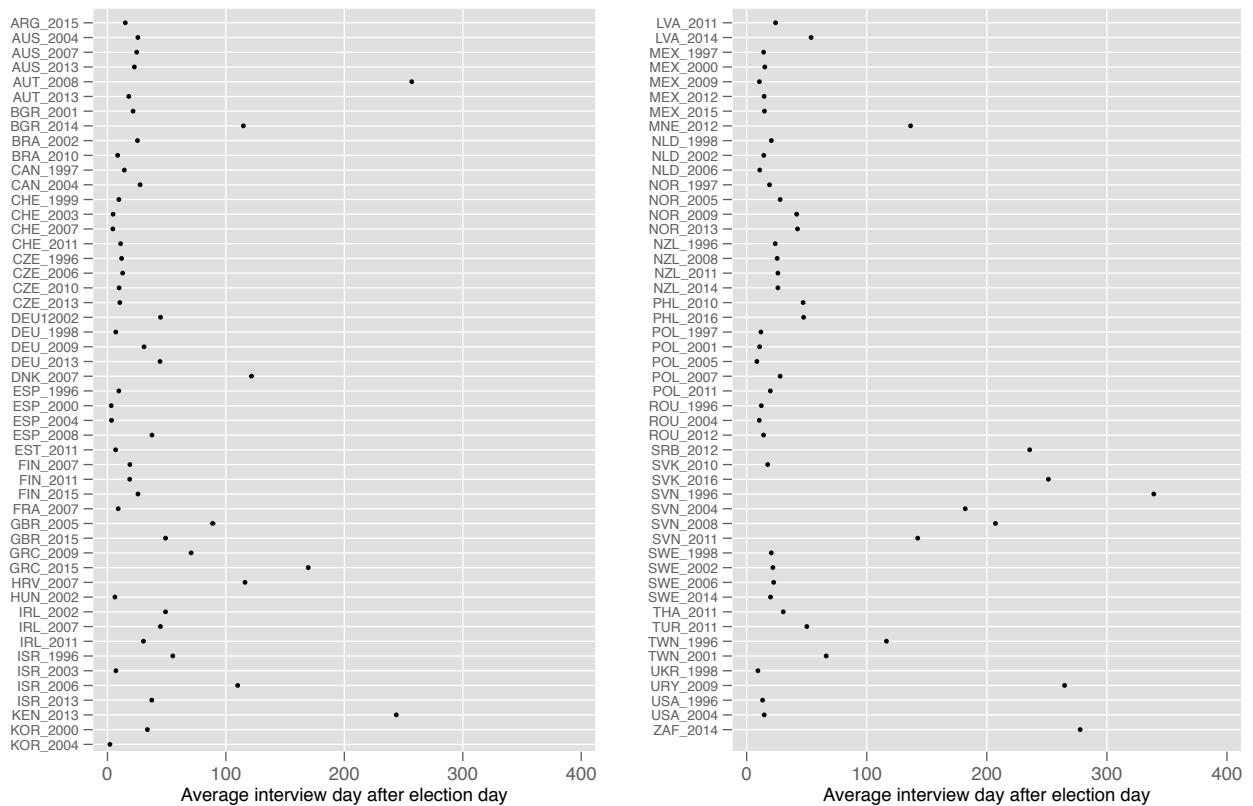
**Figure A1: Countries and elections included in the analyses**



**Figure A2: Google searches for main parties and candidates one month before/after election day in 4 countries.**



**Figure A3: Average timing of interviews in each election study.**



**Table A1: Correlation between main variables**

	Affective polarization	Time since election day	Ideological polarization	Positive party attachment	Age	Income	Gender	Education	Labor market status
Time since election day	-0.0233								
Ideological polarization	0.476	-0.0219							
Positive party attachment	0.353	-0.0373	0.164						
Age	0.0950	-0.0117	0.0330	0.103					
Income	-0.0139	-0.0104	0.00128	0.0447	-0.176				
Gender	0.0301	-0.000928	0.0354	-0.0325	-0.00975	-0.0867			
Education	-0.0406	-0.0298	-0.0407	0.0731	-0.125	0.315	-0.0339		
Labor market status	0.0711	-0.0269	0.0349	0.0259	0.370	-0.286	0.183	-0.233	
Rural/Urban	-0.0130	-0.0629	-0.0128	0.0414	-0.0513	0.131	0.0160	0.182	-0.0585

