

NBER WORKING PAPER SERIES

COORDINATION AND INCUMBENCY ADVANTAGE IN MULTI-PARTY SYSTEMS
- EVIDENCE FROM FRENCH ELECTIONS

Kevin Dano
Francesco Ferlenga
Vincenzo Galasso
Caroline Le Pennec
Vincent Pons

Working Paper 30541
<http://www.nber.org/papers/w30541>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
October 2022

For comments that have improved the paper, we thank Emiliano Grossman, Cameron Shelton, conference participants at the 2021 American Political Science Association Annual Meeting, the 2021 Workshop Economics and Politics at Paris, the 2022 Société Canadienne des Sciences Economiques Annual Meeting, as well as seminar participants at Brown University. We thank Abel François for sharing his data on the 1993, 1997, and 2002 candidates' campaign expenditures, and Nicolas Sauger for his help with the collection of the 1981 and 1988 French parliamentary election results. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2022 by Kevin Dano, Francesco Ferlenga, Vincenzo Galasso, Caroline Le Pennec, and Vincent Pons. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Coordination and Incumbency Advantage in Multi-Party Systems - Evidence from French Elections

Kevin Dano, Francesco Ferlenga, Vincenzo Galasso, Caroline Le Pennec, and Vincent Pons
NBER Working Paper No. 30541

October 2022

JEL No. D72,K16

ABSTRACT

In theory, free and fair elections can improve the selection of politicians and incentivize them to exert effort. In practice, incumbency advantage and coordination issues may lead to the (re)election of bad politicians. We ask whether these two forces compound each other. Using a regression discontinuity design in French two-round local and parliamentary elections, we find that winning an election increases candidates' chances to win the next election by 25.1 percentage points. Close winners are more likely to run again and more likely to win, conditional on running, than close losers. Incumbents personalize their campaign communication more and face fewer ideologically close competitors, indicating that parties coordinate more effectively on the winning side than on the losing side. A complementary RDD reveals that marginally qualifying for the runoff also enables candidates to rally new voters, but does not affect the number of competitors on their side. We conclude that party coordination and voters rallying candidates who won or gained visibility in an election both contribute to their success in future races, even absent any actual difference in quality with candidates on the losing side.

Kevin Dano
University of California, Berkeley
530 Evans Hall
Berkeley, Cali 94720-3880
kdano@berkeley.edu

Caroline Le Pennec
HEC Montreal
3000 Chemin De La Cote-Sainte-Catherine
Montreal, Quebec H3T 2A7
Canada
caroline.le-pennec@hec.ca

Francesco Ferlenga
Population Studies and Training Center
Brown University
Box 1836
68 Waterman St.
Providence, RI 02912
francesco_ferlenga@brown.edu

Vincent Pons
Harvard Business School
Morgan Hall 289
Soldiers Field
Boston, MA 02163
and CEPR
and also NBER
vpons@hbs.edu

Vincenzo Galasso
Università Bocconi-IGIER
Milano, Italy
vincenzo.galasso@unibocconi.it

1 Introduction

In theory, free and fair elections can improve the selection of politicians and decrease moral hazard: citizens can use elections to choose leaders who are competent and aligned with their preferences (Downs 1957; Osborne and Slivinski 1996; Besley and Coate 1997; Fearon 1999), and the prospect of facing reelection gives politicians incentives to exert effort (Barro 1973; Ferejohn 1986; Besley 2006). In practice, bad incumbents may manage to get reelected and reelection incentives may be weakened if holding power gives a systematic advantage over competitors. A large literature has documented the existence of an incumbency advantage in the United States and in other countries using first-past-the-post elections, where individual races tend to be dominated by only two or a handful of parties (e.g., Lee (2008)). Incumbents can provide pork barrel spending, and they often obtain more media coverage and larger electoral campaign funding. These advantages may scare off high quality challengers and jeopardize the process of democratic alternation and elite renewal.

In multi-party settings, in which a large number of candidates compete for any seat, a second force can contribute to the victory of bad politicians: coordination failure. Parties from the same orientation (e.g., parties on the left) have incentives to reach candidate dropout agreements, in order to reduce the number of ideologically-close competitors and increase their chances of winning. Furthermore, voters may strategically rally behind stronger candidates. However, the coordination efforts of parties and voters may fail (e.g., Pons and Tricaud (2018)).

In this paper, we ask whether coordination issues and the incumbency advantage compound each other. Coordination issues might reinforce the incumbency advantage if incumbents seeking reelection are better able to prevent ideologically close candidates from entering the race or to rally their base voters. Conversely, parties defeated in the previous election may decide to join forces to avoid a new defeat and voters from the losing political orientation may coordinate on the most promising candidate. Moreover, new candidates may enter on the incumbent's side if they expect this side to win again. If parties and voters on the losing side are better able to coordinate, incumbents' advantage may be lower or even disappear, facilitating elite renewal.

To assess the interaction between coordination failures and incumbency advantage, we use a regression discontinuity design in a multi-party environment, the French local and parliamentary elections. We measure the effects of close victories on incumbency advantage and on the compo-

sition of the candidate pool in the next election. The elections we study use a two-round plurality voting rule and they often feature a large number of candidates in the first round, making coordination issues particularly important. Elected officials face no term limits, making any systematic incumbency advantage particularly consequential. Our sample includes a total of more than 20,000 races, which enables us to explore the mechanisms underlying the effects on our main outcomes through heterogeneity analyses, while maintaining sufficient statistical precision.

We first document the existence of a large incumbency advantage in French multiparty elections: the victory of a candidate increases her likelihood of winning the next election by 25.1 percentage points. We also identify each candidate's party and political orientation (from far-left to far-right) and measure incumbents' advantage at these two additional levels as well, to account for the possibility that parties on the losing side replace their candidate more often. The effect of winning the present election on winning the next one remains substantial at the party and orientation levels: 13.3 and 12.3 percentage points, respectively. Moreover, the incumbency advantage is sizable for candidates of different orientations, and in both local and parliamentary elections.

Second, we estimate the effects of a close victory on the likelihood that the candidate or other candidates of their party participate in the next election and on the number of competitors from the same orientation, which may directly contribute to the effect on winning. Incumbents are more likely by 32.9 percentage points than their closest challenger to compete again in the next election. The impact is also positive at the party level, but smaller and non-significant. In addition to effects on candidates' own likelihood to run, a close victory decreases the number of competitors from the candidate's orientation by 0.43 on average, which corresponds to a 23% decrease compared to the mean at the left of the threshold. Interestingly, this effect is driven by competitors belonging to political parties more than by independent candidates from the same orientation, suggesting that the lower number of ideologically close competitors faced by the incumbent primarily results from dropout agreements between parties. We conclude that party coordination is more effective on the side of the incumbent. Better coordination reinforces the other mechanisms giving incumbents an advantage which have been identified in previous work on two-party systems.

Third, using a bounding strategy, we show that incumbents obtain a larger vote share (by 3.0 to 19.8 percentage points) and are more likely to win (by 8.0 to 33.9 percentage points) than their closest challenger, conditional on running again. These effects may be driven in part by the fact that

incumbents face fewer competitors from their own political orientation. However, beyond candidate and party decisions to compete, incumbency advantage may also be driven by voters rallying the incumbent in the next election, for instance because incumbents receive more contributions or run better campaigns. We explore this possibility by measuring effects on campaign expenditures and on the content of two-page candidate manifestos mailed by the state to all registered voters. While incumbents do not raise significantly more money than their closest challenger in the previous election, conditional on running again, we find that their manifestos are more original, where manifesto originality is defined relative to other candidates from the same party. The latter result suggests that incumbents' communication strategy is more personalized and better-tailored to their voters' preferences. Of course, this evidence is not sufficient to conclude that voter choice plays a crucial role. Because it is difficult to directly estimate which proportion of the effects on vote shares and on winning, conditional on running, is due to voters rallying the incumbent and to the lower number of competitors on their side, we turn to a separate regression discontinuity design, which measures the impact of qualifying for the runoff on the next elections' results, using the same sample of elections. Unlike winning the election (and becoming the incumbent), qualifying for the runoff has no effect on the number of competitors from the same orientation in the next election. However, it does increase candidates' future vote share. This effect indicates that candidates who do well in an election become focal points for voters. It suggests that part of the incumbency advantage is driven by voters' behavior as well.

1.1 Literature review

We build on a vast literature documenting the existence of an electoral advantage for incumbent politicians seeking reelection. Evidence of an incumbency advantage in the U.S. dates back to [Erikson \(1971\)](#). Since [Lee \(2008\)](#), researchers have used regression discontinuity designs to provide rigorous causal evidence on this phenomenon, both at the candidate and the party level ([Fowler and Hall 2014](#)). In the U.S., they have found consistent evidence of an incumbency advantage in state ([Uppal 2010](#)), city council ([Krebs 1998](#); [Trounstein 2011](#)), federal ([Butler 2009](#)), and primary elections ([Ansolabehere et al. 2007](#); [Olson 2020](#)). A large incumbency advantage also exists in other countries using first-past-the-post elections, including the U.K. ([Katz and King 1999](#); [Eggers and Spirling 2017](#)), Australia ([Horiuchi and Leigh 2009](#)), and Canada ([Kendall and Rekkas 2012](#)). Mat-

land and Studlar (2004) suggest that the incumbency advantage is lower in proportional elections, since the presence of multiple incumbents in the same district dilutes the effect. Positive effects have been found in proportional elections in Denmark (Dahlgaard 2016), Finland (Kotakorpi et al. 2017), Germany (Hainmueller and Kern 2008; Ade et al. 2014), Ireland (Redmond and Regan 2015), Norway (Fiva and Røhr 2018), Sweden (Liang 2013), but not in Italy (Golden and Picci 2015) and Japan (Ariga 2015), where, if anything, incumbents tend to be disadvantaged.¹

The incumbency advantage may first arise because incumbent politicians get an edge from holding office (Fiorina 1989; Krebs 1998). Incumbents can engage in clientelism (Nunez 2018; Frey 2019) and pork barrel spending (Fowler and Hall 2015; Spáč 2020). They tend to get disproportional media coverage (Prior 2006; Schaffner 2006), and may be able to outspend challengers (Fouirnaies and Hall 2014; Holbrook and Weinschenk 2014). Second, incumbents may deter high-quality challengers to compete against them (Levitt and Wolfram 1997; Ashworth and Bueno de Mesquita 2008; Ban et al. 2016; Hall and Snyder 2015).

We complement this literature by estimating the size of the incumbency advantage in two-round plurality rule elections and by documenting a third mechanism, related to party and voter coordination. Our analyses build on recent studies investigating how parties and voters solve coordination issues when the number of potential candidates is larger than two and, therefore, multiple equilibria exist (Palfrey 1988; Myerson and Weber 1993; Cox 1997). Anagol and Fujiwara (2016) show that voters tend to coordinate on candidates who finished a close second rather than third in the previous election, and Granzier et al. (2019) find coordination by both parties and voters on candidates' first-round rankings in two-round elections. However, coordination often remains imperfect: many voters' choices are driven by expressive motives or by the desire to be on the winning side instead of strategic considerations, and parties often fail to reach dropout agreements (Pons and Tricaud 2018; Granzier et al. 2019). Pons and Tricaud (2018) show that imperfect coordination can lead to ideologically close candidates splitting the votes of their base and to suboptimal outcomes such as the defeat of the Condorcet winner. In this paper, we investigate how coordination issues interact with incumbency advantage by exploring whether these issues are more severe on the winning or the losing side.

¹In non-Western countries, the incumbency effect has also often been found to be negative: see Duraisamy et al. (2014) for India, Roh (2017) for South Korea, and De Magalhaes (2015) and Klačnja and Titunik (2017) for Brazil.

Finally, our results also contribute to the broader literature studying the properties of two-round plurality rule elections ([Bouton 2013](#); [Bordignon et al. 2016](#); [Bouton et al. 2019](#); [Cipullo 2021](#)), a voting system used to elect Members of Parliament or local governments in many countries, including France, the Czech Republic (Senate), Italy (municipalities), Vietnam, Mali, Uzbekistan, and to elect the head of state in a total of 88 countries.

2 Institutional Setting and Data

2.1 Setting

Our sample includes both parliamentary and local elections.

Parliamentary elections The National Assembly is the lower house of the French Parliament. In addition to holding the legislative power, it controls the government and can overthrow it. It is currently composed of 577 representatives elected through two-round plurality elections in single-member districts. To be elected in the first round, a candidate needs to obtain the absolute majority of the votes cast in their district, and these votes need to account for at least one quarter of all registered voters. If no candidate wins in the first round, the two candidates who received the most votes in the first round and any other candidate who obtained the votes of at least 12.5% of the registered voters qualify for the second round. The runoff takes place among all qualified candidates who choose to stay in the race instead of dropping out. The candidate who receives a plurality of votes gets elected.

This two-round plurality system has been in place since 1958. The number of representatives has increased slightly over time, and the first round vote share required to qualify for the second round changed from 5% of the expressed votes in 1958 to 10% of the registered voters in 1966 and to the current threshold of 12.5% of the registered voters in 1975.

Local elections France is divided into 101 départements, which have responsibilities over education, transportation, and social assistance, among other matters. In each département, a departmental council holds the legislative power and elects a president, who holds the executive power. Members of the departmental council are chosen by small constituencies, the cantons. During our

sample period, each canton elected one council member for a six-year mandate. Every three years, half of the cantons voted to renew their representatives.²

Local elections use a two-round plurality voting rule, similarly as the parliamentary elections. The threshold to qualify for the second round was 10% of the registered voters until 2010, when it was raised to 12.5%.

Party system Over the sample period, French politics have been dominated by the following seven main parties, ordered from left to right on the ideological scale: Front de Gauche (FDG), Verts (VEC), Parti Socialiste (SOC), Parti radical de gauche (RadGauche), Mouvement Démocrate (MODEM), Union pour un Mouvement Populaire (UMP), and Front National (FN).³ These parties were long organized into two coalitions (Bornschiefer and Lachat 2009). The left coalition was dominated by SOC and the right coalition by UMP. These two parties have generally obtained the most votes and seats and they have therefore been the cornerstones of coalitions also involving the MODEM, on the right, and FDG, VEC, and RadGauche, on the left. Electoral alliances can lead to dropout agreements (where one party agrees not to field any candidate) before the first round and between the first and second rounds, as well as endorsement of other parties' candidates. After the election, allied parties often build coalitions at the National Assembly and in departmental councils, and they govern together. FN, on the far-right, has not participated in alliances with parties on the left or on the right, except for a few local elections.

Beyond the seven main parties, elections often feature candidates affiliated with smaller issue-specific parties. Candidates may also run as independents, without the endorsement of any national party. Independent candidates account for 30% of all candidates in our sample and for 19% of the top-two contenders in the final round of elections.

2.2 Electoral data

We use data for all parliamentary elections between 1958 and 2017, except for the 1986 elections, which used a proportional system. We also use data for all local elections between 1979 and 2011. Electoral results were obtained from the French Ministry of the Interior for elections held after

²Since the 2015 election, local elections take place every six years in the entire country and they elect tickets composed of a male and a female candidate. Cantons were all redistricted ahead of the 2015 election, hence this election is excluded from our analysis.

³We provide more information on each party in Appendix D.2.

1988,⁴ and they were digitized by [Granzier et al. \(2019\)](#) for elections prior to 1988. For each electoral district and election year, we have data on the number of candidates, the number of registered voters and expressed votes, and the vote shares obtained by each candidate in both electoral rounds as well as their political label. Our analysis requires linking races over time, from one election to the next. Therefore, we restrict the sample to districts that were not affected by redistricting and whose borders remained identical between two consecutive elections. Our main sample includes observations from twelve parliamentary elections (1958, 1962, 1967, 1968, 1973, 1978, 1988, 1993, 1997, 2002, 2007, and 2012) and ten local elections (1979, 1982, 1985, 1988, 1992, 1994, 1998, 2001, 2004, and 2008).⁵

In each district, we match candidates, parties, and orientations across elections. First, we use fuzzy string matching on candidate names to identify candidates present both in election t and election $t + 1$, and we link candidates at t to their electoral outcomes at $t + 1$. Second, we use the political labels attributed to candidates by the Ministry of the Interior to identify candidates affiliated with one of the seven main parties.⁶ We track parties' election-specific names and their genealogy over time based primarily on [Knapp \(2004\)](#). In each district, we aggregate candidate outcomes at the party level and link candidates at t to their party-level outcomes at $t + 1$.⁷ Third, we allocate candidates to six political orientations (far-left, left, center, right, far-right, and non-classified). This is an important classification, since candidates who are not affiliated with any of the seven main parties might nonetheless have a clear political orientation, indicated by labels such as "diverse left" or "diverse right." We thus aggregate candidate outcomes at the orientation level, and link candidates at t to their orientation-level outcomes at $t + 1$.⁸

⁴We downloaded the data on data.gouv.fr, the online governmental platform for French public data.

⁵Observations from the 2017 parliamentary election and the 2011 local election, which are the last available elections, are only used to construct next-election outcomes for, respectively, the 2012 parliamentary election and either the 2004 or the 2008 local election, depending on the cantons. Furthermore, we do not link districts in 1988 to a previous election or districts in 1981 to a future election, since the 1986 election, which took place in between, followed a different (proportional) electoral rule. Observations from 1981 are still linked to the 1978 election and used to construct next-election outcomes for that year. Appendix Tables [D.1](#) and [D.2](#) list all elections in the sample and the elections they are matched with to construct next-election outcomes.

⁶The political labels are based on candidates' self-reported political affiliation, party endorsement, past candidacies, and public declarations, among other indicators.

⁷In the vast majority of races in our sample, there is only one candidate per party. Less than 2% of the top-two contenders in the final round of a race are linked to several candidates from the same party at $t+1$.

⁸For more details on the mapping between candidate labels on the one hand and parties and orientations on the other, see Appendix [D.2](#). The mapping with orientations builds on [Granzier et al. \(2019\)](#). The key outcomes at the candidate, party, and orientation levels are defined in Appendix [D.6](#).

2.3 Complementary data

Campaign expenditures We complement our dataset with the total amount of contributions received by each candidate (from individual donations, party contributions, or personal contributions) and their total expenditures, for all elections since 1992. These data come from the French National Commission on Campaign Accounts and Political Financing (CNCCFP). They were collected and digitized by Fauvelle-Aymar and François (2005), Foucault and François (2005), and Granzier et al. (2019).

Candidate manifestos In France, individual candidates may issue a two-page electoral manifesto (*“profession de foi”*), distinct from their party’s manifesto. The state mails the manifestos of all candidates in a given district to all registered voters of this district a few days before the election. We provide additional details on these documents in Appendix D.4 and show an example in Appendix Figure D.1.

Our campaign manifesto data cover all parliamentary elections from 1962 to 1997 and the 2017 parliamentary elections. Candidate manifestos were collected and digitized by the CEVIPOF’s Archelec project (Gaultier-Voituriez 2016) and Le Pennec (2020) for the 1962 to 1993 elections and by Cagé et al. (2022) for the 1997 election. The 2017 election manifestos were made available online by the Ministry of the Interior and scraped by Regards Citoyens (<https://www.regardscitoyens.org/>).