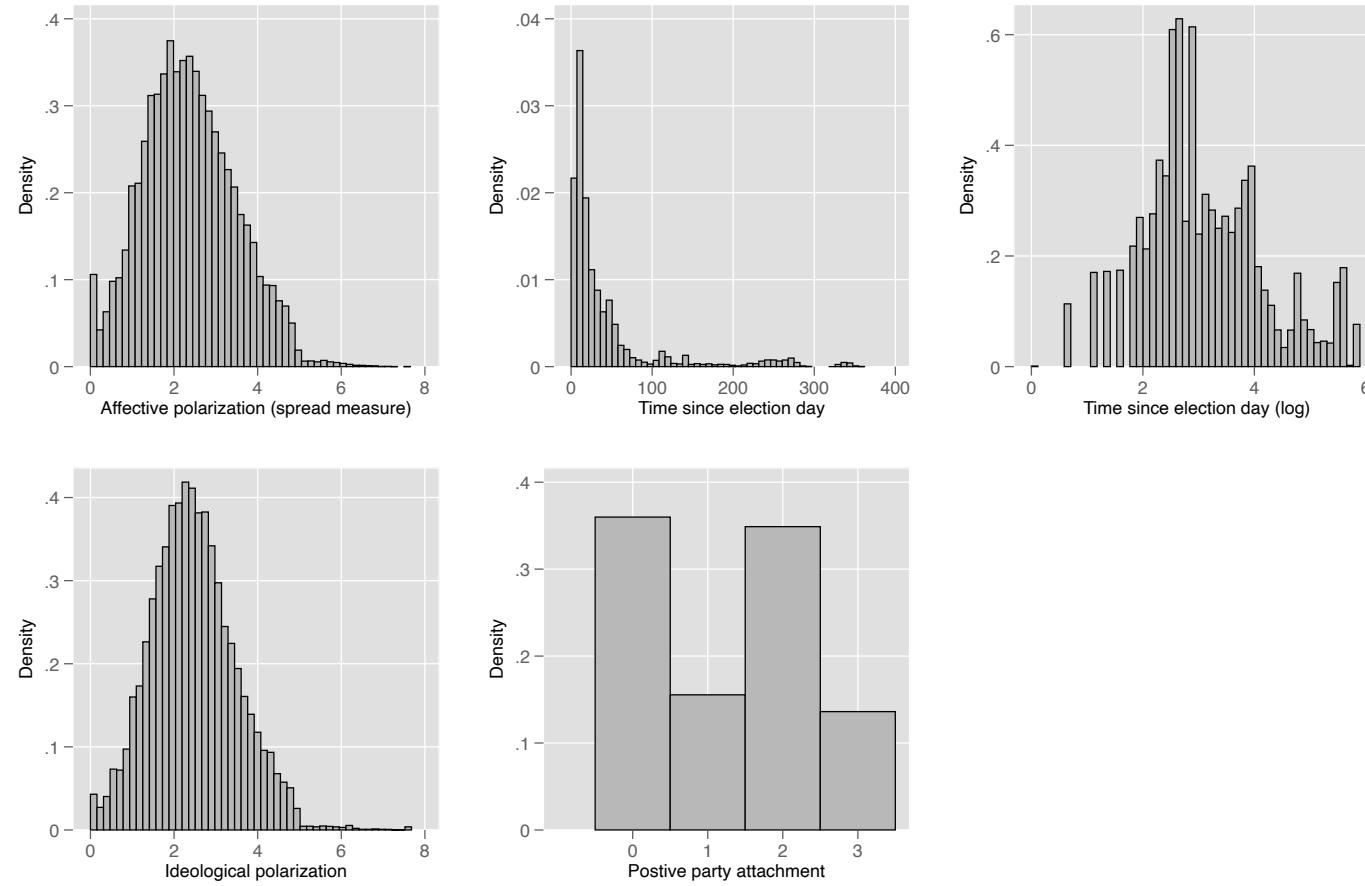
**Table A2: Operationalization and descriptive statistics of main variables**

	Wording / Coding	Mean	SD	Min	Max
Affective polarization	Affective polarization (spread) measure coded following equations 1 and 2 (based on Wagner (2019))	2.37	1.11	0	7.65
Time since election day	Number of days that passed between the election day and the day when each respondent was interviewed.	41.57	62.63	0	362
Time since election day (log)	Natural log transformation of the variable measuring the number of days that passed between election day and the day when each respondent was interviewed	3.1	1.08	0	5.89
Time since election day (rescaled)	Number of days that passed between the election day and the day when each respondent was interviewed rescaled following Gelman (2008). The variable is transformed by subtracting its mean and dividing it by two times its standard deviation.	-0.05	0.46	-0.35	2.29
Time since election day (log rescaled)	Natural log transformation of the variable measuring the number of days that passed between election day and the day when each respondent was interviewed rescaled following Gelman (2008). The variable was first log transformed and then rescaled following Gelman (2008)	0	0.5	-1.43	1.29
Ideological polarization	Ideological polarization measure coded following equations 1 and 2 but based on each respondent placement of each of the parties included in the CSES on the 0-10 left-right scale instead of the extent to which they like or dislike these parties (based on Wagner 2019)	2.46	1.02	0	7.68
Positive party attachment	Variable measuring how close citizens feel to the party they identify with. The variable measuring the strength of party identification is based on the 3 categories item IMD3005_4 from the IMD CSES dataset, which we reverse code so that higher values imply greater closeness to a party. This survey item directly captures how close citizens feel to the party they identify with. We add an additional residual category (=0) to this variable based on the responses to IMD3005_1, IMD3005_2, and IMD3005_3. This residual category represents respondents who do not feel close to any party. Respondents are assigned the value 0 in this variable if they fulfill two conditions. First, these respondents declared that they did not feel close (code 5 in IMD3005_1) or closer (code 5 in IMD3005_2) to any party. Second, these respondents were, at the same time, coded either as missing (code 9999999), or were not capable (don't know answer) or refused naming the party they feel close to (codes 9999998 and 9999997) in question IMD3005_3. Note that in some	1.26	1.09	0	3

countries the question on leaners (IMD3005\_2) was not asked and this is likely to reduce the share of respondents who are presented with item IMD3005\_4. These country-elections are: Australia (2004, 2013), Canada (1997), Switzerland (2007), Latvia (2011, 2014), Norway (2005, 2009, 2013), New Zealand (1996), Slovenia (1996, 2008, 2011).

Age	Age of respondents	47	16.83	16	102
Age (rescaled)	Age of respondent rescaled following Gelman (2008).	0	0.49	-0.9	1.61
Income	Categorical variable measuring the household income of respondents in 5 categories (from lowest income group = 1 to highest income group = 5)	3	1.39	1	5
Gender	Categorical variable measuring the gender of respondents in 2 categories (1= Male 2= Female)	1.52	0.5	1	2
Education	Categorical variable measuring the level of education of respondents in 5 categories, ranging from no education = 0 to university education = 4	2.1	1.2	0	4
Labor market status	Categorical variable measuring the labor market status of individuals in 6 categories	2.32	1.68	1	7
Rural/Urban	Categorical variable measuring whether the respondent lives in a village = 1, a small town = 2, the suburbs of a large city = 3, or a large city = 4.	2.57	1.21	1	4
Maximum affect	Maximum level of affect for the party(ies) respondents like the most. That is, the variable captures the highest score assigned in like-dislike scale to any party by each respondent.	7.87	1.99	0	10
Minimum affect	Minimum level of affect for the party(ies) respondents like the least. That is, the variable captures the lowest score assigned in like-dislike scale to any party by each respondent.	1.46	1.82	0	10

**Figure A4: Distribution of main variables**



*Note: Y-axis with different scales*

## APPENDIX B: Additional results (affective polarization spread measure)

**Table B1: Impact of time since election day on affective polarization (numeric covariates rescaled).<sup>18</sup>**

	(1)	(2)	(3)	(4)	(5)
Time since election day	-0.38*** (0.03)	-0.33*** (0.03)	-0.36*** (0.03)		-0.62*** (0.07)
Time since election day (squared)			0.11** (0.04)		
Time since election day (log)				-0.15*** (0.01)	
Constant	2.39*** (0.05)	2.39*** (0.05)	2.36*** (0.05)	2.39*** (0.04)	
Observations	116027	116027	116027	116027	116027
Elections	99	99	99	99	99
Country-election random-intercepts	Yes	Yes	Yes	Yes	No
Individual-level covariates	No	Yes	Yes	Yes	Yes
Country-election fixed-effects	No	No	No	No	Yes

Note: Models 1-4 are mixed effects linear models. Model 5 is a non-parametric series regression with a cross-validation criterion used to select the optimal number of terms in a third-order B-spline basis function. In model 5, coefficients report average marginal effects estimates based on the average of derivatives. Standard errors in parentheses (in Model 5 robust standard errors are reported). \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table B2: Impact of time since election day on affective polarization (numeric covariates not rescaled).**

	(1)	(2)	(3)	(4)	(5)
Time since election day	-0.003*** (0.000)	-0.002*** (0.000)	-0.003*** (0.000)		-0.004*** (0.000)
Time since election day (squared)			0.000** (0.000)		
Time since election day (log)				-0.070*** (0.006)	
Constant	2.524*** (0.047)	2.503*** (0.049)	2.498*** (0.047)	2.606*** (0.049)	
Observations	116027	116027	116027	116027	116027
Elections	99	99	99	99	99
Country-election random-intercepts	Yes	Yes	Yes	Yes	No
Individual-level covariates	No	Yes	Yes	Yes	Yes
Country-election fixed-effects	No	No	No	No	Yes

Note: Models 1-4 are mixed effects linear models. Model 5 is a non-parametric series regression with a cross-validation criterion used to select the optimal number of terms in a third-order B-spline basis function. In model 5, coefficients report average marginal effects estimates based on the average of derivatives. Standard errors in parentheses (in Model 5 robust standard errors are reported). \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