We use an unsupervised approach to construct a measure of manifesto originality with respect to manifestos issued by other candidates from the same party, for candidates affiliated with one of the seven parties. Specifically, we calculate each manifesto’s average pairwise similarity to all other manifestos issued in the same election year by candidates from the same party, based on the words appearing in their manifestos. The similarity between any two manifestos is computed in six different ways.⁹ The six measures of mean similarity to other manifestos from the same party are then standardized by election year. We define an originality index equal to the average of these six standardized measures. This index reflects the politician’s effort and ability to write a personalized campaign message, instead of using a template common to other candidates endorsed by the same party.

⁹We define similarity as the cosine similarity between vectors of frequencies or weighted frequencies over unigrams (single words) or bigrams (two-word expressions), or using a Latent Semantic Indexing approach as in Bertrand et al. (2021). For more details, see Appendix D.5.

3 Empirical Strategy

3.1 Regression discontinuity design

We estimate the causal impact of winning on party coordination and subsequent electoral success by exploiting close races.

After excluding races that cannot be linked to a subsequent election due to redistricting as well as races where the winner ran uncontested, our sample for the candidate-level analysis includes a total of 20,755 races: 5,757 races from parliamentary elections and 14,998 races from local elections.¹⁰ Our sample for the party-level analysis further excludes candidates who are not affiliated with any of the seven main party organizations and races in which the top-two contenders are from the same party. It includes 19,434 races. Races in which the top-two contenders are from the same party only account for 0.5 percent of all races. In general, *all* candidates are from distinct parties. Our orientation-level sample excludes candidates who cannot be classified on the left-right scale and races in which the top-two contenders are from the same orientation. It includes 18,666 races.

Summary statistics for races included in each sample are displayed in Appendix Table D.3. First-round turnout is about 68% on average, in all samples, with an average number of six competing candidates. A runoff is held in 71% of races and the winning margin is 21 percentage points on average. Thanks to the large number of races in our data, many of them are close: the vote share difference between the winner and the closest contender is lower than 5 percentage points in 3,686 races in the main sample.

We use two observations per race, corresponding to the winner and the runner-up. We define our running variable *Marg* based on the difference between the vote shares obtained by these two candidates in the final round of the election (the first round, if the election was won in the first round, and the second round otherwise). It is positive and equal to the difference between the vote shares of the winner and the runner-up, for the winner, and negative and equal to the difference between the vote shares of the runner-up and the winner, for the runner-up. The treatment variable

¹⁰See Appendix Tables D.1 and D.2 for more details.

T is a dummy equal to one if the candidate won the election ($Marg > 0$) and 0 otherwise ($Marg < 0$).¹¹ We use a sharp regression discontinuity design and estimate the following equation:

$$Y_{i,t+1} = \alpha + \tau T_{i,t} + \beta f(Marg_{i,t}) + \gamma T_{i,t} * f(Marg_{i,t}) + \epsilon_{i,t+1}, \quad (1)$$

where $Y_{i,t+1}$ is the outcome of interest for candidate i (alternatively, for the party or the orientation of candidate i) in election $t + 1$. Our baseline specification is non-parametric, following [Imbens and Lemieux \(2008\)](#) and [Calonico et al. \(2014\)](#), and we estimate it using the `rdrobust` Stata package. The specification amounts to estimating two local linear regressions, one to the left and the other to the right of the cutoff.¹² Our coefficient of interest, τ , corresponds to the difference between the intercepts of the two regressions, evaluated at $Marg = 0$. It estimates the causal impact of winning the election t .

We estimate equation 1 for a wide range of outcomes, including the probability of running again, the number of candidates from the same orientation in the next election, and the probability of winning the next election. We use an identical bandwidth for all outcomes, equal to 5 percentage points, as in [Colonnelli et al. \(2020\)](#). Indeed, the optimal bandwidths selected by the MSERD procedure from [Calonico et al. \(2019\)](#) and by the method from [Imbens and Kalyanaraman \(2012\)](#) yield surprisingly large values in our setting (e.g., the MSERD method yields a bandwidth of 13.8pp for the probability of winning the next election). These outcome-specific optimal bandwidths also vary widely across the different outcomes. Using a common bandwidth facilitates the comparison of point estimates across outcomes and subsamples and the assessment of the underlying mechanisms. In Appendix Figure C.1, we replicate our main results for a wide range of bandwidth values from 1 to 20pp, including the bandwidths from [Calonico et al. \(2019\)](#) and [Imbens and Kalyanaraman \(2012\)](#). In all specifications, standard errors are clustered at the district level.

3.2 Identification assumption

We provide standard tests to assess the validity of our RDD.

¹¹There are nine races in our sample in which the top-two contenders obtain the exact same number of votes, in which case the older candidate is designated as winner. We exclude these races from the sample.

¹²We show the robustness of our main results to fitting local quadratic regressions instead of linear ones in Appendix Table C.1.

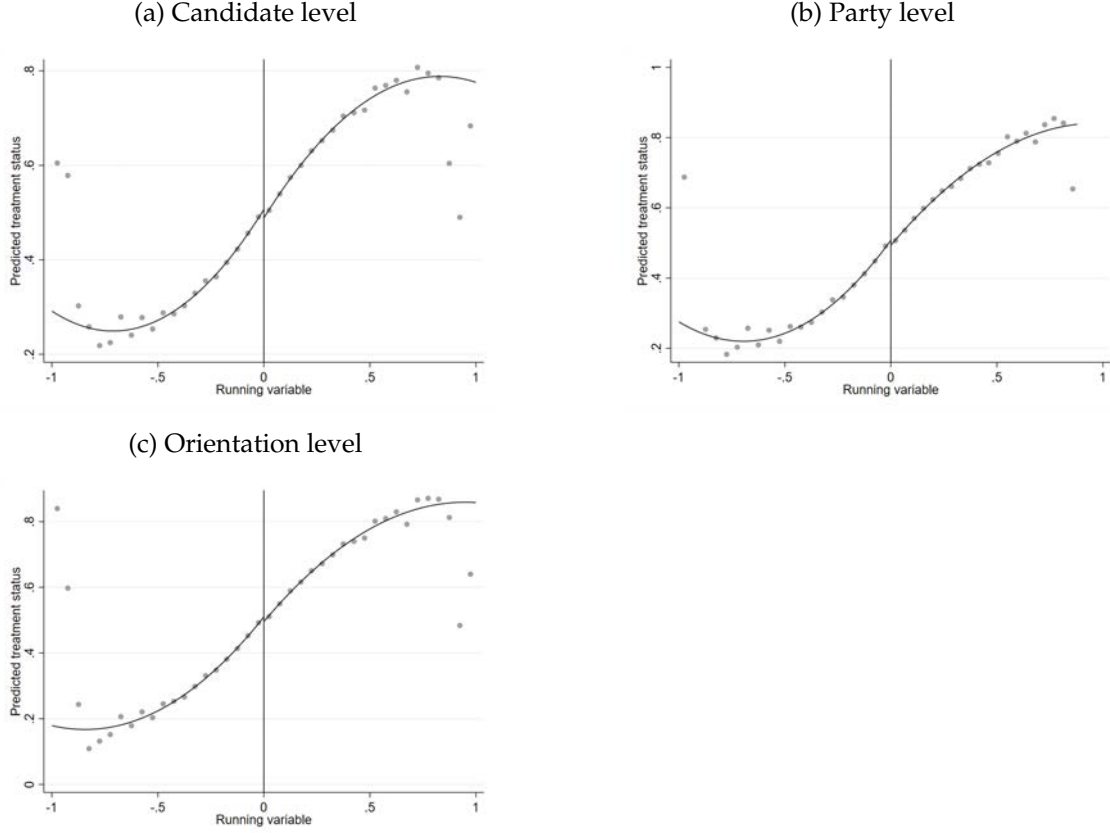
A usual concern is that candidates of a specific type may manage to systematically sort immediately to the right of the victory cutoff. Such manipulation is unlikely, since it would require candidates to be able to predict the outcome of the race with great accuracy, while several unpredictable events, including weather conditions, make electoral outcomes uncertain. To rule out the presence of sorting empirically, we implement the density test from [Cattaneo et al. \(2018\)](#). In our setting, this test is satisfied by construction at the candidate level since our sample includes the exact same set of races on both sides of the threshold and, in each race, the winning and losing candidates are equally distant from the cutoff. The samples we use for analyses at the party and orientation levels include a few races with only one candidate, due to the exclusion of candidates who do not belong to one of the seven main parties and of candidates who cannot be classified on the left-right scale, respectively, but the tests remain relatively uninformative. We show the results of the density tests in Appendix Figure B.1. As expected, the null hypothesis of no sorting at the threshold cannot be rejected at standard levels of significance, for any of our levels of analysis (candidate, party or orientation).

Next, we conduct a general test of imbalance by checking whether treatment status predicted based on covariates jumps at the threshold. We consider variables whose distribution at the cutoff is not mechanically symmetric: a set of six dummies indicating the candidate’s orientation; the number of other candidates from the candidate’s orientation in the current election, at t ; a dummy indicating if the candidate is affiliated with a party or running as independent;¹³ a dummy indicating if the candidate is a woman; dummies indicating if the candidate, their party and their orientation ran in the previous election, at $t - 1$; dummies indicating if they, their party and their orientation won at $t - 1$; their first round vote share, the vote share of their party, and that of their orientation at $t - 1$ (set equal to 0 if they, their party, and their orientation did not run, respectively); and the number of other candidates from the same orientation at $t - 1$.¹⁴ We regress each candidate’s actual treatment status T on these variables and generate their predicted treatment

¹³Independent candidates are those whose political label assigned by the Ministry of the Interior does not correspond to a party organization. The classification of labels between parties and non-parties was performed by [Granzier et al. \(2019\)](#). Note that candidates affiliated with a party are never considered independent, including if this party is not one of the seven main parties that we focus on.

¹⁴Other variables such as the number of registered voters, the total number of candidates, voter turnout, or the candidate’s vote share at the decisive stage are smooth at the threshold, by construction, since they take the same value for the observations corresponding to the incumbent and to the runner-up of a given race, so we do not take them into account in this test.

Figure 1: General balance test



Notes: Dots represent the local averages of the predicted treatment status (vertical axis). Averages are calculated within equally-spaced bins of the running variable (horizontal axis). The running variable (the vote share difference between the first two candidates) is measured as percentage points, and each bin is five-percentage-points wide. Continuous lines are a quadratic fit. In Figure 1b, we use our party-level sample. In Figure 1c, we use our orientation-level sample.

assignment based on the regression's coefficients.¹⁵ We then test whether predicted values jump at the victory cutoff.

Figure 1 shows the results. Each dot represents the probability of being treated within a given bin of the running variable – i.e., the vote share difference between the first two candidates. Winning candidates are located to the right of the threshold, and losing ones to the left. A quadratic fit on each side of the cutoff is provided as a visual assistance. Figure 1a does not reveal any discontinuity when using our sample for the candidate-level analysis. Figures 1b and 1c do not show any discontinuity in the party-level or the orientation-level sample either. Table 1 shows the corre-

¹⁵Outcomes at $t-1$ are set to missing in districts that have been redistricted since the previous election, for all observations in the 1988 parliamentary election (which was preceded by an election with a different electoral rule), and for observations in the 1958 parliamentary election and the 1979 local election (which are the earliest elections in our sample). To avoid dropping observations, for each regressor, we include a dummy equal to one when the variable is missing and we replace missing values by 0. Each covariate is described in more detail in Appendix D.7.

Table 1: General balance test

	Predicted treatment status		
	(1) Cand.	(2) Party	(3) Orient.
Treatment effect	-0.004 (0.011)	0.006 (0.012)	0.001 (0.012)
Robust p-value	0.804	0.416	0.567
Observations	7372	5850	6575
Polynomial order	1	1	1
Bandwidth	0.050	0.050	0.050
Mean, left of threshold	0.491	0.491	0.493

Notes: Standard errors, shown in parentheses, are clustered at the district level. We compute statistical significance based on the robust p-value and indicate significance at 1, 5, and 10% with ***, **, and *, respectively. The unit of observation is the candidate. In column 2, we use our party-level sample. In column 3, we use our orientation-level sample. The outcome is the value of the treatment predicted by candidate-level (column 1), party-level (column 2), and orientation-level (column 3) baseline variables listed in the text. The treatment variable is a dummy equal to 1 if the candidate wins the election. We use local polynomial regressions: we fit separate polynomials of order 1 on each side of the threshold, using a bandwidth of 5 percentage points. The mean, left of the threshold gives the value of the outcome for the losing candidate at the threshold.

sponding point estimates: coefficients for the three levels of analysis are small and non-significant. As shown in Appendix Figure C.2, this is true for a large range of bandwidth values, including those chosen optimally using the MSERD and IK procedures.

We finally test whether there is a discontinuity in any of the individual variables used to predict treatment. Appendix Figure B.2 shows that there is no discontinuity in the probability that the candidate (or the candidate’s party or orientation) won or ran in election $t - 1$, nor in the number of other candidates from the same orientation in the current and in the previous election. Appendix Table B.1 shows results for all other variables, in the candidate-level sample. All estimates are small and non-significant, except for the candidate’s orientation: columns 1 through 5 of Panel a suggest that close winners are more often from the center and the right. Our main results are virtually identical when controlling for candidate orientation fixed effects, as shown in Appendix Table C.2.

4 Main Results

4.1 Impact on the likelihood of winning the next election

We first test for the existence of an incumbency advantage in French parliamentary and local elections by measuring the impact of a close victory on the odds of winning the following election. We conduct this analysis at the candidate, party, and orientation levels. The outcome is a dummy equal to 1 if the candidate (or the candidate’s party or orientation) wins the next election, and 0 if they run and lose or if they do not run. Thus, this outcome is defined whether the candidate (or their party or orientation) is present in the next election or not.¹⁶

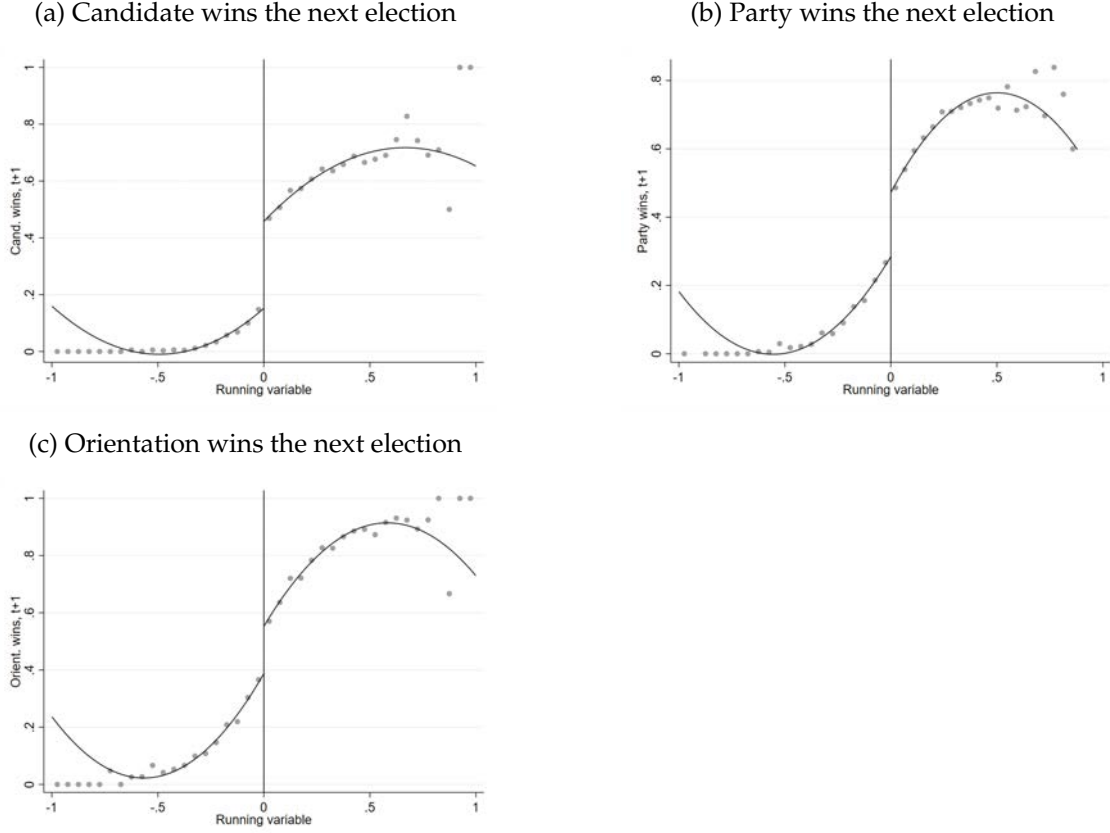
Figure 2a plots the likelihood that the first and second candidates in the current election win the next election against the running variable. We observe a marked discontinuity at the cutoff: winning the current election dramatically increases a candidate’s odds of winning the next one. Figures 2b and 2c show that winning the current election also increases the odds that *any* candidate from the same party and the same orientation, respectively, wins the next election.

Table 2 complements the graphical analysis with formal estimates of the effects. On average, the victory of a candidate increases their likelihood of winning the next election by 25.1 percentage points (column 1), an effect that is statistically significant at the 1% level and represents a 70% increase relative to the average likelihood of winning of close contenders at the left of the threshold. The effect is halved at the party and orientation levels – 13.3 and 12.3 percentage points, respectively (columns 2 and 3) – but the point estimates still represent 50% and 34% increases compared to the average chance of victory of the parties and orientations of losing candidates at the left of the threshold.

Appendix Table C.1 checks the robustness of our results to using bandwidths chosen based on the MSERD procedure from Calonico et al. (2019) and the method from Imbens and Kalyanaraman (2012); tighter and larger bandwidths of 2.5 and 10 percentage points; and a quadratic specification instead of a linear one. Point estimates at the candidate level are virtually unchanged across all specifications and always remain significant at the 1% level (Panel a). Results at the party and orientation levels are also similar across specifications, but point estimates are either non-significant

¹⁶We provide more details on the definition of this outcome and all others in Appendix D.6.

Figure 2: Impact of winning on winning the next election



Notes: Dots represent the local averages of the outcome: a dummy equal to one if the candidate (or the candidate's party or orientation) wins the next election (vertical axis). Averages are calculated within equally-spaced bins of the running variable (horizontal axis). The running variable (the vote share difference between the first two candidates) is measured as percentage points, and each bin is five-percentage-points wide. Continuous lines are a quadratic fit. In Figure 2b, we use our party-level sample. In Figure 2c, we use our orientation-level sample.

or significant only at the 10% level when using a quadratic specification or a smaller bandwidth (Panels b and c, columns 3 and 5). Appendix Figure C.1 further shows that our results are robust to a large range of bandwidth values, with smaller and noisier estimates for very narrow bandwidths. Optimal bandwidths are generally larger and yield more precise estimates than our baseline five-percentage-point bandwidth.