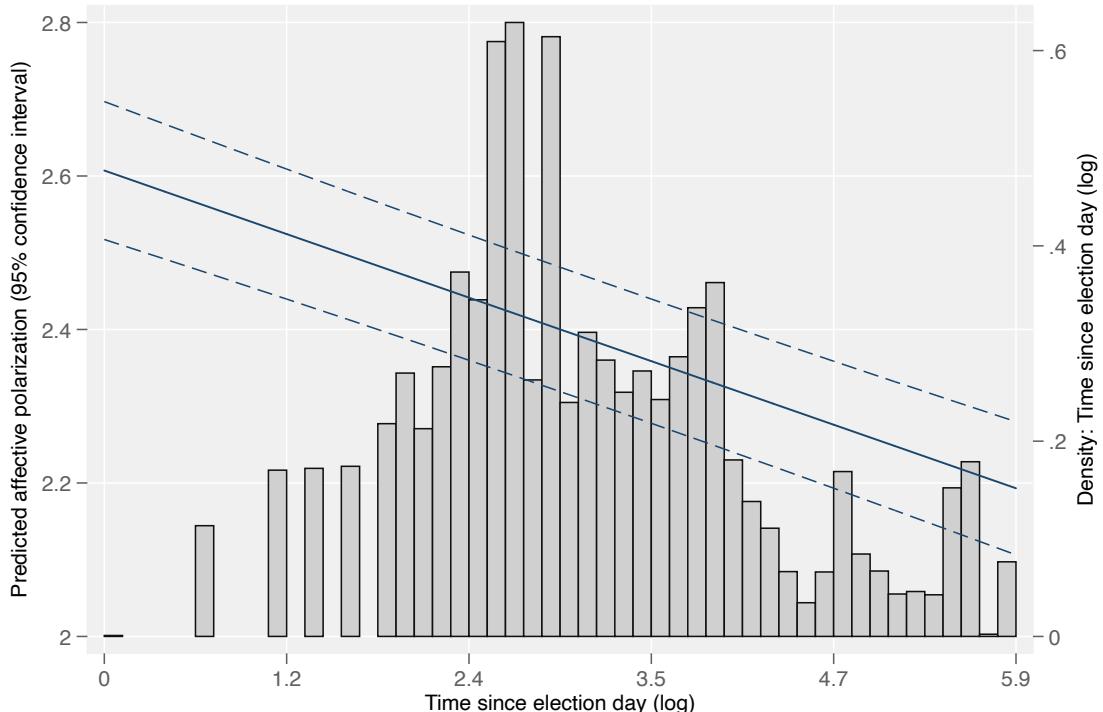
<sup>18</sup> To facilitate the interpretation of the results we rescale numeric covariates (*time since election day* and *age*) by subtracting their mean and dividing them by two times their standard deviation (see data and methods section).

**Table B3: Impact of time since election day on the evaluation of the most- and least-liked parties: mixed-effects linear models (numeric covariates rescaled).**

	(1. Most liked party)	(2. Least liked party)	(3. Most liked party)	(4. Least liked party)	(5. Most liked party)	(6. Least liked party)
Time since election day	-0.45*** (0.05)	0.38*** (0.05)	-0.48*** (0.06)	0.46*** (0.05)		
Time since election day (squared)			0.08 (0.06)	-0.29*** (0.06)		
Time since election day (log)					-0.20*** (0.02)	0.20*** (0.02)
Constant	7.92*** (0.06)	1.73*** (0.08)	7.89*** (0.06)	1.81*** (0.08)	7.92*** (0.06)	1.72*** (0.07)
Observations	116027	116027	116027	116027	116027	116027
Elections	99	99	99	99	99	99
Country-election random-intercepts	Yes	Yes	Yes	Yes	Yes	Yes
Individual-level covariates	Yes	Yes	Yes	Yes	Yes	Yes

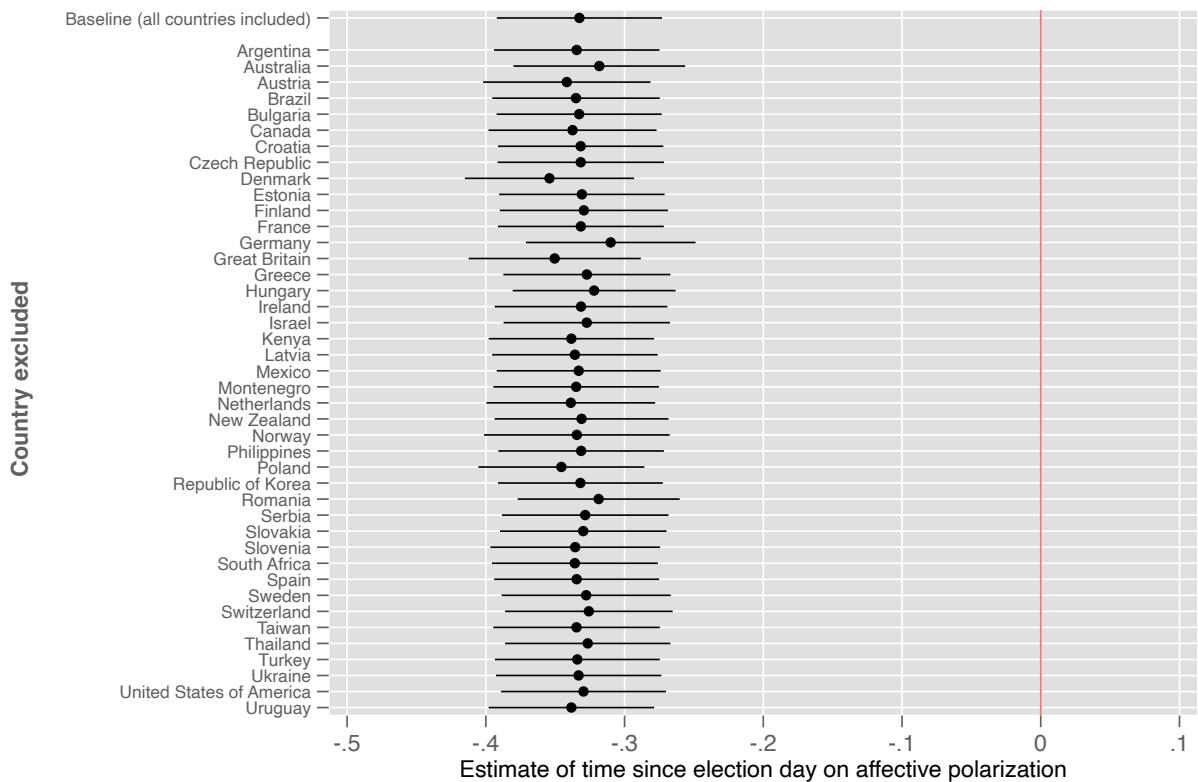
Note: Standard errors in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Figure B1: Time since election day (log transformed) and affective polarization**



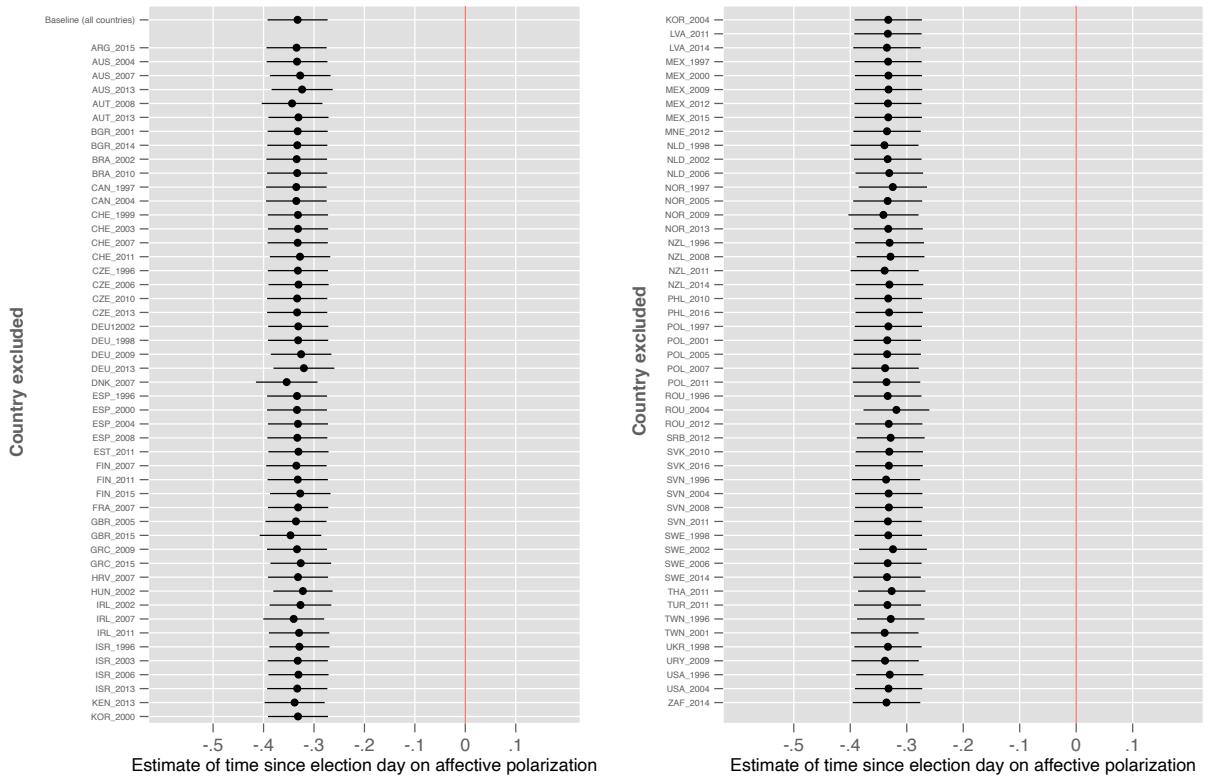
Note: Based on Model 4 of Table B2 in the Appendix. The histogram in the background summarizes the distribution of the log transformed variable measuring the number of days that passed between the election day and the day when each respondent was interviewed.