Having established the existence of an incumbency advantage at the individual, party, and orientation levels, we now compare the magnitude of the effect across different settings. Appendix Table A.1 shows the heterogeneity results at the candidate level. The treatment effect on the odds of winning the next election is sizable in different types of elections and for candidates of different orientations and party formations. However, the effect is twice as large in local elections as in

Table 2: Impact of winning on winning the next election

	Cand. wins, t+1	Party wins, t+1	Orient. wins, t+1
	(1)	(2)	(3)
Treatment effect	0.251*** (0.023)	0.133** (0.027)	0.123** (0.026)
Robust p-value	0.000	0.011	0.016
Observations	7372	5850	6575
Polynomial order	1	1	1
Bandwidth	0.050	0.050	0.050
Mean, left of threshold	0.148	0.267	0.366

Notes: Standard errors, shown in parentheses, are clustered at the district level. We compute statistical significance based on the robust p-value and indicate significance at 1, 5, and 10% with ***, **, and *, respectively. The unit of observation is the candidate. In column 2, we use our party-level sample. In column 3, we use our orientation-level sample. The outcome is a dummy equal to one if the candidate (column 1), the candidate's party (column 2), or the candidate's orientation (column 3) wins the next election. The treatment variable is a dummy equal to 1 if the candidate wins the current election. We use local polynomial regressions: we fit separate polynomials of order 1 on each side of the threshold, using a fixed bandwidth of 5 percentage points. The mean, left of the threshold gives the value of the outcome for the losing candidate at the threshold.

parliamentary elections (columns 1 and 2), suggesting that the incumbency advantage is stronger in elections which are less salient or where the identity (valence) of the candidate is more relevant than their party affiliation (ideology). The size of the effect is comparable for men and women (columns 3 and 4), although the point estimate is not significant at conventional levels for female candidates – presumably because very few women get elected over our sample period, resulting in a small sample size. The effect is also comparable for left and far-left candidates, on the one hand, and candidates of other orientations, on the other hand (columns 5 and 6). It is slightly larger for candidates running for an opposition party than for candidates belonging to a party of the ruling majority (columns 7 and 8).¹⁷ Finally, the incumbency advantage is slightly larger for candidates of the centrist MODEM party (column 9), but it remains sizable and significant for FDG, SOC, and UMP (columns 9 through 12).¹⁸

The positive effect of winning on winning the next election may stem from impacts on the likelihood that the candidate and their competitors run in the following election, and from an

¹⁷The ruling majority refers to the party or the coalition of parties that support the ruling national government at the time of the $t + 1$ election.

¹⁸The point estimate for the left-wing party FDG falls short of statistical significance due to a smaller sample size (column 9). We exclude the Green party, VEC, and FN from this party-specific analysis as too few of their candidates are close to the threshold.

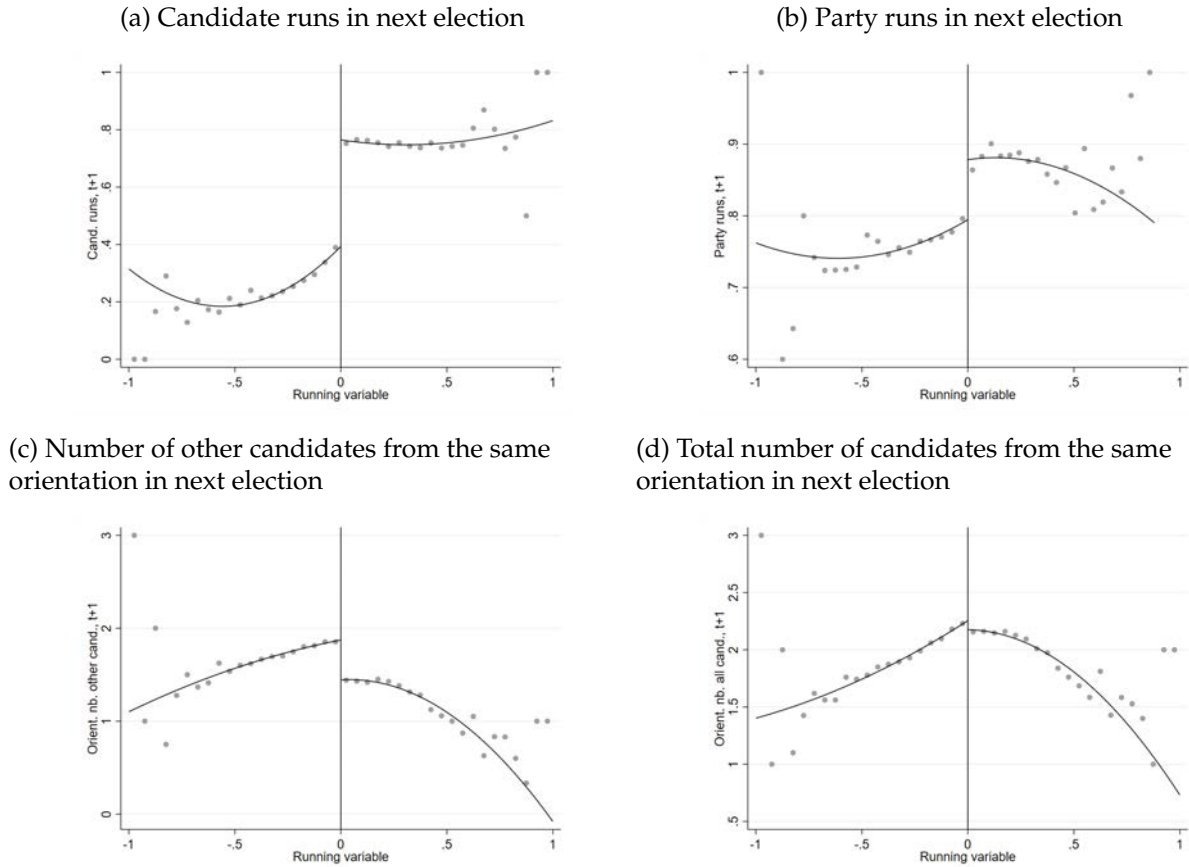
increased probability of winning the election, conditional on rerunning. We build on our RDD framework to disentangle and quantify the importance of each of these two types of channels.

4.2 Impact on candidate entry in the next election

Figures 3a and 3b plot the likelihood of running in the next election against the running variable at the candidate level and at the party level, respectively. In both cases, we observe a large upward jump at the threshold, indicating that the incumbent candidate and party are more likely to run again than the runner-up from the previous election. Additionally, Figures 3c and 3d plot the number of candidates from the same orientation running in the next election, respectively excluding and including the candidate themselves. One may expect a negative effect on the number of competitors from the same orientation if incumbents are better able to deter ideologically-close challengers from entering the race, as a result of the political power that comes with being in office. Alternatively, a positive effect could emerge if candidates and parties on the losing side decide to join forces in order to reverse the result of the previous election. The quadratic polynomial fit in Figure 3c indicates a marked downward jump at the cutoff, in line with the former hypothesis.

In accordance with the graphical evidence, column 1 in Table 3 shows that a candidate's victory increases their odds of running again in the next election by 32.9 percentage points (84% of the mean at the left of the threshold), which is significant at the 1% level. The impact is also positive, but non-significant, at the party level, with a point estimate of 4.6 percentage points. Finally, a close victory decreases the number of competitors from the candidate's orientation by 0.43 (23%), compared to a close defeat, which is also significant at the 1% level. The effect on the number of candidates from other orientations is mechanically of the exact same magnitude and opposite sign since our RDD compares the number of candidates from the winner's orientation to that of the loser's orientation, while keeping the number of candidates from any other orientation constant. A possible concern with focusing on the number of competitors from the same orientation is that, if parties always replace a non-running candidate, this outcome could mechanically jump up to the left of the cutoff, since losing candidates are more likely not to run again. This would thus lead to overestimating the effect. Figure 3d and column 4 of Table 3 report the effect on the total number of competitors from the same orientation, including the candidate. In this case, on the contrary, the effect is likely to be underestimated. Since a winning candidate is more likely to re-run, the total

Figure 3: Impact of winning on candidate entry in the next election



Notes: In Figure 3b, we use our party-level sample. In Figures 3c and 3d, we use our orientation-level sample. Other notes as in Figure 2.

number of candidates from the same orientation mechanically increases to the right of the cutoff. It is reassuring that this underestimated coefficient remains negative, even though it falls short of statistical significance. These results are robust to changes in the choice of bandwidth or to using a quadratic specification, as shown in Appendix Table C.3. In particular, the effect of winning the current election on the total number of candidates from the same orientation in the next election is negative and significant at the 1% and 5% level, respectively, when using either the MSERD or IK optimal bandwidths (Panel d of Appendix Table C.3, columns 1 and 2).

In sum, the unconditional impact of winning today on winning again tomorrow is partly driven both by the increased probability that the winner runs again and the lower number of competitors from the same political orientation. We now turn to study whether the effect on re-running suffices to explain the effect on winning or whether winning the present election also increases the likelihood of winning the next one, conditional on running.

Table 3: Impact of winning on candidate entry in the next election

	Cand. runs, t+1	Party runs, t+1	Orient. nb. other cand., t+1	Orient. nb. all cand., t+1
	(1)	(2)	(3)	(4)
Treatment effect	0.329*** (0.024)	0.046 (0.021)	-0.426*** (0.066)	-0.129 (0.062)
Robust p-value	0.000	0.386	0.000	0.166
Observations	7372	5850	6575	6575
Polynomial order	1	1	1	1
Bandwidth	0.050	0.050	0.050	0.050
Mean, left of threshold	0.390	0.796	1.854	2.230

Notes: The outcome is a dummy equal to 1 if the candidate runs (column 1), a dummy equal to 1 if the candidate's party runs (column 2), and the number of other candidates from the same orientation (column 3) or the total number of candidates from the same orientation (column 4) in the next election. In column 2, we use our party-level sample. In columns 3 and 4, we use our orientation-level sample. Other notes as in Table 2.

4.3 Impact on the likelihood of winning conditional on running

While the RDD ensures that close winners and losers are, on average, similar, there is no guarantee that winners and losers who choose to run again in the next election are similar as well. The possibility of differential selection on the two sides of the threshold makes measuring the effects on winning conditional on running more difficult. Suppose for instance that all winners run again but only high-quality losers do so. Then, using our RDD on the subsample of candidates present in the next election would likely underestimate the impact of winning conditional on re-running.

We address this selection issue with an approach borrowed from [Anagol and Fujiwara \(2016\)](#) and [Granzier et al. \(2019\)](#), and detailed in Appendix E. The effect of winning an election on winning the next election, conditional on re-running, depends on several ingredients. It depends on the effect of winning on re-running as well as the unconditional effect of winning on winning again, which can both be measured in the data. It also depends on the likelihood that candidates who lose the present election and, as a result, do not re-run in the next one, would have won the next election – had they decided to re-run. We refer to those candidates as "compliers."¹⁹ This last term is not observable and our approach thus requires making an assumption about its value.

Assuming that this term is equal to 0, that is, that compliers would have had no chance of winning the following election, had they run, amounts to assuming that the effect on the uncon-

¹⁹Technical details and the exact formula we use to calculate bounds are provided in Appendix E.

ditional likelihood of winning reported in Section 4.1 is entirely driven by the effect on winning conditional on running. Therefore, this assumption provides an upper bound on the likelihood of winning, conditional on running. Conversely, to obtain a reasonably conservative lower bound, we assume that, had they run, compliers who decided not to run in the next election as a result of losing the present one would have had the same probability of winning as the close winners who did run. This probability is equal to 58.3 percent.

We use the same method to derive bounds for the effect of a current victory on the vote share received in the first round of the following election, conditional on the candidate running again. The counterfactual is set again to zero when deriving the upper bound, and to the estimated outcome for close winners participating in the next election, namely 37.9 percent, when deriving the lower bound. We also estimate the effect of winning on the number of other candidates from the same orientation conditional on the incumbent being present. Unlike winning the next election, which is always equal to zero when the candidate does not run again, the number of competitors from the same orientation may take any value, whether the candidate runs again or not. Furthermore, winning the current election may affect ideologically close candidates' decision to run in the next election, even if the winning candidate does not run again themselves. We adapt the bounds formula to take this into account and provide technical details in Appendix E. Once again, we need to make assumptions on the expected number of competitors from the same orientation that would have run against a complier who did not run, if that candidate had decided to run. To compute the least conservative lower bound (i.e., the most negative bound) we assume that this quantity is equal to the number of candidates from the same orientation as any losing candidate who does not run again in the future: 2.3. To compute the more conservative upper bound, we assume that one competitor would have dropped out of the race if the complier had decided to run again, so the number of candidates from the same orientation would have been 1.3.

To evaluate the significance of these bounds, we compute their empirical standard errors based on 10,000 bootstrap iterations obtained by sampling from our dataset with replacement. We complement the analysis by replicating the exercise at the party level: we measure bounds on the effects of a victory on the candidate's party vote share and on the number of other candidates from the same political orientation (that are not affiliated with the same party) in the next election, conditional on any candidate from the same party running again.

Table 4 displays the main results of this analysis at the individual candidate level. In column 1, we see that conditional on re-running, the victory of a candidate increases their likelihood of winning the next election by 8.0 to 33.9 percentage points, corresponding to 21 to 89 percent of the mean value for close contenders on the left side of the cutoff. These upper and lower bounds are both statistically significant at the 1% level. Moreover, consistent with the conditional effect on winning, column 2 indicates a sizable treatment impact on the subsequent first-round vote share conditional on re-running: 3.0 to 19.8 percentage points.²⁰ Again, both bounds are statistically significant at the 1% level. Winning an election also leads to a reduction in the number of other candidates from the same orientation: conditional on the incumbent running again, the number of ideologically close competitors decreases by 0.116 to 0.545. The conservative upper bound is significant at the 10% level and corresponds to a 9% decrease relative to the mean number of other candidates from the same orientation at the left of the threshold.

Table 4: Bounds on the impact of winning on electoral success and candidate entry in the next election, conditional on running

	Cand. wins, t+1	Cand. vote share, t+1	Orient. nb. other cand., t+1
	(1)	(2)	(3)
Upper bound	0.339*** (0.033)	0.198*** (0.011)	-0.116* (0.062)
Lower bound	0.080*** (0.023)	0.030*** (0.004)	-0.545*** (0.068)
Bootstrap replications	10000	10000	10000
Mean, left of threshold	0.381	0.310	1.292

Notes: Bootstrapped standard errors, shown in parentheses, are clustered at the district level and we indicate significance at 1, 5, and 10% with ***, **, and *, respectively. The unit of observation is the candidate. The outcome is a dummy equal to one if the candidate wins (column 1), the candidate's vote share in the first round in the next election (column 2), and the number of other candidates from the same orientation (column 3). The mean, left of the threshold gives the value of the outcome for the losing candidate at the threshold, conditional on the candidate running in the next election. Other notes as in Table 2, column 1.

Appendix Table A.2 corroborates these patterns at the party level. At this level of analysis, the ranges of possible values for the effects of a victory are narrower, due to lower effects on running: between 12.8 and 15.6 percentage points for the probability of winning again (column 1); and between 5.1 and 6.9 percentage points for the impact on the party's vote share in the first round of

²⁰The effects on unconditional vote shares at the candidate and party level are shown in Appendix Figures A.1a and A.1b, respectively.

the next election, conditional on the party running again. Both the lower and upper bounds for the conditional effect on the number of candidates from the same orientation are negative, although the upper bound falls short of statistical significance (column 3).

Collectively, these results highlight the quantitatively important role of the effect of winning, conditional on re-running, in explaining the incumbency advantage in French parliamentary and local elections. Conditional on running again, the incumbent is more likely to win, obtains a higher vote share, and faces fewer candidates from their own orientation.

5 Mechanisms

Our main results show two major consequences of winning an election, which both contribute to the incumbency advantage in multi-party settings. First, an effect on candidates' entry in the next election: the winner (or another candidate from their party) is more likely to run again while other candidates from the same orientation are more likely to stay out of the race. Second, an effect on vote shares and on the probability of winning the next election, conditional on running again. While the first effect is primarily due to candidate behavior and the second to voter behavior, they are likely to complement each other. Indeed, the incumbent may be more likely to run in the next election and their competitors (other candidates on the same side as well as the runner-up from the previous election) to stay out because they all expect voters to have a preference for the incumbent. Facing fewer competitors on their side, the incumbent candidate and party are better able to rally base voters and thus to win the election again.

Several mechanisms may drive these effects and favor incumbents' reelection. We focus on candidates' campaigning strategies and on the coordination between parties and between voters.

5.1 Advantage in running and campaigning

We first examine a mechanism that has been discussed in the existing literature on incumbency advantage (see Section 1.1). Incumbents may be able to mobilize more resources and run better campaigns than challengers, possibly thanks to the experience and connections they gained in office. In turn, this may enable them to win more votes, conditional on running. Incumbents'

decision to run again more often, while other candidates from the same orientation prefer dropping out, may come in part from other candidates anticipating that they will face these disadvantages.²¹

To test for the existence of an advantage in campaigning, conditional on running, we follow the strategy from Section 4.3 and derive bounds on the conditional impact of winning on the candidate's total campaign expenditures, total contributions, and manifesto originality in the next election. Table 5 shows the results.

Table 5: Bounds on the impact of winning on campaign money and manifesto originality in the next election, conditional on running

	Expend., t+1	Contrib., t+1	Originality, t+1
	(1)	(2)	(3)
Upper bound	10579.8*** (1057.0)	11676.5*** (1214.7)	0.604*** (0.116)
Lower bound	459.6 (616.3)	719.4 (694.6)	0.335*** (0.114)
Bootstrap replications	10000	10000	10000
Mean, left of threshold	19046.6	20264.2	0.894

Notes: In columns 1 and 2, the sample is restricted to elections preceding an election for which data on campaign expenditures and contributions are available (i.e., elections held in 1985 or later). In column 3, the sample is restricted to parliamentary elections preceding an election for which candidate manifestos are available (i.e., elections held between 1958 and 1993 as well as in 2012). The outcome is the candidate's campaign expenditures (column 1) and total contributions received (column 2) in euros, and the originality of the candidate's manifesto as measured by its distance to any other manifesto from the same party (column 3) in the next election. Other notes as in Table 4.

While the lower bounds on the impact of winning on total expenditures and contributions are positive (column 1 and 2), they are small and non-significant. Therefore, we cannot conclude that incumbents are better able to raise money than opponents. By contrast, both the upper and lower bounds on the impact on the originality of the candidate's manifesto issued before the next election are positive and significant at the 1% level. Winning the current election raises a candidate's future originality by 0.34 to 0.60 standard deviations, conditional on running again.²²

²¹In theory, candidates of other orientations could also be scared off if they expect the incumbent to have more resources. However, this effect is likely stronger for ideologically-close candidates who are competing for the same base voters.

²²To calculate the upper bound on the effect on originality conditional on running again in the next election, we assume that, had they run again, the originality index of compliers who do not re-run after losing the current election would have been equal to the first decile of the index among candidates who run again. This assumption is different than for other outcomes (e.g., vote share or campaign contributions), for which we assume that this counterfactual quantity is equal to zero. Indeed, unlike those outcomes whose minimal value is zero, the originality index can take any negative value.