**Figure B2: Estimates of the effects of “time since election day” on affective polarization excluding one country at a time.**



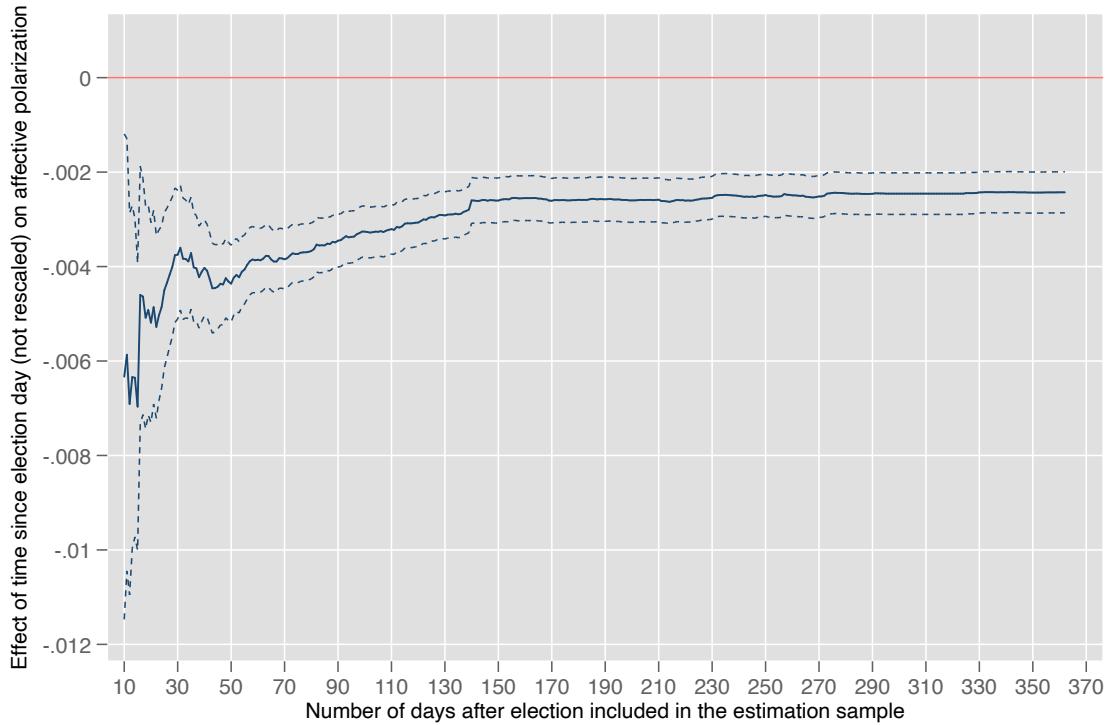
*Note: All estimates are based on a mixed-effects linear model with country-election random intercepts and individual level-covariates. The variable time since-election day is rescaled, so that a one-unit increase represents the effect of a change in two standard deviations. That is, the estimates replicate the results of Model 2 of Table B1, excluding one country at a time.*

**Figure B3: Estimates of the effects of “time since election day” on affective polarization excluding one election at a time.**



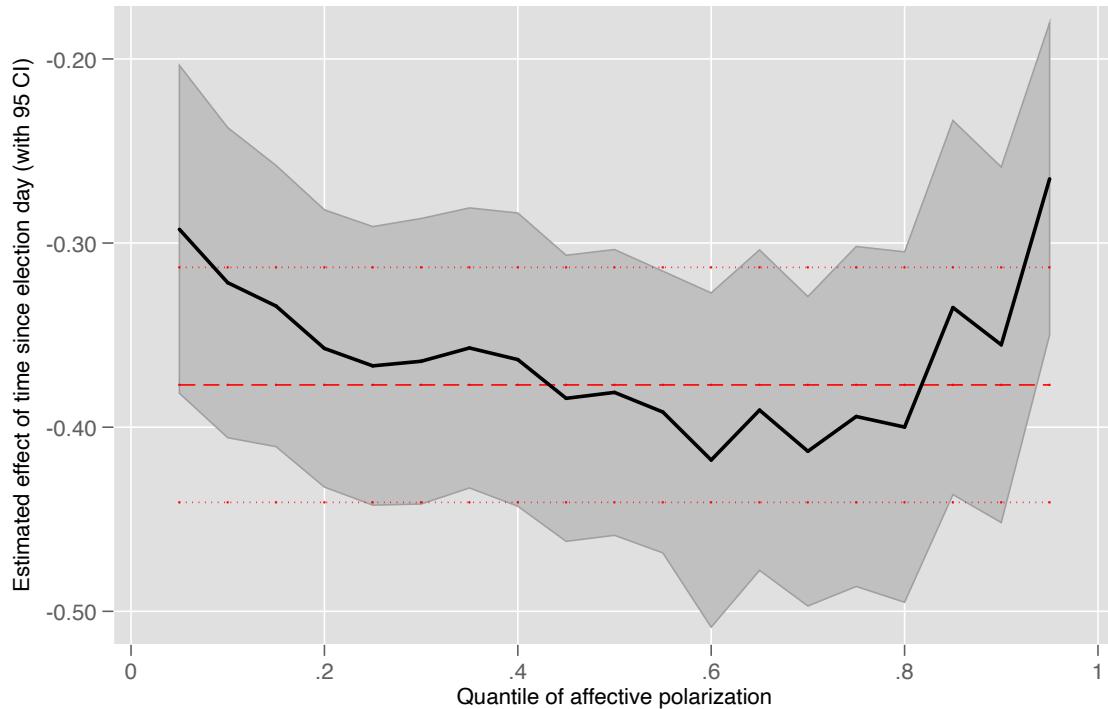
*Note: All estimates are based on a mixed-effects linear model with country-election random intercepts and individual level-covariates. The variable time since-election day is rescaled, so that a one-unit increase represents the effect of a change in two standard deviations. That is, the estimates replicate the results of Model 2 of Table B1, excluding one election a time.*