The originality of a candidate’s manifesto relative to other candidates from the same party reflects their ability and effort to use messages that are personal and tailored to their local electorate. Hence, our findings suggest that incumbents tend to run higher-quality campaigns than their competitors, possibly because being in office has given them access to better resources (e.g., better campaign advisors) or because they have formed better communication skills during their mandate. An alternative explanation is that challengers are less well-known, so their best chance to win votes is to advertise the party platform, which voters may recognize. Either way, these results suggest that the incumbency advantage is, at least in part, due to the type of campaign run by candidates.

5.2 Party-level dropout agreements

In two-round electoral systems, party agreements are common between the first round and the runoff. Parties with no candidate admitted at the runoff often endorse candidates belonging to other parties from the same orientation. Even parties with a candidate qualified for the runoff may agree to ask their candidate to drop out and endorse another candidate from the same political orientation. Here, we examine situations in which parties agree on a common candidate even before the first round. Sister parties from the same orientation may coordinate and agree to leave the incumbent candidate or party unchallenged, in order to avoid splitting the votes between them and ideologically-close opponents. In exchange, the incumbent party may agree to stay out of races in other constituencies or for other offices in the same locality. In the presence of such party coordination, one may expect the negative impact of winning on the number of other candidates from the same orientation in the next election to be stronger for candidates affiliated with a party than for independent candidates. Indeed, the latter are less likely to be affected by party-level agreements when they decide whether or not to run, since they are not affiliated with any party.

To test this hypothesis, we estimate equation 1 in the orientation-level sample, using as outcomes the number of other candidates from the same orientation that are affiliated with a party and the number of other candidates from the same orientation that run as independents, in the next election. The results, shown in Table 6, reveal that the overall impact of winning on dropout decisions of ideologically-close candidates is almost entirely driven by candidates affiliated with a party: winning the current election reduces the number of party-endorsed competitors from

Table 6: Impact of winning on the number of other party-affiliated vs. independent candidates from the same orientation

	Orient nb. other cand., t+1	Orient nb. other party cand., t+1	Orient. nb. other indep. cand., t+1
	(1)	(2)	(3)
Treatment effect	-0.426*** (0.066)	-0.370*** (0.056)	-0.056 (0.040)
Robust p-value	0.000	0.000	0.645
Observations	6575	6575	6575
Polynomial order	1	1	1
Bandwidth	0.050	0.050	0.050
Mean, left of threshold	1.854	1.404	0.450
Wald test (2)-(3)			
	Chi2	Robust p-value	
	17.491	0.000	

Notes: The outcome is the total number of other candidates from the same orientation (column 1), the number of other candidates from the same orientation who are affiliated with a party (column 2), and the number of candidates from the same orientation who run as independents (column 3). Other notes as in Table 3, column 3. A Wald test of equality of coefficients from columns 2 and 3 is provided below. The test is performed by running two separate linear regressions of the outcomes in columns 2 and 3 on the treatment dummy, the running variable, and the interaction term. The Wald test is then performed on the estimates, stored with the *suest* Stata command.

the same orientation by 0.37, an estimate that is significant at the 1% level and represents a 26% decrease relative to the mean at the left of the threshold (column 2). Conversely, the effect on the number of independent competitors from the same orientation is non-significant and much smaller in magnitude (column 3). As reported in the bottom of Table 6, we can reject the null hypothesis that the two coefficients are equal.

These results provide suggestive evidence that party-level agreements play a key role in determining who enters the race. If the only factor deterring candidates from the same orientation as the incumbent from entering the race was their expectation that voters will favor the incumbent, thereby reducing their own chances of winning, the two coefficients shown in Table 6 should be of similar magnitude. Indeed, winning the current election should deter *all* competitors from entering the next race, whether they are endorsed by a party or not. Instead, the fact that the effect on the number of future competitors from the same orientation that are affiliated with a party is much larger suggests that party coordination is a first-order determinant of candidates' decision to run.

The analysis above considers agreements between parties from the same *orientation*, as these broadly-defined orientations remain stable over time. As shown in Appendix Table A.3, we find

very similar results when we estimate the impact of winning on the entry of other candidates from the same *coalition*, defined as alliances formed between left- or right-wing parties prior to the election.²³ We also find in Appendix Table A.4 that the impact of winning on the number of other candidates from the same orientation in the next election is larger for candidates who are presently facing a large number of ideologically close competitors: winning the current election against an above-average number of competitors from the same orientation reduces the future number of such competitors by 0.528 (column 2) against 0.378 for candidates facing a below-average number of same-orientation competitors (column 4). The incumbency advantage is similar in size for both types of candidates (columns 1 and 3), suggesting that incumbents who won against many candidates from the same orientation manage to reach dropout agreements to secure their probability of winning the next election.

5.3 Focal point effects

We finally test whether the incumbency advantage stems from the fact that, in and of itself, and independently from the benefits of being in office, winning an election turns a candidate into a focal point. Being a focal point may attract voters and increase vote shares conditional on running: Voters may use the candidate (or the party) that won the previous election as a coordination device to avoid splitting their votes if they have to choose between multiple candidates from the same orientation. Being a focal point may also facilitate dropout agreements among parties from the same orientation. However, it is not possible to directly isolate this focal point effect from other effects resulting from the incumbent being in office. Therefore, we provide an indirect test of this "focal point hypothesis" by estimating the effects of *another* focal point: the qualification of a specific candidate or party for the runoff. Qualifying for the runoff signals that a candidate is a strong contender and gives them visibility, but it does not come with any actual power (unless of course the candidate also wins the election).

RDD framework We estimate the causal impact of runoff qualification on future electoral outcomes using a complementary RDD. Our running variable is the margin of qualification, defined

²³These coalitions are less stable over time (e.g., candidates from the Green party used to run alone but started joining the left-wing coalition in 1992). We hand-coded coalitions formed by the seven major parties in our sample, as described in Appendix D.3.

in two different ways to account for the fact that two different types of candidates qualify for the second round, as indicated in Section 2.1: the two candidates who received the most votes in the first round, and any other candidate who passed a certain threshold of votes.

First, in races where the candidates ranked first and second in the first round pass the qualification threshold, we estimate the impact for the third-ranked candidate to qualify. We use one observation per race and define the running variable as the difference between the first round vote share of this candidate and the qualification threshold, as in Pons and Tricaud (2018).²⁴ For example, in elections with a qualification threshold equal to 12.5% of registered voters, third-ranked candidates with a first round vote share of 12.5% or more are treated and their running variable is positive. Conversely, third-ranked candidates with a vote share lower than 12.5% are not treated and their running variable takes a negative value.

Second, in races where the second-ranked candidate does not pass the qualification threshold, the only candidates allowed to compete in the runoff are the top-two candidates. In other words, the candidates qualified for the second round are the first candidate and whichever of the two next candidates gets the most votes. We estimate the impact for the second-ranked candidate to qualify by getting more votes than the third-ranked candidate.²⁵ Formally, we use two observations per race, corresponding to the second and third-ranked candidates, who are respectively treated and not treated. We define the running variable as the (positive) difference between the second and third candidates' vote shares, for the second candidate; and as the (negative) difference between the third and second candidate's vote shares, for the third candidate.

We pool both sets of races to estimate the overall impact of qualifying for the runoff. We use a specification in the form of equation 1, where the running variable $Marg$ is defined as described above, and with a fixed bandwidth of 2.5 percentage points.²⁶ Our sample for the candidate-level

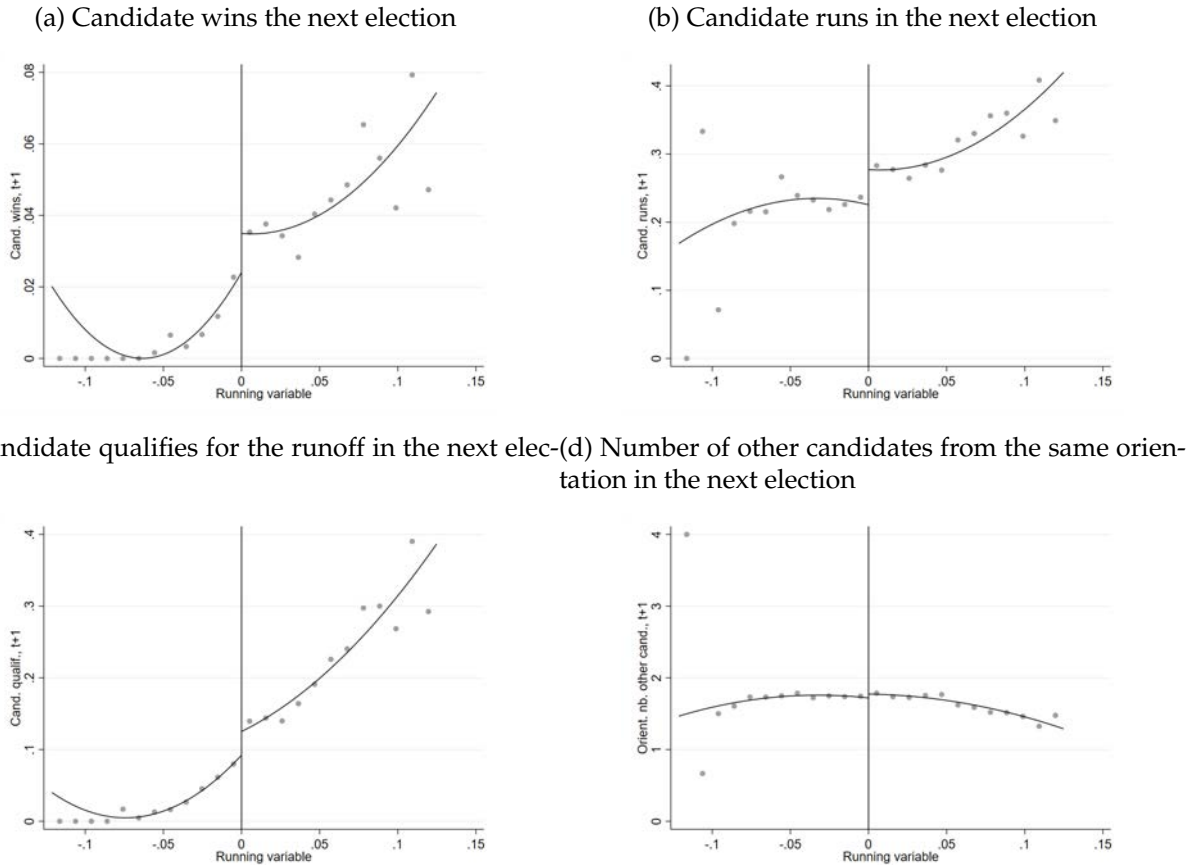
²⁴The qualification threshold was 5% of cast votes for parliamentary elections before 1967, 10% of registered voters for parliamentary elections from 1967 to 1973 and local elections before 2015, and 12.5% of registered voters for the remaining elections. All vote shares and qualification thresholds use the number of registered voters as denominator.

²⁵The effects obtained with this second source of variation (shown in isolation in Appendix Table A.5) may capture both the impact of qualifying for the runoff and the impact of obtaining a higher rank (second instead of third). As shown by Anagol and Fujiwara (2016) and Granzier et al. (2019), obtaining a higher rank may affect future outcomes in and of itself, independently of the visibility that comes from qualifying for the runoff. Our results are qualitatively similar, albeit smaller in magnitude, when using only the first source of variation (Appendix Table A.6), indicating that qualification matters per se, independently of ranking effects.

²⁶We use a bandwidth of 2.5 instead of 5 percentage points because the support of the running variable is much smaller than in our main RDD. In addition, while our running variable and bandwidth are defined as shares of cast votes when we estimate the impact of winning the election, they are defined as shares of registered voters when we estimate the impact of qualifying for the runoff.

runoff analysis excludes races that cannot be linked to a subsequent election due to redistricting as well as races with fewer than three candidates and races in which either the second- and third-ranked candidates are ex-aequo or the third- and fourth-ranked candidates are ex-aequo. Our party-level runoff sample further excludes candidates who are not affiliated with any of the seven main party organizations and those who are facing a third- or second-ranked candidate from the same party (in races where the second-ranked candidate does not pass the qualification threshold). Our orientation-level runoff sample excludes candidates who cannot be classified on the left-right scale and those who are facing a third- or second-ranked candidate from the same orientation (in races where the second-ranked candidate does not pass the qualification threshold).

Figure 4: Impact of runoff qualification on electoral success and candidate entry in the next election



Notes: The running variable (the difference between the vote share of the third-ranked candidate and the qualification threshold or the vote share difference between the second- and third-ranked candidates) is measured as percentage points relative to the number of registered voters, and each bin is 1-percentage-point wide. The graph is truncated at 12.5 percentage points on the horizontal axis to accommodate for outliers. In Figure 4d, we use our orientation-level runoff sample. Other notes as in Figures 2 and 3c.

Identification assumption As in Section 3, we run multiple tests to check the validity of our RDD approach. First, Appendix Figure B.3 shows no significant discontinuity in the density of the running variable at the threshold, for any of our three levels of analysis – candidate, party or orientation. Second, Appendix Figure B.4 and Appendix Table B.2 show no discontinuous jump in predicted treatment assignment at the threshold. The outcome is constructed from regressing an indicator equal to one if the candidate qualifies to the runoff (i.e., our treatment variable) on all regressors listed in Section 3.2.

Results As shown in Figure 4, the probability of winning the next election (Figure 4a), of running again (Figure 4b), and of qualifying for the runoff again in the next election (Figure 4c) all jump at the qualification threshold. Table 7 provides formal estimates. Despite the jump visible in Figure 4a, the effect on winning the election is not statistically significant (column 1). However, qualifying for the runoff does raise a candidate’s likelihood to run again and to qualify for the runoff in the next election, by 5.1 and 4.9 percentage points, which is significant at the 10 and 5% level respectively (columns 2 and 3).

It is important to note that qualifying for the runoff increases the likelihood that a candidate wins the *current* election from 0 to 3.5%, as shown in column 1 of Appendix Table A.7. But we know from Section 4 that winning the current election increases the likelihood of competing in the next one and winning it. Therefore, the effects of qualifying for the runoff on outcomes at $t+1$ could be driven, in part, by the increased likelihood of winning at t . Multiplying the effect of runoff qualification on winning at t (shown in Appendix Table A.7, column 1) by the effects of winning at t on $t+1$ outcomes (shown in columns 2 through 4), we obtain predicted effects of 0.9, 1.1, and 0.9 percentage points on winning, running, and qualifying for the runoff of the next election, respectively.²⁷ Importantly, all these predicted effects are smaller than the actual effects shown in Table 7, columns 1 through 3.

These results suggest that qualifying for the runoff leads candidates to enter the next race more often and increases their future electoral success, as measured by vote shares and runoff qualification, whether or not they won the current race.²⁸ As shown in Appendix Tables A.6 and A.5, these

²⁷This exercise assumes that the impact of winning among closely-qualified candidates is similar as among close winners. Supporting this assumption, close qualifiers who win the election also tend to win with a relatively narrow margin of victory: 7.1 percentage points, on average.

²⁸Appendix Table A.8 shows qualitatively similar but smaller effects at the party level.

Table 7: Impact of runoff qualification on electoral success and candidate entry in the next election

	Cand. wins, t+1	Cand. runs, t+1	Cand. qualif., t+1	Orient nb. other cand., t+1	Orient nb. all cand., t+1
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.012 (0.008)	0.051* (0.021)	0.049** (0.015)	0.062 (0.055)	0.109 (0.054)
Robust p-value	0.342	0.055	0.021	0.344	0.113
Observations	7706	7706	7706	7252	7252
Polynomial order	1	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025	0.025
Mean, left of threshold	0.016	0.228	0.067	1.745	1.961

Notes: The unit of observation is the candidate. The outcome is a dummy equal to one if the candidate wins (column 1), runs (column 2), or qualifies for the runoff (column 3) in the next election, the number of other candidates from the same orientation in the next election (column 4), and the total number of candidates from the same orientation (column 5). The treatment variable is a dummy equal to 1 if the candidate qualifies for the runoff in the current election. We use local polynomial regressions: we fit separate polynomials of order 1 on each side of the threshold, using a fixed bandwidth of 2.5 percentage points. The mean, left of the threshold gives the value of the outcome for unqualified candidates at the threshold. In columns 4 and 5, we use our orientation-level runoff sample. Other notes as in Table 2.

patterns are mostly driven by the qualification of second-ranked candidates (in races where the second-ranked candidate does not pass the qualification threshold) as opposed to the qualification of third-ranked candidates (in races where the second-ranked candidate passes the qualification threshold). A possible interpretation is that candidates draw more attention and that they are more likely to become focal points when fewer of them qualified for the second round

In Appendix Table A.9, we implement the strategy described in Section 4.3 to derive bounds on the impact of qualifying for the runoff, conditional on running again. Results show that the bounds on the impact on winning the next election are both positive but not significant at conventional levels (column 1). However, the upper and lower bounds on the effects on the candidate's vote share in the first round of the next election (column 2) and on the probability that they qualify for the runoff again (column 3) are all positive and significant at the 5% or 1% level. They account for a 1.8 to 5.1 and a 8.6 to 16.8 percentage points increases, respectively.

Interestingly, Appendix Tables A.10 and A.11 show that the positive effects of runoff qualification on electoral success are primarily driven by candidates who barely qualify for a runoff against higher-ranked candidates of a *different* orientation. In particular, the effect on the likelihood that a candidate wins the next election is 2.4 percentage points in that case, which is at the margin of statistical significance with a robust p-value of 0.10 (Appendix Table A.10, Panel b, column 1). The

corresponding estimate for candidates who qualify for runoffs in which they will compete against at least one candidate of the *same* orientation is null (Appendix Table A.10, Panel a, column 1). In addition, the lower bounds on the effects of runoff qualification on vote shares and qualification for the runoff in the next election, conditional on running again, are quite large and significant at the 1% level for candidates who qualify against runoff opponents of a different orientation, but small and non-significant for candidates who qualify against opponents from the same orientation (Appendix A.11, columns 2 and 3). These results suggest that qualifying for the runoff only really benefits candidates who do not have to share their increased visibility with a close competitor from the same orientation, and further highlight the importance of focal point effects.

The effects of runoff qualification on future electoral success seem to be mostly driven by voter behavior. Indeed, Figure 4d as well as column 4 of Table 7 show a non-significant and *positive* – rather than negative – effect of runoff qualification on the number of other candidates from the same orientation in the next election. The estimated effect on the total number of candidates from the same orientation is even larger, although it is not significant either (Table 7, column 5). In addition, bounds on the effects of qualifying for the runoff – conditional on re-running – on the number of other candidates from the same orientation in the next election are of opposite signs and non-significant (Appendix Table A.9, column 4). Unlike winning, qualifying for the runoff is *not* sufficient to reach dropout agreements and deter ideologically close candidates from entering the next race – even when the qualified candidate runs again in the next election. Furthermore, as shown in Table A.12, we do not find any clear evidence that qualifying for the runoff significantly affects candidates’ ability to raise campaign money or the originality of their platform, conditional on running again: all lower bounds are positive but small and non-significant.