**Figure B4: Estimates of the effects of “time since election day” (not rescaled) on affective polarization using different windows of days after election day.**



*Note: All estimates are based on mixed-effects linear models with country-election random intercepts and individual level-covariates. The plot is based on 356 different models that include a limited number of days after the election (x-axis). Like in Table B2, the variable measuring the time since election day is not rescaled. Therefore, the point estimates represent the effect of an increase in one day after the election on affective polarization. That is, the estimates replicate the results of Model 2 of Table B2, varying the number of days included in the estimation sample. Dashed lines represent 95 percent confidence intervals around point estimates.*

**Figure B5: Quantile regression model of affective polarization and the time since election day**



*Note: The solid black line reports the estimates of the effect of the time since election day on affective polarization at different points of the distribution of affective polarization (obtained through a quantile regression). The shaded area summarizes a 95 percent confidence interval around those estimates. The estimation is based on a quantile regression model that includes the same individual-level covariates as those models summarized in Table B1 as well as country-election fixed-effects. The dotted red line represents the effects of the time since election day on affective polarization estimated through an OLS regression model and its corresponding 95 confidence intervals. The overlap between the confidence intervals of the quantile regression and the OLS regression indicates that there is no significant variation in the estimated effects of time since election day depending on the level of affective polarization of individuals.*

**Table B4: Summary of results of generalized random-intercepts linear structural equation model**

(1)	
Equation 1: Affective polarization	
Ideological polarization	0.388***
Positive party attachment	0.295***
Time since election day	-0.128***
Individual-level covariates	Yes
M2[country-election]	1 (Constrained)
Constant	1.153***
Equation 2: Ideological polarization	
Time since election day	-0.297***
Individual-level covariates	Yes
M1[country-election]	1 (Constrained)
Constant	2.445***
Equation 3: Positive party attachment	
Time since election day	-0.272***
Individual-level covariates	Yes
M3[country-election]	1 (Constrained)
Constant	1.054***
Random-intercepts variances:	
M1[country-election]	0.251***
M2[country-election]	0.070***
M3[country-election]	0.169***
Error variances:	
Affective polarization	0.742***
Ideological polarization	0.837***
Positive party attachment	1.005***
Observations	113943
Elections	99

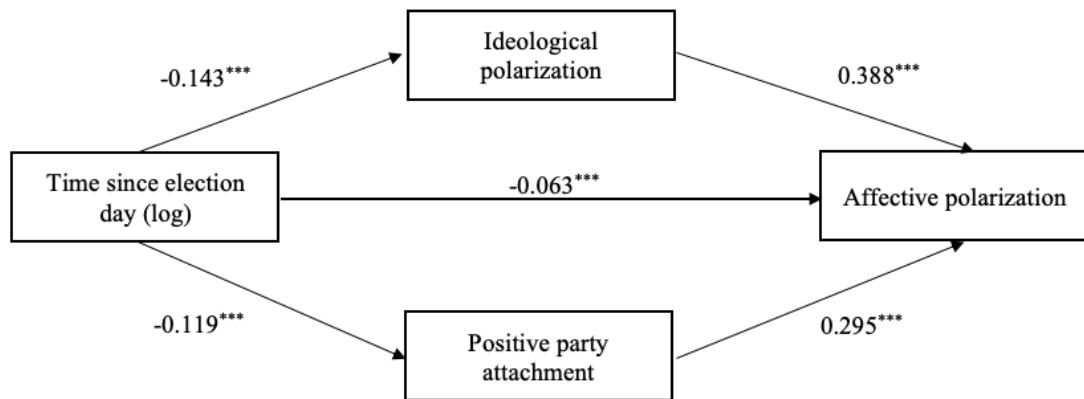
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table B5: Summary of results of generalized random-intercepts linear structural equation model (time since election day variable log transformed)**