Because candidates who marginally qualify for the runoff generally do not win the election, and given the lack of any significant impact on the number of competitors from the same orientation, campaign money, and manifesto originality, the effects of runoff qualification on electoral success at the next election cleanly isolate a focal point effect on the voter side: voters tend to rally candidates who gained visibility in the previous election. This effect is likely to be present also for candidates who won the previous election and, thus, to contribute to incumbency advantage, even though it is harder to isolate in that case.

6 Conclusion

Using an RDD in French local and parliamentary elections, this paper shows that candidates who marginally win a race are substantially more likely to compete again and win the next election than their closest challenger. The effects are large (32.9 and 25.1 percentage points) and also present at the party and orientation levels.

Two complementary mechanisms contribute to giving incumbents an electoral advantage. First, some voters rally incumbents when those seek reelection. We find suggestive evidence that the effect of past victories on voter choice in future elections is driven by incumbents using more personalized campaign communication and by the fact that they become focal points. Indeed, using a separate RDD, we also find a substantial effect on future first-round vote shares of marginally qualifying for the runoff, which cannot be explained by any advantage resulting from being in office. This focal point mechanism also echoes previous work documenting voter coordination based on candidate rankings in the previous election (e.g., [Anagol and Fujiwara \(2016\)](#), [Granzier et al. \(2019\)](#)).

Second, winning an election decreases the number of ideologically close competitors faced by the candidate in the next election, particularly competitors endorsed by a party. This result suggests that incumbents reach dropout agreements with sister parties from the same orientation more easily than their challengers. In other words, party coordination is more effective on the winning than the losing side. This mechanism, specific to multi-party settings, reinforces other mechanisms giving incumbents an advantage, which are also present in two-party systems.

Since we use an RDD, all our effects are estimated out of elections in which the winning and losing candidates have virtually identical vote shares and average characteristics. It is striking and perhaps concerning, then, that incumbents' victory gives them such an outsized political rent: the electoral advantage enjoyed by incumbents may sometimes be sufficient to prevent their replacement by candidates who better represent voter preferences or have higher valence. Because the incumbency advantage is compounded by coordination issues on the losing side, when more than two candidates are present, these effects should be considered when weighing the merits and drawbacks of voting rules conducive to the emergence of multi-party systems such as the two-round plurality rule used in French elections.

References

- Ade, F., Freier, R., and Odendahl, C. (2014). Incumbency effects in government and opposition: Evidence from Germany. *European Journal of Political Economy*, 36:117–134.
- Anagol, S. and Fujiwara, T. (2016). The runner-up effect. *Journal of Political Economy*, 124(4):927–991.
- Ansolabehere, S., Hansen, J., Hirano, S., and Snyder, J. (2007). The incumbency advantage in US primary elections. *Electoral Studies*, 26(3):660–668.
- Ariga, K. (2015). Incumbency Disadvantage under Electoral Rules with Intraparty Competition: Evidence from Japan. *The Journal of Politics*, 77(3):874–887. Publisher: The University of Chicago Press.
- Ashworth, S. and Bueno de Mesquita, E. (2008). Electoral Selection, Strategic Challenger Entry, and the Incumbency Advantage. *The Journal of Politics*, 70(4):1006–1025. Publisher: The University of Chicago Press.
- Ban, P., Llaudet, E., and Snyder, J. M. (2016). Challenger Quality and the Incumbency Advantage. *Legislative Studies Quarterly*, 41(1):153–179.
- Barro, R. J. (1973). The control of politicians: an economic model. *Public choice*, pages 19–42.
- Bertrand, M., Bombardini, M., Fisman, R., Hackinen, B., and Trebbi, F. (2021). Hall of Mirrors: Corporate Philanthropy and Strategic Advocacy. Technical Report 4.
- Besley, T. (2006). *Principled agents?: The political economy of good government*. Oxford University Press on Demand.
- Besley, T. and Coate, S. (1997). An economic model of representative democracy. *The quarterly journal of economics*, 112(1):85–114.
- Bordignon, M., Nannicini, T., and Tabellini, G. (2016). Moderating Political Extremism: Single Round versus Runoff Elections under Plurality Rule. *American Economic Review*, 106(8):2349–2370.
- Bornschier, S. and Lachat, R. (2009). The evolution of the french political space and party system. *West European Politics*, 32(2):360–383.
- Bouton, L. (2013). A Theory of Strategic Voting in Runoff Elections. *American Economic Review*, 103(4):1248–1288.

- Bouton, L., Gallego, J., Llorente-Saguer, A., and Morton, R. (2019). Runoff Elections in the Laboratory. Working Paper 25949, National Bureau of Economic Research.
- Butler, D. (2009). A regression discontinuity design analysis of the incumbency advantage and tenure in the US House. *Electoral Studies*, 28(1):123–128.
- Cagé, J., Le Pennec, C., and Mougin, E. (2022). Corporate donations and political rhetoric: Evidence from a national ban. Technical report, CEPR Discussion Paper 16774.
- Calonico, S., Cattaneo, M. D., Farrell, M. H., and Titiunik, R. (2019). Regression discontinuity designs using covariates. *Review of Economics and Statistics*, 101(3):442–451.
- Calonico, S., Cattaneo, M. D., and Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, 82(6):2295–2326.
- Cattaneo, M. D., Jansson, M., and Ma, X. (2018). Manipulation testing based on density discontinuity. *The Stata Journal*, 18(1):234–261.
- Chabal, E. (2015). *France Since The 1970s*. Bloomsbury Publishing.
- Cipullo, D. (2021). Voting systems and fiscal policy: Evidence from runoff and plurality elections. *National Tax Journal*, 74(2):347–376.
- Colonnelli, E., Prem, M., and Teso, E. (2020). Patronage and selection in public sector organizations. *American Economic Review*, 110(10):3071–99.
- Cox, G. W. (1997). *Making votes count: strategic coordination in the world’s electoral systems*. Cambridge University Press.
- Dahlgaard, J. O. (2016). You just made it: Individual incumbency advantage under Proportional Representation. *Electoral Studies*, 44:319–328.
- De Magalhaes, L. (2015). Incumbency Effects in a Comparative Perspective: Evidence from Brazilian Mayoral Elections. *Political Analysis*, 23(1):113–126. Publisher: Oxford University Press, Society for Political Methodology.
- Downs, A. (1957). An economic theory of political action in a democracy. *Journal of political economy*, 65(2):135–150.
- Duraisamy, P., Lemennicier, B., and Khouri, M. (2014). Incumbency effect in the Indian parliamentary elections, 2004 and 2009: A Regression Discontinuity approach. *Journal of Quantitative Economics*, 12(1):12–30.

- Eggers, A. C. and Spirling, A. (2017). Incumbency Effects and the Strength of Party Preferences: Evidence from Multiparty Elections in the United Kingdom. *The Journal of Politics*, 79(3):903–920. Publisher: The University of Chicago Press.
- Erikson, R. S. (1971). The Advantage of Incumbency in Congressional Elections. *Polity*, 3(3):395–405. Publisher: The University of Chicago Press.
- Fauvelle-Aymar, C. and François, A. (2005). Campaigns, political preferences and turnout: an empirical study of the 1997 french legislative elections. *French Politics*, 3(1):49–72.
- Fearon, J. D. (1999). Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance. *Democracy, accountability, and representation*, 55:61.
- Ferejohn, J. (1986). Incumbent performance and electoral control. *Public choice*, 50(1):5–25.
- Fiorina, M. P. (1989). *Congress: Keystone of the Washington Establishment, Revised Edition*. Yale University Press.
- Fiva, J. and Røhr, H. L. (2018). Climbing the ranks: Incumbency effects in party-list systems. *European Economic Review*, 101(C):142–156. Publisher: Elsevier.
- Foucault, M. and François, A. (2005). Le rendement des dépenses électorales en france. *Revue économique*, 56(5):1125–1143.
- Fourinaies, A. and Hall, A. B. (2014). The Financial Incumbency Advantage: Causes and Consequences. *The Journal of Politics*, 76(3):711–724. Publisher: The University of Chicago Press.
- Fowler, A. and Hall, A. (2015). Congressional seniority and pork: A pig fat myth? *European Journal of Political Economy*, 40:42–56.
- Fowler, A. and Hall, A. B. (2014). Disentangling the Personal and Partisan Incumbency Advantages: Evidence from Close Elections and Term Limits. *Quarterly Journal of Political Science*, 9(4):501–531. Publisher: Now Publishers.
- Frey, A. (2019). Cash transfers, clientelism, and political enfranchisement: Evidence from Brazil. *Journal of Public Economics*, 176:1–17.
- Gaultier-Voituriez, O. (2016). Archelec, les archives électorales de la ve république, du papier au numérique. *Histoire@ Politique*, (3):213–220.
- Golden, M. A. and Picci, L. (2015). Incumbency Effects under Proportional Representation: Leaders and Backbenchers in the Postwar Italian Chamber of Deputies. *Legislative Studies Quarterly*, 40(4):509–538.

- Granzier, R., Pons, V., and Tricaud, C. (2019). The large effects of a small win: How past rankings shape the behavior of voters and candidates. Technical report, National Bureau of Economic Research.
- Hainmueller, J. and Kern, H. L. (2008). Incumbency as a source of spillover effects in mixed electoral systems: Evidence from a regression-discontinuity design. *Electoral Studies*, 27(2):213–227.
- Hall, A. B. and Snyder, J. M. (2015). How much of the incumbency advantage is due to scare-off? *Political Science Research and Methods*, 3(3):493–514.
- Holbrook, T. and Weinschenk, A. (2014). Money, candidates, and mayoral elections. *Electoral Studies*, 35:292–302.
- Horiuchi, Y. and Leigh, A. (2009). Estimating Incumbency Advantage: Evidence from Multiple Natural Experiments. Manuscript.
- Imbens, G. and Kalyanaraman, K. (2012). Optimal bandwidth choice for the regression discontinuity estimator. *The Review of economic studies*, 79(3):933–959.
- Imbens, G. W. and Lemieux, T. (2008). Regression discontinuity designs: A guide to practice. *Journal of econometrics*, 142(2):615–635.
- Katz, J. and King, G. (1999). A Statistical Model for Multiparty Electoral Data. *American Political Science Review*, 93:15–32.
- Kendall, C. and Rekkas, M. (2012). Incumbency advantages in the Canadian Parliament. *Canadian Journal of Economics/Revue canadienne d'économique*, 45(4):1560–1585.
- Klašnja, M. and Titiunik, R. (2017). The incumbency curse: Weak parties, term limits, and unfulfilled accountability. *American Political Science Review*, 111(1):129–148.
- Knapp, A. (2004). *Parties and the party system in France : a disconnected democracy?* French politics, society, and culture. Palgrave Macmillan, Basingstoke, Hampshire.
- Kotakorpi, K., Poutvaara, P., and Terviö, M. (2017). Returns to Office in National and Local Politics: A Bootstrap Method and Evidence from Finland. *The Journal of Law, Economics, and Organization*, 33(3):413–442.
- Krebs, T. (1998). The determinants of candidates vote share and the advantages of incumbency in city council elections. *American Journal of Political Science*, 42(3):921–935.
- Le Pennec, C. (2020). Strategic campaign communication: Evidence from 30,000 candidate manifestos. SoDa Laboratories Working Paper Series 2020-05, Monash University, SoDa Laboratories.

- Lee, D. S. (2008). Randomized experiments from non-random selection in U.S. House elections. *Journal of Econometrics*, 142(2):675–697.
- Levitt, S. D. and Wolfram, C. D. (1997). Decomposing the Sources of Incumbency Advantage in the U. S. House. *Legislative Studies Quarterly*, 22(1):45–60. Publisher: Wiley, Comparative Legislative Research Center.
- Liang, C.-Y. (2013). Is there an incumbency advantage or cost of ruling in proportional election systems? *Public Choice*, 154(3):259–284. Publisher: Springer.
- Matland, R. E. and Studlar, D. T. (2004). Determinants of Legislative Turnover: A Cross-National Analysis. *British Journal of Political Science*, 34(1):87–108. Publisher: Cambridge University Press.
- Myerson, R. B. and Weber, R. J. (1993). A theory of voting equilibria. *American Political science review*, 87(1):102–114.
- Nunez, L. (2018). Do clientelistic machines affect electoral outcomes? Mayoral incumbency as a proxy for machine prowess. *Electoral Studies*, 55:109–119.
- Olson, M. (2020). The Direct Primary and the Incumbency Advantage in the US House of Representatives. *Quarterly Journal of Political Science*, 15(4):483–506.
- Osborne, M. J. and Slivinski, A. (1996). A model of political competition with citizen-candidates. *The Quarterly Journal of Economics*, 111(1):65–96.
- Palfrey, T. R. (1988). A mathematical proof of duverger’s law.
- Pons, V. and Tricaud, C. (2018). Expressive voting and its cost: Evidence from runoffs with two or three candidates. *Econometrica*, 86(5):1621–1649.
- Prior, M. (2006). The incumbent in the living room: The rise of television and the incumbency advantage in US House elections. *Journal of Politics*, 68(3):657–673.
- Redmond, P. and Regan, J. (2015). Incumbency advantage in a proportional electoral system: A regression discontinuity analysis of Irish elections. *European Journal of Political Economy*, 38(C):244–256. Publisher: Elsevier.
- Roh, J. (2017). The incumbency disadvantage in South Korean National Assembly elections: Evidence from a regression discontinuity approach. *Electoral Studies*, 46:112–122.
- Schaffner, B. (2006). Local news coverage and the incumbency advantage in the US House. *Legislative Studies Quarterly*, 31(4):491–511.
- Spáč, P. (2020). Pork barrel politics and electoral returns at the local level. *Public Choice*.

- Trounstine, J. (2011). Evidence of a Local Incumbency Advantage. *Legislative Studies Quarterly*, 36(2):255–280.
- Uppal, Y. (2010). Estimating Incumbency Effects in U.s. State Legislatures: A Quasi-Experimental Study. *Economics & Politics*, 22(2):180–199.
- Williams, P. M. (1970). *French Politicians and Elections, 1951-1969*. Cambridge University Press.

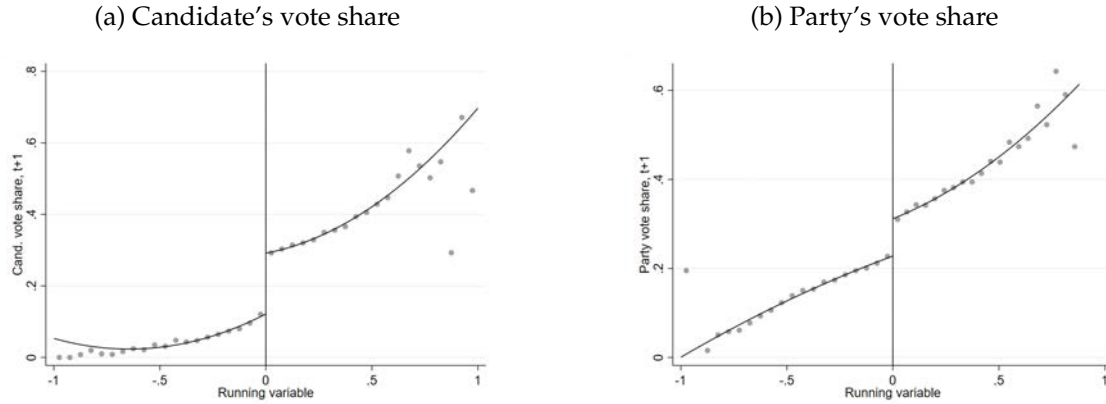
Online Appendix

Table of Content

- Appendix [A](#): Additional Results
- Appendix [B](#): Additional Balance Tests
- Appendix [C](#): Additional Robustness Checks
- Appendix [D](#): Additional Details on the Setting and the Data
 - Appendix [D.1](#): Elections
 - Appendix [D.2](#): Party system
 - Appendix [D.3](#): Electoral coalitions
 - Appendix [D.4](#): Campaign manifestos
 - Appendix [D.5](#): Similarity between manifestos
 - Appendix [D.6](#): Definition of key outcomes
 - Appendix [D.7](#): Balance test covariates
- Appendix [E](#): Bounds on Treatment Effect Conditional on Running Again

A Additional Results

Figure A.1: Unconditional impact on first-round vote share in the next election



Notes: The party's vote share in Figure A.1b is defined as the sum of vote shares received by all candidates from the same party running in the same district. The outcome is set to zero when the same candidate does not run again (Figure A.1a) or when no candidate from the same party runs again (Figure A.1b). Other notes as in Figure 2.

Table A.1: Heterogeneous impact of winning on winning the next election

	Cand. wins, t+1											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Local	Parliamentary	Male	Female	Left or far-left	Other orientations	Opposition	Majority	FDG	SOC	MDM	UMP
Treatment effect	0.307*** (0.027)	0.162** (0.038)	0.254*** (0.023)	0.221 (0.080)	0.254*** (0.029)	0.252*** (0.034)	0.277*** (0.033)	0.184** (0.036)	0.191 (0.089)	0.252*** (0.041)	0.356*** (0.055)	0.191* (0.043)
Robust p-value	0.000	0.038	0.000	0.363	0.000	0.000	0.000	0.011	0.144	0.000	0.000	0.055
Observations	4768	2604	6758	612	3941	3423	3457	2544	536	2278	1075	1809
Polynomial order	1	1	1	1	1	1	1	1	1	1	1	1
Bandwidth	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Mean, left of threshold	0.124	0.194	0.152	0.109	0.117	0.182	0.189	0.101	0.179	0.190	0.093	0.130

Notes: The sample is restricted to local elections (column 1); parliamentary elections (column 2); men (column 3); women (column 4); candidates whose orientation is left or far-left (column 5); candidates from all other orientations (column 6); candidates affiliated with a party that is not part of the ruling national government at t+1 (column 7); candidates affiliated with a party that is part of the ruling national government at t+1 (column 8); and candidates affiliated with the Front de Gauche (column 9), the Socialist Party (column 10), the Modem (column 11), or the UMP (column 12). Other notes as in Table 2, column 1.

Table A.2: Bounds on the impact of winning on party's electoral success and candidate entry in the next election, conditional on running

	Party wins, t+1	Party vote share, t+1	Orient. nb. other cand., t+1
	(1)	(2)	(3)
Upper bound	0.156*** (0.037)	0.069*** (0.010)	-0.107 (0.074)
Lower bound	0.128*** (0.035)	0.051*** (0.007)	-0.147** (0.071)
Bootstrap replications	10000	10000	10000
Mean, left of threshold	0.336	0.285	1.403

Notes: Candidates who are not affiliated with a main party and those who are facing a candidate from the same party are excluded. Other notes as in Table 4.

Table A.3: Impact of winning on the number of other candidates from the same coalition

	Coal. nb. other cand., t+1	Coal. any other cand., t+1
	(1)	(2)
Treatment effect	-0.359*** (0.058)	-0.165** (0.026)
Robust p-value	0.000	0.000
Observations	5706	5706
Polynomial order	1	1
Bandwidth	0.050	0.050
Mean, left of threshold	1.443	0.829

Notes: Candidates who are not part of the main left-wing or right-wing coalition and those who are facing a candidate from the same coalition are excluded. The outcome is the number of other candidates from the same coalition (column 1) and a dummy equal to one if any candidate from the same coalition runs (column 2) in the next election. Other notes as in Table 6.

Table A.4: Impact of winning depending on the number of candidates from the same orientation in the current election

	Cand. wins, t+1 (more than avg)	Orient. nb. other cand., t+1 (more than avg)	Cand wins., t+1 (fewer than avg)	Orient. nb. other cand., t+1 (fewer than avg)
	(1)	(2)	(3)	(4)
Treatment effect	0.263*** (0.040)	-0.528** (0.119)	0.245*** (0.027)	-0.378*** (0.072)
Robust p-value	0.000	0.011	0.000	0.001
Observations	2585	2133	4787	4442
Polynomial order	1	1	1	1
Bandwidth	0.050	0.050	0.050	0.050
Mean, left of threshold	0.169	2.424	0.137	1.576

Notes: The sample is restricted to candidates who are facing a number of candidates from the same orientation above average (columns 1 and 2) or below average (columns 3 and 4) in the current election. Other notes as in Table 2, column 1, and Table 3, column 3.

Table A.5: Impact of runoff qualification for the second-ranked candidate

	Cand. wins, t+1	Cand. runs, t+1	Cand. qualif., t+1	Orient nb. other cand., t+1	Orient nb. all cand., t+1
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.051 (0.022)	0.060** (0.044)	0.101*** (0.033)	-0.027 (0.143)	-0.038 (0.142)
Robust p-value	0.107	0.039	0.001	0.991	0.944
Observations	1490	1490	1490	1143	1143
Polynomial order	1	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025	0.025
Mean, left of threshold	0.024	0.259	0.087	1.902	2.149

Notes: The sample is restricted to second- and third-ranked candidates in races where the second-ranked candidate does not pass the qualification threshold. Other notes as in Table 7.

Table A.6: Impact of runoff qualification for the third-ranked candidate

	Cand. wins, t+1	Cand. runs, t+1	Cand. qualif., t+1	Orient nb. other cand., t+1	Orient nb. all cand., t+1
	(1)	(2)	(3)	(4)	(5)
Treatment effect	-0.002 (0.008)	0.047 (0.024)	0.033 (0.016)	0.083 (0.059)	0.143* (0.058)
Robust p-value	0.693	0.256	0.419	0.275	0.071
Observations	6216	6216	6216	6109	6109
Polynomial order	1	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025	0.025
Mean, left of threshold	0.014	0.221	0.063	1.717	1.928

Notes: The sample is restricted to third-ranked candidates in races where the second-ranked candidate passes the qualification threshold. Other notes as in Table 7.

Table A.7: Decomposition of the impact of runoff qualification

	Cand wins, t	Cand wins, t+1	Cand. runs, t+1	Cand qualif., t+1
	(1)	(2)	(3)	(4)
Treatment effect	0.035*** (0.006)	0.251*** (0.023)	0.329*** (0.024)	0.255*** (0.025)
Robust p-value	0.000	0.000	0.000	0.000
Observations	7706	7372	7372	7372
Polynomial order	1	1	1	1
Bandwidth	0.025	0.050	0.050	0.050
Mean, left of threshold	0.000	0.148	0.390	0.318
Treatment	Runoff	Winning	Winning	Winning
Pred. treatment effect		0.009	0.011	0.009

Notes: In column 1, we measure the impact of qualifying for the runoff. We estimate a specification as in Table 7 and the outcome is a dummy equal to one if the candidate wins the current election. In columns 2 through 4, we measure the impact of winning. We estimate a specification as in Table 2, column 1, and the outcomes are dummies equal to one if the candidate wins the next election (column 2), runs in the next election (column 3), or qualifies for the runoff in the next election (column 4). We also report the estimates obtained by multiplying the effect of runoff qualification on winning at t (shown in column 1) by the effects of winning at t on t+1 outcomes (shown in columns 2 through 4). Other notes as in Tables 2 and 7.

Table A.8: Impact of runoff qualification on party's electoral success and party entry in the next election

	Party wins, t+1	Party runs, t+1	Party qualif., t+1	Orient. nb. other cand., t+1
	(1)	(2)	(3)	(4)
Treatment effect	0.016 (0.013)	0.006 (0.021)	0.060* (0.027)	0.118* (0.059)
Robust p-value	0.240	0.533	0.096	0.061
Observations	6130	6130	5532	5685
Polynomial order	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025
Mean, left of threshold	0.038	0.831	0.251	1.086

Notes: We use our party-level runoff sample. Other notes as in Table 7.

Table A.9: Bounds on the impact of runoff qualification on electoral success and candidate entry in the next election, conditional on running

	Cand. wins, t+1	Cand. vote share, t+1	Cand. qualif., t+1	Orient. nb. other cand.,t+1
	(1)	(2)	(3)	(4)
Upper bound	0.041 (0.028)	0.051*** (0.013)	0.168*** (0.047)	0.149 (0.101)
Lower bound	0.018 (0.024)	0.018*** (0.007)	0.086** (0.038)	-0.017 (0.105)
Bootstrap replications	10000	10000	10000	10000
Mean, left of threshold	0.070	0.151	0.295	1.287

Notes: The outcome is a dummy equal to one if the candidate wins (column 1), their vote share in the first round (column 2), a dummy equal to one if they qualify for the runoff (column 3) in the next election, and the number of other candidates from the same orientation in the next election (column 4). The treatment variable is a dummy equal to 1 if the candidate qualifies for the runoff in the current election. We rely on the bounding strategy described in Appendix E, using a fixed bandwidth of 2.5 percentage points. The mean, left of the threshold gives the value of the outcome for the unqualified candidates at the threshold, conditional on the candidate running in the next election. In column 4, we use our orientation-level runoff sample. Other notes as in Table 4.

Table A.10: Impact of runoff qualification depending on the political orientation

(a) Same orientation as higher-ranked candidates

	Cand. wins, t+1	Cand. runs, t+1	Cand. qualif., t+1	Orient nb. other cand., t+1	Orient nb. all cand., t+1
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.000 (0.012)	0.040 (0.032)	0.025 (0.021)	0.038 (0.076)	0.083 (0.076)
Robust p-value	0.779	0.252	0.615	0.558	0.313
Observations	3410	3410	3410	3355	3355
Polynomial order	1	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025	0.025
Mean, left of threshold	0.018	0.246	0.072	2.213	2.448

(b) Different orientation than higher-ranked candidates

	Cand. wins, t+1	Cand. runs, t+1	Cand. qualif., t+1	Orient nb. other cand., t+1	Orient nb. all cand., t+1
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.024 (0.011)	0.068* (0.029)	0.071*** (0.020)	0.041 (0.071)	0.089 (0.069)
Robust p-value	0.100	0.061	0.007	0.697	0.359
Observations	4167	4167	4167	3897	3897
Polynomial order	1	1	1	1	1
Bandwidth	0.025	0.025	0.025	0.025	0.025
Mean, left of threshold	0.013	0.213	0.062	1.373	1.574

Notes: In columns 1 and 2, the sample is restricted to third-ranked candidates in races where the second-ranked candidate passes the qualification threshold and either the second- or first-ranked candidate is from the same orientation as the third, and to second- and third-ranked candidates in races where the second-ranked candidates does not pass the qualification threshold and the first-ranked candidate is from the same orientation as the second- or third-ranked candidate. In columns 3 and 4, the sample is restricted to third-ranked candidates in races where the second-ranked candidate passes the qualification threshold and both the second- and first-ranked candidates are of a different orientation than the third, and to second- and third-ranked candidates in races where the second-ranked candidates does not pass the qualification threshold and the first-ranked candidate is of a different orientation than the second- and third-ranked candidates. Candidates whose orientation is non-classified are excluded. Other notes as in Table 7.

Table A.11: Bounds on impact of runoff qualification, conditional on running and depending on the political orientation

(a) Same orientation as higher-ranked candidates				
	Cand. wins, t+1	Cand. vote share, t+1	Cand. qualif., t+1	Orient. nb. other cand.,t+1
	(1)	(2)	(3)	(4)
Upper bound	0.001 (0.043)	0.034* (0.020)	0.087 (0.073)	0.072 (0.131)
Lower bound	-0.016 (0.039)	0.009 (0.010)	0.028 (0.059)	-0.061 (0.127)
Bootstrap replications	10000	10000	10000	10000
Mean, left of threshold	0.074	0.151	0.292	1.816

(b) Different orientation than higher-ranked candidates				
	Cand. wins, t+1	Cand. vote share, t+1	Cand. qualif., t+1	Orient. nb. other cand.,t+1
	(1)	(2)	(3)	(4)
Upper bound	0.078** (0.036)	0.067*** (0.018)	0.238*** (0.062)	0.182 (0.128)
Lower bound	0.048 (0.030)	0.023** (0.009)	0.124** (0.049)	-0.011 (0.141)
Bootstrap replications	10000	10000	10000	10000
Mean, left of threshold	0.060	0.149	0.292	0.802

Notes: Same notes as in Tables A.9 and A.10.

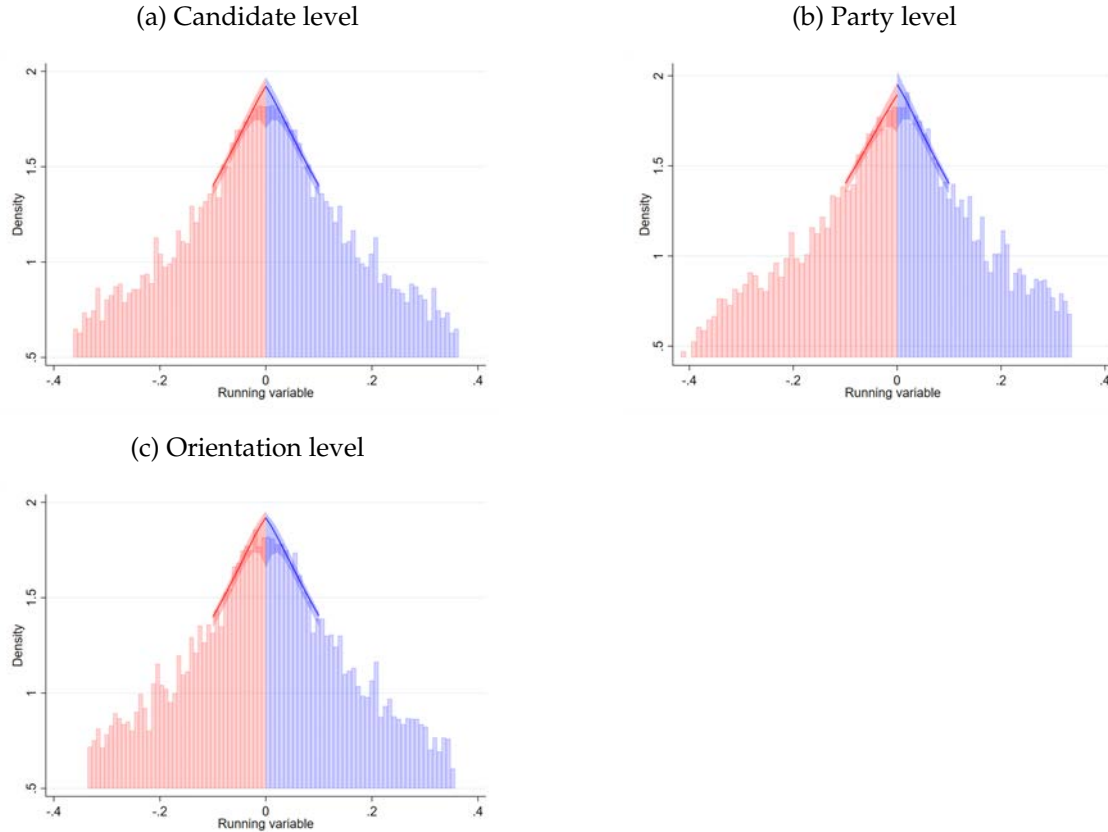
Table A.12: Bounds on the impact of runoff qualification on campaign money and manifesto originality in the next election, conditional on running

	Expend., t+1	Contrib., t+1	Originality, t+1
	(1)	(2)	(3)
Upper bound	3358.6** (1402.8)	3495.6** (1435.1)	0.562** (0.268)
Lower bound	651.1 (1028.3)	727.3 (1052.5)	0.101 (0.175)
Bootstrap replications	10000	10000	10000
Mean, left of threshold	11420.7	11620.4	-0.277

Notes: Same notes as in Tables 5 and A.9.

B Additional Balance Tests

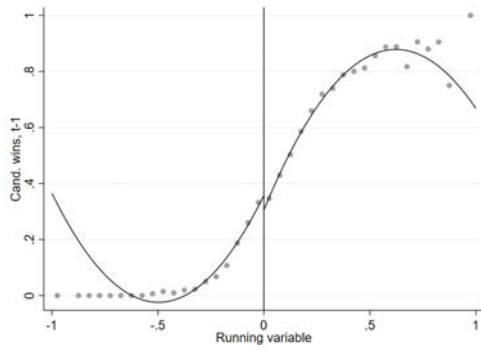
Figure B.1: Running variable density around the threshold



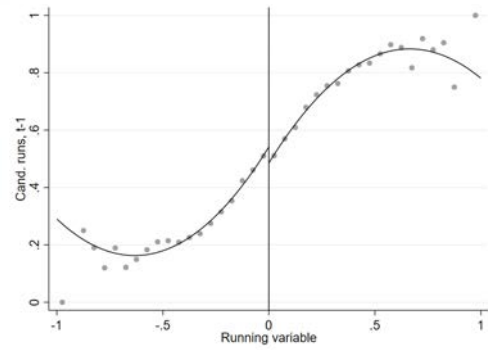
Notes: This figure tests if there is a jump at the threshold in the density of the running variable defined as the vote share difference between the top-two candidates in the final round, represented by a histogram. The solid line is a quadratic fit and the confidence intervals are represented by shaded areas. In Figure B.1a, this test is satisfied by construction since we consider the exact same set of races on both sides of the threshold and, in each race, the winning and losing candidates are equally distant to the cutoff. In Figure B.1b, we use our party-level sample. In Figure B.1c, we use our orientation-level sample. We find no evidence of manipulation of the running variable in the party-level sample (p-val. = 0.415), or in the orientation-level sample (p-val. = 0.978).

Figure B.2: Balance tests

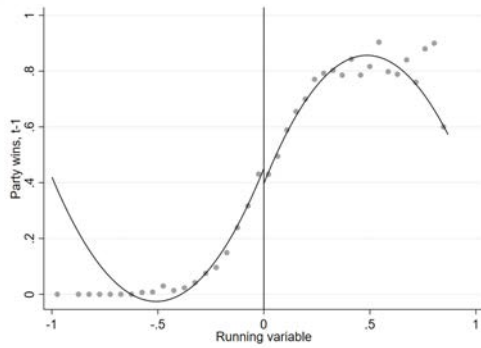
(a) Candidate won previous election



(b) Candidate ran in previous election



(c) Party won previous election



(d) Party ran in previous election

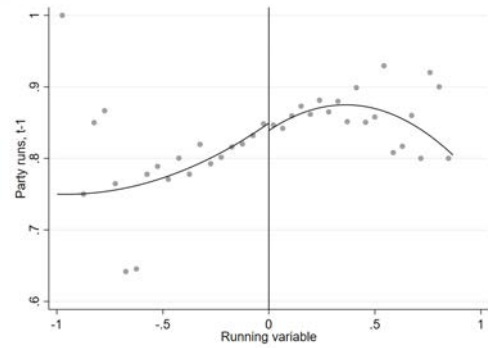
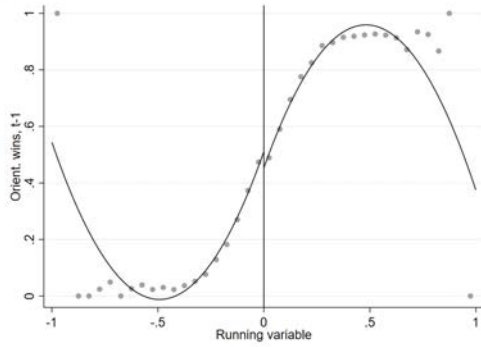
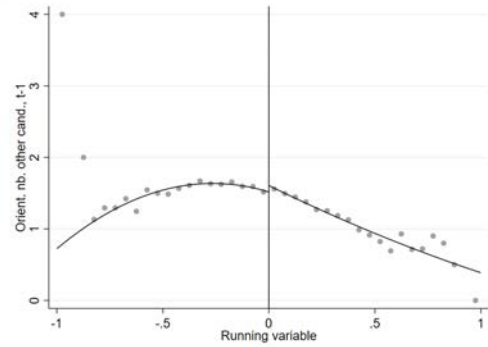


Figure B.2: Balance tests (cont.)