(1)	
Equation 1: Affective polarization	
Ideological polarization	0.389***
Positive party attachment	0.295***
Time since election day (log)	-0.064***
Individual-level covariates	Yes
M2[country-election]	1 (Constrained)
Constant	1.151***
Equation 2: Ideological polarization	
Time since election day (log)	-0.143***
Individual-level covariates	Yes
M1[country-election]	1 (Constrained)
Constant	2.448***
Equation 3: Positive party attachment	
Time since election day (log)	-0.119***
Individual-level covariates	Yes
M3[country-election]	1 (Constrained)
Constant	1.069***
Random-intercepts variances:	
M1[country-election]	0.223***
M2[country-election]	0.068***
M3[country-election]	0.164***
Error variances:	
Affective polarization	0.742***
Ideological polarization	0.837***
Positive party attachment	1.005***
Observations	113943
Elections	99

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Figure B6: Main paths from generalized structural equation model).**



*Note* Based on the model summarized in Table B5. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table B6: Mediation analysis: Total, direct and indirect effects of time since election day on affective polarization (time since election day variable log transformed)**

	Effect	p-value	Proportion of total effect
Total effect	-0.15	-11.03	1.00
Direct effect	-0.06	-5.11	0.41
Mediated by ideological polarization	-0.05	-11.27	0.36
Mediated by positive party attachment	-0.03	-8.62	0.23

*Note:* Based on the model summarized in Table B5

## APPENDIX C: Alternative operationalization of affective polarization (distance measure)

The distance measure of affective polarization is also based on the 0-10 like-dislike score respondents attribute to each of parties included in the CSES. This operationalization measures the weighted average affective distance from one's most liked party to all other parties (Wagner, 2019). To operationalize the distance measure, we follow again the notation proposed by Wagner (2019). Therefore, affective polarization is measured as:

$$DISTANCE_i = \sqrt{\sum_{p=1}^P v_p (like_{ip} - like_{max,i})^2} \quad (3)$$

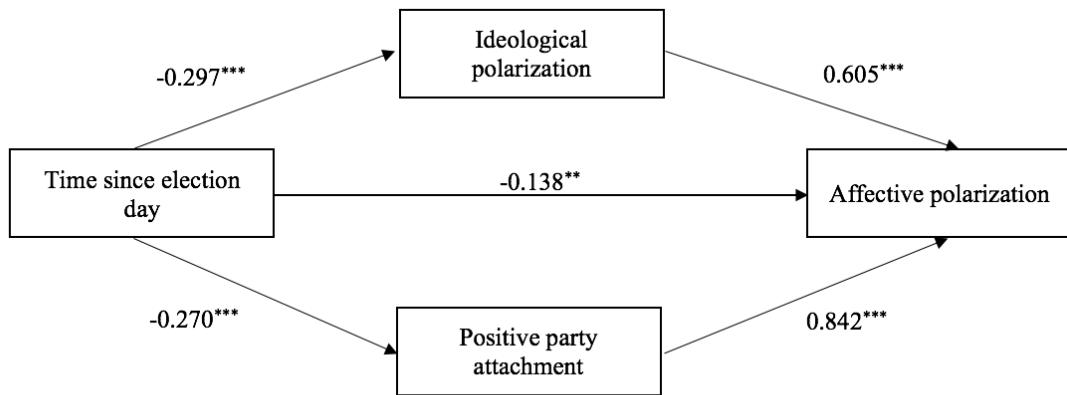
where  $like_{max}$  is the 0-10 score assigned to the most liked party by individual  $i$ , and  $p$  is the number of parties without the most liked party (see Wagner (2019) for further details about the operationalization of this measure). This measure, therefore, excludes those who assign the same like-dislike score to all parties in each CSES post-electoral study.

**Table D1: Impact of time since election day on affective polarization (distance measure): Mixed-effects linear regressions (numeric covariates rescaled)**

	(1)	(2)	(3)	(4)
Time since election day	-0.45*** (0.05)	-0.38*** (0.05)	-0.47*** (0.05)	
Time since election day (squared)			0.25*** (0.06)	
Time since election day (log)				-0.20*** (0.02)
Constant	3.86*** (0.07)	3.82*** (0.07)		
Observations	111242	111242	111242	111242
Elections	99	99	99	99
Country-election random-intercepts	Yes	Yes	Yes	Yes
Individual-level covariates	No	Yes	Yes	Yes

Note: Standard errors in parentheses. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

**Figure D1: Main paths from generalized structural equation model (distance measure)**



*Note* \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table D2: Mediation analysis: Total, direct and indirect effects of time since election day on affective polarization (distance measure)**

	Effect	p-value	Proportion of total effect
Total effect	-0.40	-7.50	
Direct effect	-0.10	-1.99	0.24
Mediated by ideological polarization	-0.17	-9.81	0.43
Mediated by positive party attachment	-0.13	-8.50	0.33