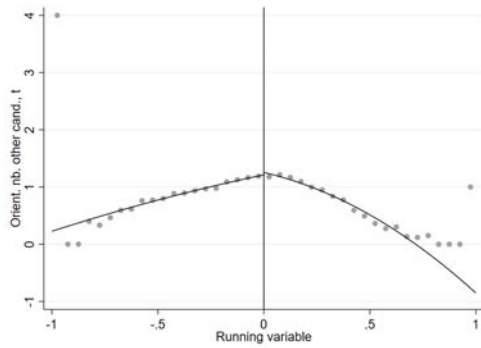
(e) Orientation won previous election



(f) Number of other candidates from same orientation in previous election

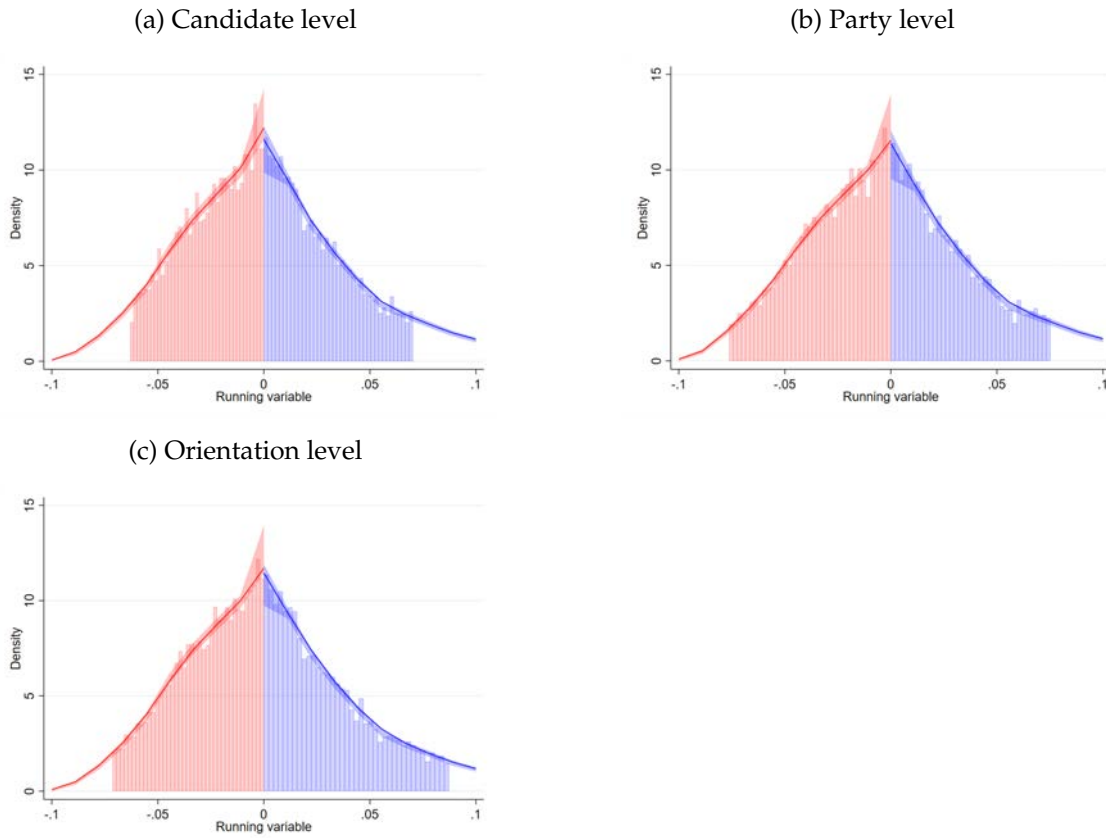


(g) Number of other candidates from same orientation in current election



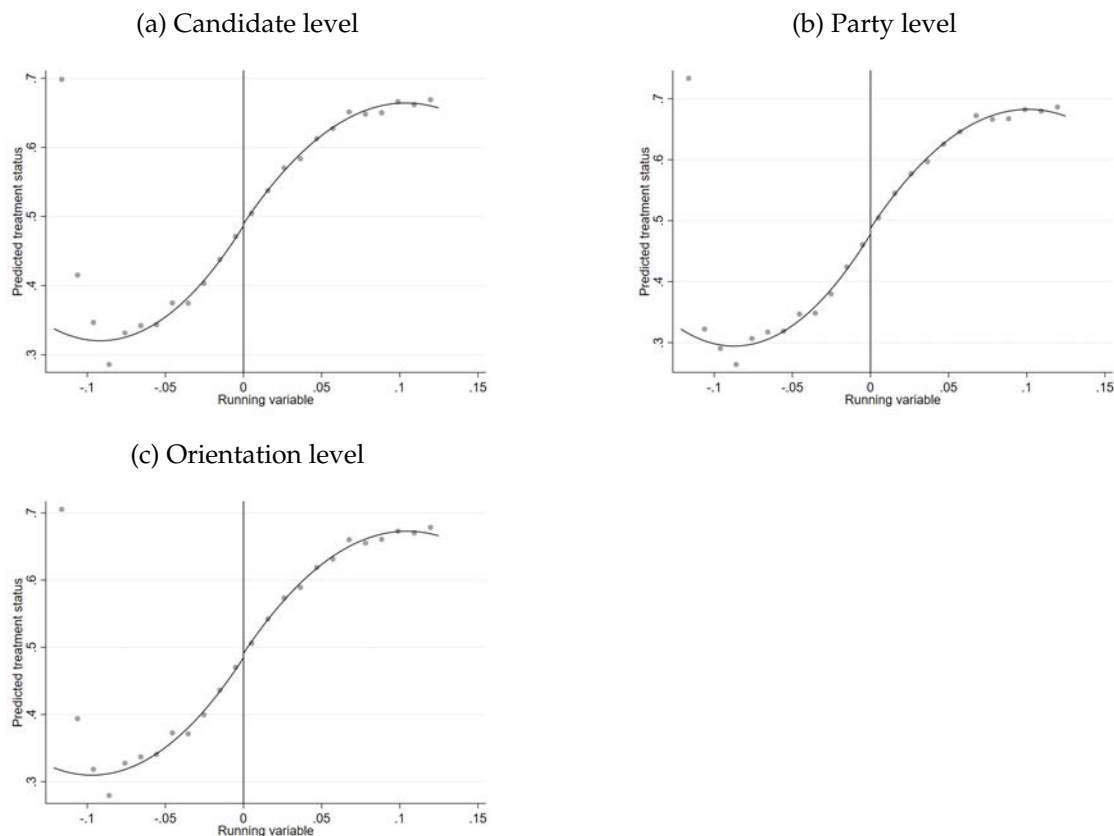
Notes: The sample is restricted to districts that can be linked to a previous election. In Figures B.2c and B.2d, we use our party-level sample. In Figures B.2e through B.2g, we use our orientation-level sample. Other notes as in Figure 1.

Figure B.3: Running variable density around the runoff qualification threshold



Notes: This figure tests if there is a jump at the threshold in the density of the running variable defined as the difference between the vote share of the third-ranked candidate and the qualification threshold or the vote share difference between the second- and third-ranked candidates, represented by an histogram. The solid line is a quadratic fit and the confidence intervals are represented by shaded areas. In Figure B.3b, we use our party-level runoff sample. In Figure B.3c, we use our orientation-level runoff sample. We find no evidence of manipulation of the running variable in the candidate-level sample (p-val. = 0.301), the party-level sample (p-val. = 0.789), or in the orientation-level sample (p-val. = 0.646).

Figure B.4: General balance test around the runoff qualification threshold



Notes: Dots represent the local averages of the predicted treatment status (vertical axis). Averages are calculated within equally-spaced bins of the running variable (horizontal axis). The running variable (the difference between the vote share of the third-ranked candidate and the qualification threshold or the vote share difference between the second- and third-ranked candidates) is measured as percentage points relative to the number of registered voters, and each bin is 1-percentage-point wide. The graph is truncated at 12.5 percentage points on the horizontal axis to accommodate for outliers. Continuous lines are a quadratic fit. In Figure B.4b, we use our party-level runoff sample. In Figure B.4c, we use our orientation-level runoff sample.

Table B.1: Balance tests

(a) Covariates measured in the current election

	Far-left	Left	Center	Right	Far-right	Non classified	Orient. nb. other cand.	Party cand. vs. ind.	Female cand.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatment effect	0.005* (0.004)	-0.046** (0.026)	0.014* (0.008)	0.032* (0.026)	-0.007** (0.003)	-0.010 (0.052)	0.002 (0.004)	0.012 (0.020)	0.003 (0.015)
Robust p-value	0.069	0.036	0.069	0.097	0.046	0.625	0.436	0.628	0.902
Observations	7364	7364	7364	7364	7364	7364	7364	7364	7370
Polynomial order	1	1	1	1	1	1	1	1	1
Bandwidth	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Mean, left of threshold	0.002	0.482	0.023	0.480	0.007	1.256	0.007	0.808	0.087

(b) Covariates measured in the previous election

	Cand. wins, t-1	Cand. vote share, t-1	Cand. runs, t-1	Party wins, t-1	Party vote share, t-1	Party runs, t-1	Orient. wins, t-1	Orient. vote share, t-1	Orient. runs, t-1	Orient. nb. other cand., t-1
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment effect	-0.035 (0.028)	-0.014 (0.012)	-0.037 (0.030)	-0.024 (0.033)	-0.008 (0.011)	-0.021 (0.023)	-0.047 (0.029)	0.002 (0.009)	-0.021 (0.023)	0.076 (0.067)
Robust p-value	0.731	0.627	0.742	0.646	0.400	0.352	0.303	0.700	0.352	0.446
Observations	5414	5414	5414	4266	4266	4266	5410	5410	4266	5410
Polynomial order	1	1	1	1	1	1	1	1	1	1
Bandwidth	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Mean, left of threshold	0.332	0.181	0.510	0.432	0.281	0.847	0.514	0.440	0.847	1.523

Notes: In Panel b, the sample is restricted to districts that can be linked to a previous election. Other notes as in Table 1.

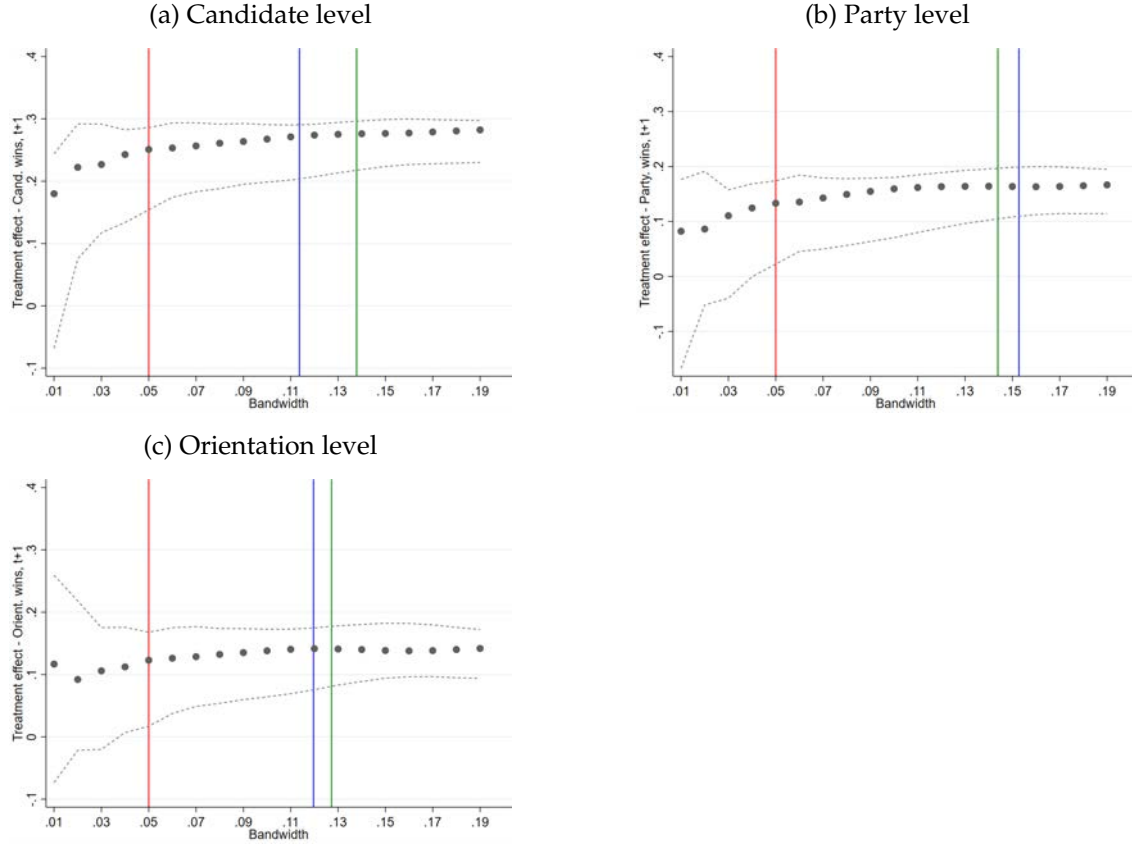
Table B.2: General balance test around the runoff qualification threshold

	Predicted treatment status		
	(1) Cand.	(2) Party	(3) Orient.
Treatment effect	-0.001 (0.009)	0.006 (0.011)	0.001 (0.009)
Robust p-value	0.838	0.792	0.854
Observations	7706	6130	7255
Polynomial order	1	1	1
Bandwidth	0.025	0.025	0.025
Mean, left of threshold	0.447	0.432	0.445

Notes: The treatment variable is a dummy equal to 1 if the candidate qualifies for the runoff. We use local polynomial regressions: we fit separate polynomials of order 1 on each side of the threshold, using a fixed bandwidth of 2.5 percentage points (relative to the number of registered voters). The mean, left of the threshold gives the value of the outcome for the unqualified candidate at the threshold. Other notes as in Table 1.

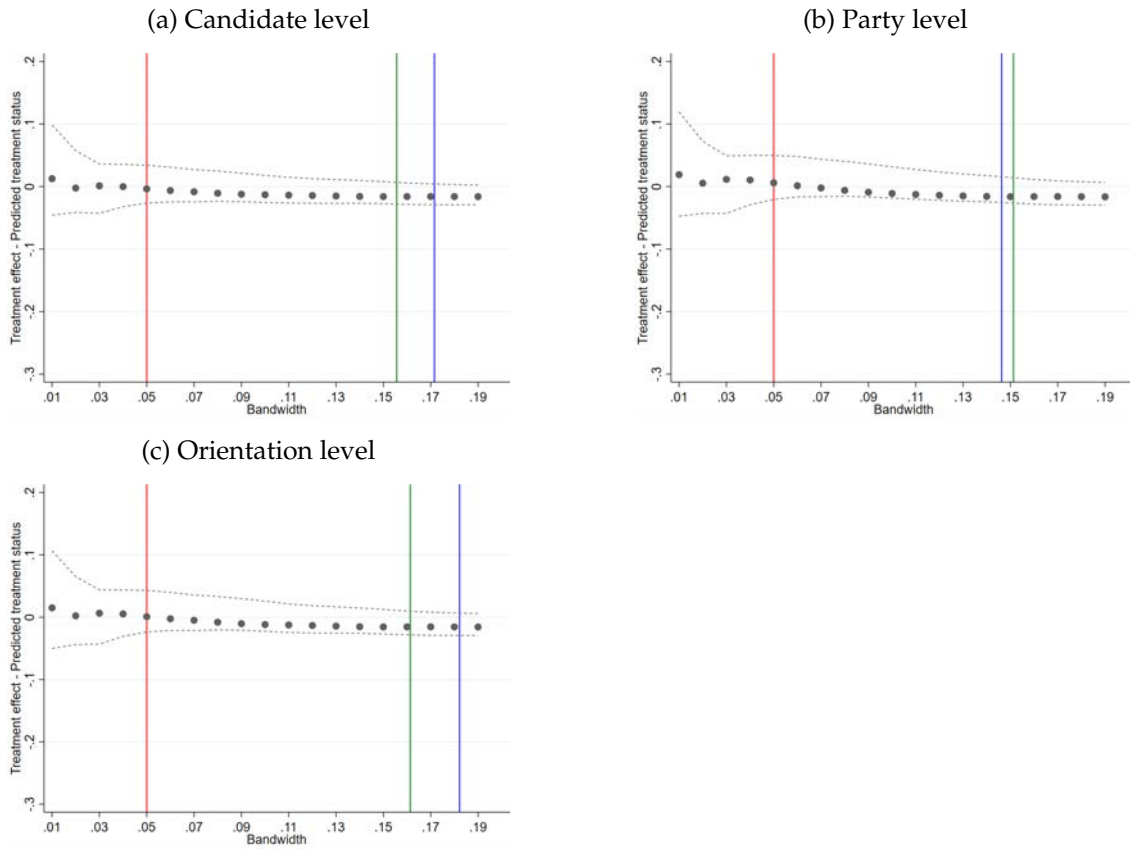
C Additional Robustness Checks

Figure C.1: Robustness of main results to bandwidth choice



Notes: This figure tests the sensitivity of our main results to bandwidth choice. Dots represent the estimated treatment effect of winning the current election on the probability that the candidate (Figure C.1a), the candidate's party (Figure C.1b), or the candidate's orientation (Figure C.1c) wins the next election, using different bandwidths from 1 to 20 percentage points. The vertical red line corresponds to our fixed five-percentage-point bandwidth while the green and blue lines give the value of the MSERD and IK optimal bandwidths, respectively. In Figure C.1b, we use our party-level sample. In Figure C.1c, we use our orientation-level sample.

Figure C.2: Robustness of general balance test to bandwidth choice



Notes: This figure tests the sensitivity of our general balance test to bandwidth choice. Dots represent the estimated treatment effect of winning the current election on the predicted treatment status, using different bandwidths from 1 to 20 percentage points. Other notes as in Appendix Figure C.1.

Table C.1: Impact of winning on winning the next election, other bandwidths and polynomial orders

(a) Candidate level					
	Cand. wins, t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.276*** (0.014)	0.272*** (0.015)	0.220*** (0.033)	0.268*** (0.016)	0.220*** (0.034)
Robust p-value	0.000	0.000	0.000	0.000	0.000
Observations	17740	15204	3770	13664	7372
Polynomial order	1	1	1	1	2
Bandwidth	0.138	0.114	0.025	0.100	0.050
Mean, left of threshold	0.114	0.122	0.156	0.126	0.148
(b) Party level					
	Party wins, t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.164*** (0.016)	0.163*** (0.016)	0.092 (0.037)	0.159*** (0.019)	0.098 (0.039)
Robust p-value	0.000	0.000	0.207	0.000	0.184
Observations	14623	15266	3015	10856	5850
Polynomial order	1	1	1	1	2
Bandwidth	0.144	0.153	0.025	0.100	0.050
Mean, left of threshold	0.222	0.217	0.281	0.243	0.267
(c) Orientation level					
	Orient. wins, t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.141*** (0.016)	0.142*** (0.017)	0.093* (0.037)	0.138*** (0.019)	0.092* (0.038)
Robust p-value	0.000	0.000	0.098	0.000	0.085
Observations	14856	14119	3354	12171	6575
Polynomial order	1	1	1	1	2
Bandwidth	0.127	0.120	0.025	0.100	0.050
Mean, left of threshold	0.320	0.325	0.383	0.338	0.366

Notes: We use the MSERD and IK optimal bandwidths (columns 1 and 2), fixed bandwidths of 2.5 and 10 percentage points (columns 3 and 4), and a polynomial of order 2 (column 5). Other notes as in Table 2.

Table C.2: Impact of winning on winning the next election, controlling for candidates' political orientation

	Cand. wins, t+1	Party wins, t+1	Orient. wins, t+1
	(1)	(2)	(3)
Treatment effect	0.253*** (0.023)	0.140*** (0.026)	0.132*** (0.026)
Robust p-value	0.000	0.005	0.004
Observations	7364	5850	6575
Polynomial order	1	1	1
Bandwidth	0.050	0.050	0.050
Mean, left of threshold	0.148	0.267	0.366

Notes: We control for five dummies indicating the candidate's orientation from far-left to far-right. The dummy for being non-classified is omitted. Other notes as in Table 2.

Table C.3: Impact of winning on candidate entry in the next election, other bandwidths and polynomial orders

(a) Candidate level					
	Cand. runs, t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.337*** (0.015)	0.337*** (0.015)	0.309*** (0.033)	0.331*** (0.017)	0.307*** (0.034)
Robust p-value	0.000	0.000	0.000	0.000	0.000
Observations	17354	16608	3770	13664	7372
Polynomial order	1	1	1	1	2
Bandwidth	0.134	0.127	0.025	0.100	0.050
Mean, left of threshold	0.351	0.354	0.395	0.366	0.390
(b) Party level					
	Party runs, t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	0.051*** (0.013)	0.053** (0.015)	0.026 (0.029)	0.053** (0.015)	0.026 (0.030)
Robust p-value	0.001	0.044	0.963	0.029	0.763
Observations	14482	10359	3015	10998	5924
Polynomial order	1	1	1	1	2
Bandwidth	0.142	0.094	0.025	0.100	0.050
Mean, left of threshold	0.783	0.790	0.800	0.788	0.796
(c) Orientation level					
	Orient nb. other cand., t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	-0.414*** (0.038)	-0.420*** (0.035)	-0.408*** (0.092)	-0.406*** (0.048)	-0.407*** (0.096)
Robust p-value	0.000	0.000	0.003	0.000	0.004
Observations	17852	20497	3354	12171	6575
Polynomial order	1	1	1	1	2
Bandwidth	0.161	0.196	0.025	0.100	0.050
Mean, left of threshold	1.841	1.836	1.867	1.854	1.854
(d) Orientation level (cont.)					
	Orient nb. all cand., t+1				
	(1)	(2)	(3)	(4)	(5)
Treatment effect	-0.103*** (0.034)	-0.103** (0.034)	-0.123 (0.086)	-0.103* (0.045)	-0.125 (0.090)
Robust p-value	0.006	0.032	0.239	0.054	0.372
Observations	19807	20007	3354	12171	6575
Polynomial order	1	1	1	1	2
Bandwidth	0.186	0.189	0.025	0.100	0.050
Mean, left of threshold	2.161	2.161	2.250	2.207	2.230

Notes: Same notes as in Table 3 and Appendix Table C.1.

D Additional Details on the Setting and the Data

D.1 Elections

Our sample contains 20,755 races from both parliamentary and local elections. The distribution of races by election type and election year are shown in Tables [D.1](#) and [D.2](#). Summary statistics for races included in our candidate-level, party-level, and orientation-level samples are shown in Table [D.3](#).

Table D.1: Number of races in parliamentary elections by election year

Election type	Year t (running variable)	Year t+1 (electoral outcomes)	Nb of races
	(1)	(2)	(3)
Parliamentary elections	1958	1962	475
	1962	1967	337
	1967	1968	484
	1968	1973	458
	1973	1978	481
	1978	1981	483
	1988	1993	557
	1993	1997	560
	1997	2002	565
	2002	2007	574
	2007	2012	221
	2012	2017	562
Total			5757

Notes: Column 3 indicates the number of races in a given election year (shown in column 1) that were successfully linked to a subsequent race occurring in the same district in the next election year (shown in column 2). We exclude races that cannot be linked to a subsequent election due to redistricting as well as races where the winner ran uncontested.

Table D.2: Number of races in local elections by election year

Election type	Year t (running variable) (1)	Year t+1 (electoral outcomes) (2)	Nb of races (3)
Local elections	1979	1982	62
	1979	1985	937
	1982	1985	42
	1982	1988	1023
	1985	1988	59
	1985	1992	1460
	1988	1992	28
	1988	1994	1574
	1992	1994	28
	1992	1998	1926
	1994	1998	24
	1994	2001	1920
	1998	2001	30
	1998	2004	1951
	2001	2004	16
	2001	2008	1912
	2004	2008	16
	2004	2011	1979
	2008	2011	11
Total			14998

Notes: Same notes as in Table [D.1](#).

Table D.3: Summary statistics

	Mean	Sd	Min	Max	Obs.
A. Candidate-level					
Registered voters	25,043.1	27,541.1	255.0	181,284.0	20,755
Turnout	0.682	0.103	0.134	0.952	20,755
Nb. of cand.	6.1	2.9	2.0	29.0	20,755
Runoff	0.707	0.455	0.000	1.000	20,755
Winning margin	0.206	0.163	0.000	0.999	20,755
B. Party-level					
Registered voters	25,870.6	27,850.8	255.0	181,284.0	19,434
Turnout	0.681	0.103	0.134	0.920	19,434
Nb. of cand.	6.1	3.0	2.0	29.0	19,434
Runoff	0.708	0.455	0.000	1.000	19,434
Winning margin	0.206	0.162	0.000	0.999	19,434
C. Orientation-level					
Registered voters	26,258.3	28,034.5	258.0	181,284.0	18,666
Turnout	0.680	0.103	0.134	0.912	18,666
Nb. of cand.	6.1	3.0	2.0	29.0	18,666
Runoff	0.711	0.453	0.000	1.000	18,666
Winning margin	0.204	0.161	0.000	0.999	18,666

Notes: The unit of observation is the race. In Panel a, we exclude races that cannot be linked to a subsequent election due to redistricting as well as races where the winner runs uncontested. In Panel b, we further exclude races in which none of the top-two contenders is affiliated with one of the seven main party organizations, and races in which the top-two contenders are from the same party. In Panel c, we exclude races in which none of the top-two contenders can be classified on the left-right scale and races in which the top-two contenders are from the same orientation.

D.2 Party system

Our analysis focuses on the seven main French parties over the last 70 years, labeled as follows (from left to right): FDG, VEC, SOC, RadGauche, MODEM, UMP, FN. FDG refers to the most extreme party on the left – among those in our list. It corresponded to the French Communist Party (FCP) from 1958 to 2007 and included Front de Gauche in 2012. VEC represents the main ecologist party, which started operating in France in 1978. SOC coincides with the different shades of socialist parties that ran for election in France between 1958 and 2012 – namely, the French Section of the Workers' International (SFIO) in 1958 and 1962, the Federation of the Democratic and Socialist Left (FGDS) in 1967 and 1968, the Socialist Party and the Movement of Left Radicals (PSMRG) in 1978, and the Socialist Party (SOC) in 1973 and from 1981 to 2012. RadGauche identifies the radical left, which coincided with the Radicals until 1972 (when the latter party leaned toward the left) and with the Parti Radical de Gauche after the Radicals split between a center-right and a center-left

component. MODEM stands for the centrist party, represented by Union for French Democracy from 1978 to 2002 and by MODEM in 2007 and 2012. Under UMP, we list the right-wing Gaullist parties that ran from 1958 to 2012. The list starts with Union for the New Republic (UNR) founded by De Gaulle's supporters that ran in 1958, the UNR-UDT in 1962, which gathered the UNR and the Gaullist Democratic Union of Labour (UDT), the Union of Democrats for the Fifth Republic (UD5) in 1967, the Union for the Defense of the Republic (UDR) in 1968, the Union of Republicans for Progress (URP) in 1973, the Rally for the Republic (RPR) from 1978 to 1997, and the Union pour un Mouvement Populaire from 2002 to 2012. Finally, FN refers to the Front National, the most extreme party on the right. This party, founded in 1972, has gained more than 10% of the expressed votes in all parliamentary elections since 1988.

While the previous paragraph provides a broad description of the main political parties in our database, the classification we performed was more detailed and complex. In the French political system, it is not rare for national politicians to leave their party and found a new political formation. Similarly, it is common for small parties to merge into larger formations. There exists a clear trade-off between maintaining the precise and granular ideological differences between parties present in a given election year, and identifying parties that remain stable over time. Given the long time span of our sample, we prioritized party consistency, possibly losing some short-term ideological granularity.

Parties were mapped using the following approach: first, whenever a party simply changes its name over time, it is mapped into one of our seven party labels. For instance, the party labels SFIO, FGDS, PS, and SOC all identify the socialist party and are all mapped into the general label SOC. Second, all election-specific party nuances that eventually converge (through mergers) into one of the seven main categories are considered as part of the main category throughout the whole period.

Consider for instance the 1973 election. In this case, the *Républicains Indépendants* (RI), the Union of Democrats for the Republic (UDR), and the *Centre Démocratie et Progrès* (CDP) ran independently but under a general coalition named *Union des Républicains pour le Progrès*. The CDP later merged into the *Centre des Démocrates Sociaux* which in turn converged into the *Force Démocrate*, led by François Bayrou, one of the founders of the MODEM. Thus, CDP is classified as MODEM. As for RI, the party was later replaced by the *Parti Républicain*, which then became

Démocratie Libérale (DL), one of the founding components of the UMP. We thus classified RI as UMP. Finally, the UDR was replaced by the Rassemblement pour la République, the main component of the UMP, and was thus also classified as UMP.

These classifications were performed mainly relying on the work by [Knapp \(2004\)](#) and the information provided in "france-politique.fr". Table D.4 displays the mapping between political labels (present in the electoral results) and party names, political orientations, and a dummy indicating whether the label corresponds to a structured party or independent candidates, for each election separately. Note that the political orientation is from [Granzier et al. \(2019\)](#).

Table D.4: Party classification and political orientation, by election

<i>Political label</i>	1958 Parliamentary elections		
	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Centre National des Indépendants et Paysans	UMP	right	1
Centre de la Réforme Républicaine		left	1
Démocratie Chrétienne de France		right	1
Divers Extrême Droite		farright	0
Divers Gaullistes		right	0
Modérés		nonclassified	0
Mouvement Républicain Populaire	MDM	center	1
Non Classés		nonclassified	0
Parti Communiste Français	FDG	left	1
Poujadistes	FN	farright	1
Parti Socialiste Autonome		left	1
Radicaux Centristes		center	1
Radicaux Socialistes	RadGauche	left	1
Radicaux - Union des Forces Démocratiques		left	1
Rassemblement des Gauches Républicaines		center	1
Section Française de l'Internationale Ouvrière	SOC	left	1
UDSR Minoritaires		left	1
Union des Forces Démocratiques		left	1
Union de la Gauche Socialiste		left	1
Union pour la Nouvelle République	UMP	right	1

1962 Parliamentary elections				
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>	
Centre National Des Indépendants Et Paysans	UMP	right	1	
Divers Extrême Droite		farright	0	
Divers Extrême Gauche		farleft	0	
Divers Gaullistes		right	0	
Indépendants		nonclassified	0	
Indépendants - V ^e République		nonclassified	0	
Modérés		nonclassified	0	
Mouvement Républicain Populaire	MDM	center	1	
Mouvement Républicain Populaire - V ^e République	MDM	center	1	
Non Classés		nonclassified	0	
Parti Communiste Français	FDG	left	1	
Poujadistes	FN	farright	1	
Parti Socialiste Unifié		farleft	1	
Radicaux centristes		center	1	
Radicaux socialistes	RadGauche	left	1	
Section Française de l'Internationale Ouvrière	SOC	left	1	
Union pour la Nouvelle République - Union Démocratique du Travail	UMP	right	1	

1967 Parliamentary elections				
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>	
Alliance Républicaine pour les Libertés et le Progrès		center	1	
Apparenté au Parti Communiste Français		left	0	
Centre Démocrate	MDM	center	1	
Divers Extrême Droite		farright	0	
Divers Gaullistes		right	0	
Divers Extrême Gauche		farleft	0	
Modérés		nonclassified	0	
Parti Communiste Français	FDG	left	1	
Parti Socialiste Unifié		farleft	1	
Radicaux de Droite		right	1	
Centre Droit Rallié Gaullisme		right	0	
Régionalistes		nonclassified	0	
Républicains Indépendants	UMP	right	1	
Fédération de la Gauche Démocrate et Socialiste	SOC	left	1	
Union pour la Nouvelle République	UMP	right	1	

1968 Parliamentary elections				
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>	
Alliance Républicaine		center	1	
Parti Communiste Français et apparentés	FDG	left	1	
Centre Démocrate	MDM	center	1	
Centre Démocrate/Centre Progrès et Démocratie Moderne	MDM	center	1	
Centre Progrès et Démocratie Moderne	MDM	center	1	
Divers Extrême Droite		farright	0	
Divers Gaullistes		right	0	
Divers Gaullistes/Union pour la Nouvelle République	UMP	right	1	
Divers Extrême Gauche		farleft	0	
Indépendants		nonclassified	0	
Modérés		nonclassified	0	
Modérés/Centre Progrès et Démocratie Moderne		center	1	
Modérés/Radicaux Socialistes		left	1	
Modérés/Républicains Indépendants		right	1	
Mouvement pour la Réforme		center	1	
Non Classés		nonclassified	0	
Parti Communiste Français	FDG	left	1	
Parti Socialiste Unifié		farleft	1	
Radicaux de Droite		right	1	
Radicaux de Droite/Républicains Indépendants		right	1	
Radicaux Socialistes	RadGauche	left	1	
Radicaux Socialistes/Républicains Indépendants		right	1	
Régionalistes		nonclassified	0	
Républicains Indépendants	UMP	right	1	
Républicains Indépendants/Divers Gaullistes	UMP	right	1	
Républicains Indépendants/Union des	UMP	right	1	
Démocrates pour la Ve République				
Républicains Indépendants/UDR/Union pour la Nouvelle République	UMP	right	1	
Fédération de la Gauche Démocrate et Socialiste	SOC	left	1	
Technique et Démocratie		nonclassified	1	
Union pour la Nouvelle République	UMP	right	1	

1973 Parliamentary elections				
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>	
Centre Démocratie et Progrès	MDM	right	1	
Centre Démocratie et Progrès/Union des Républicains de Progrès	MDM	right	1	
Divers Gaullistes	MDM	right	0	
Réformateurs		center	1	
Divers Droite		right	0	
Divers Gauche		left	0	
Extrême Droite		farright	0	
Extrême Gauche		farleft	0	
Indépendants		nonclassified	0	
Ligue Communiste Révolutionnaire	RadGauche	farleft	1	
Lutte Ouvrière		farleft	1	
Mouvement des Radicaux de Gauche		left	1	
Non Classés		nonclassified	0	
Organisation Communiste Internationale		farleft	1	
Parti Communiste Français		left	1	
Parti Socialiste Unifié		farleft	1	
Parti Socialiste Unifié - Gauche Sociale Unifié	SOC	left	1	
Radicaux Réformateurs	MDM	center	1	
Républicains Indépendants	UMP	right	1	
Républicains Indépendants/Union pour la Nouvelle République	UMP	right	1	
Union des Démocrates pour la V ^e République	UMP	right	1	
Union des Démocrates pour la V ^e République/Union pour la Nouvelle République	UMP	right	1	
Union pour la Nouvelle République	UMP	right	1	

1978 Parliamentary elections				
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>	
Divers Droite	VEC	right	0	
Divers Gauche		left	0	
Écologistes		nonclassified	1	
Extrême Droite		farright	0	
Extrême Gauche		farleft	0	
Indépendants		nonclassified	0	
Non Classés		nonclassified	0	
Parti Communiste Français	FDG	left	1	
Parti Socialiste	SOC	left	1	
Rassemblement pour la République	UMP	right	1	
Union pour la Démocratie Française	MDM	right	1	

1979 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Union pour la Démocratie Française		right	0
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Gauche		farleft	0
Parti Radical de Gauche	RadGauche	left	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1

1982 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Parti Radical de Gauche	RadGauche	left	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1

1981 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Indépendants		nonclassified	0
Non Classés		nonclassified	0
Parti Communiste Français	FDG	left	1
Parti Socialiste	SOC	left	1
Rassemblement pour la République	UMP	right	1
Union pour la Démocratie Française	MDM	right	1

1985 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Parti Radical de Gauche	RadGauche	left	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1

1988 Parliamentary and local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Front National	FN	farright	1
Majorité Présidentielle		left	0
Parti Communiste Français	FDG	left	1
Parti Socialiste	SOC	left	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la République	UMP	right	1
Sans Etiquette		nonclassified	0
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1

1992 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers Droite		right	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Génération écologie		nonclassified	1
Autres Majorité Présidentielle		left	0
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1
Verts	VEC	left	1

1993 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers		nonclassified	0
Divers Droite		right	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Génération Écologie		nonclassified	1
Majorité Présidentielle		left	0
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1
Verts	VEC	left	1

1994 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers		nonclassified	0
Divers Droite		right	0
Divers Gauche		left	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Génération Écologie		nonclassified	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1
Verts	VEC	left	1

1997 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers		nonclassified	0
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	nonclassified	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Parti Radical-Socialiste	RadGauche	left	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1

1998 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers		nonclassified	0
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Mouvement Républicain et Citoyen		left	1
Parti Radical de Gauche	RadGauche	left	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	right	1
Verts	VEC	left	1

2001 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Chasse Pêche Nature Traditions		right	1
Divers		nonclassified	0
Démocratie Libérale		right	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Mouvement Républicain et Citoyen		left	1
Mouvement National Républicain		farright	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la France		right	1
Rassemblement pour la République	UMP	right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	center	1
Verts	VEC	left	1

2002 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Chasse Pêche Nature Traditions		right	1
Divers		nonclassified	0
Démocratie Libérale		right	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Ligue Communiste Révolutionnaire		farleft	1
Lutte Ouvrière		farleft	1
Mouvement National Républicain		farright	1
Mouvement pour la France		right	1
Pôle Républicain		left	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Rassemblement pour la France		right	1
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	center	1
Union pour la Majorité Présidentielle	UMP	right	1
Verts	VEC	left	1

2004 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Chasse Pêche Nature Traditions		right	1
Divers		nonclassified	0
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Socialistes	SOC	left	1
Union pour la Démocratie Française	MDM	center	1
Union pour un Mouvement Populaire	UMP	right	1
Verts	VEC	left	1

2008 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Autres		nonclassified	0
Communiste	FDG	left	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Majorité présidentielle		right	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Socialistes	SOC	left	1
Union pour la Démocratie Française - Mouvement Démocrate	MDM	center	1
Union pour un Mouvement Populaire	UMP	right	1
Verts	VEC	left	1

2007 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Chasse Pêche Nature Traditions		right	1
Divers		nonclassified	0
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Majorité Présidentielle		right	0
Mouvement pour la France		right	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Socialistes	SOC	left	1
Union pour la Démocratie Française - Mouvement Démocrate	MDM	center	1
Union pour un Mouvement Populaire	UMP	right	1
Verts	VEC	left	1

2011 Local elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Autres		nonclassified	0
Communiste	FDG	left	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front National	FN	farright	1
Autres candidats majorité présidentielle		right	1
Majorité présidentielle		right	1
Mouvement Démocrate	MDM	center	1
Parti de Gauche	FDG	left	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Socialistes	SOC	left	1
Union pour un Mouvement Populaire	UMP	right	1
Verts	VEC	left	1

2012 Parliamentary elections			
<i>Political label</i>	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Alliance Centriste		center	1
Autres		nonclassified	0
Le Centre pour la France	MDM	center	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes		nonclassified	0
Extrême Droite		farright	0
Extrême Gauche		farleft	0
Front de Gauche	FDG	left	1
Front National	FN	farright	1
Nouveau Centre		right	1
Parti radical		right	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
Socialistes	SOC	left	1
Union pour un Mouvement Populaire	UMP	right	1
Verts	VEC	left	1

<i>Political label</i>	2017 Parliamentary elections		
	<i>Party name</i>	<i>Political orientation</i>	<i>Party/Independent</i>
Communiste	FDG	left	1
Divers		nonclassified	0
Debout la France		right	1
Divers Droite		right	0
Divers Gauche		left	0
Écologistes	VEC	left	1
Extrême Droite		farright	0
Extrême Gauche		farleft	0
La France Insoumise		left	1
Front National	FN	farright	1
Les Républicains	UMP	right	1
Mouvement Démocrate	MDM	center	1
Parti Radical de Gauche	RadGauche	left	1
Régionalistes		nonclassified	0
La République en Marche		center	1
Socialistes	SOC	left	1
Union des Démocrates et Indépendants		right	1

Notes: The Political label indicates the label present in the electoral results and attributed by the Ministry of Interior. The Party name indicates how each party label was classified into the seven main French parties. Each party is further classified into six ideological orientations from far-left to far-right (including the residual category "non-classified"), following [Granzier et al. \(2019\)](#). The final column, Party/Independent, indicates whether the label corresponds to a structured party or independent candidates. structured

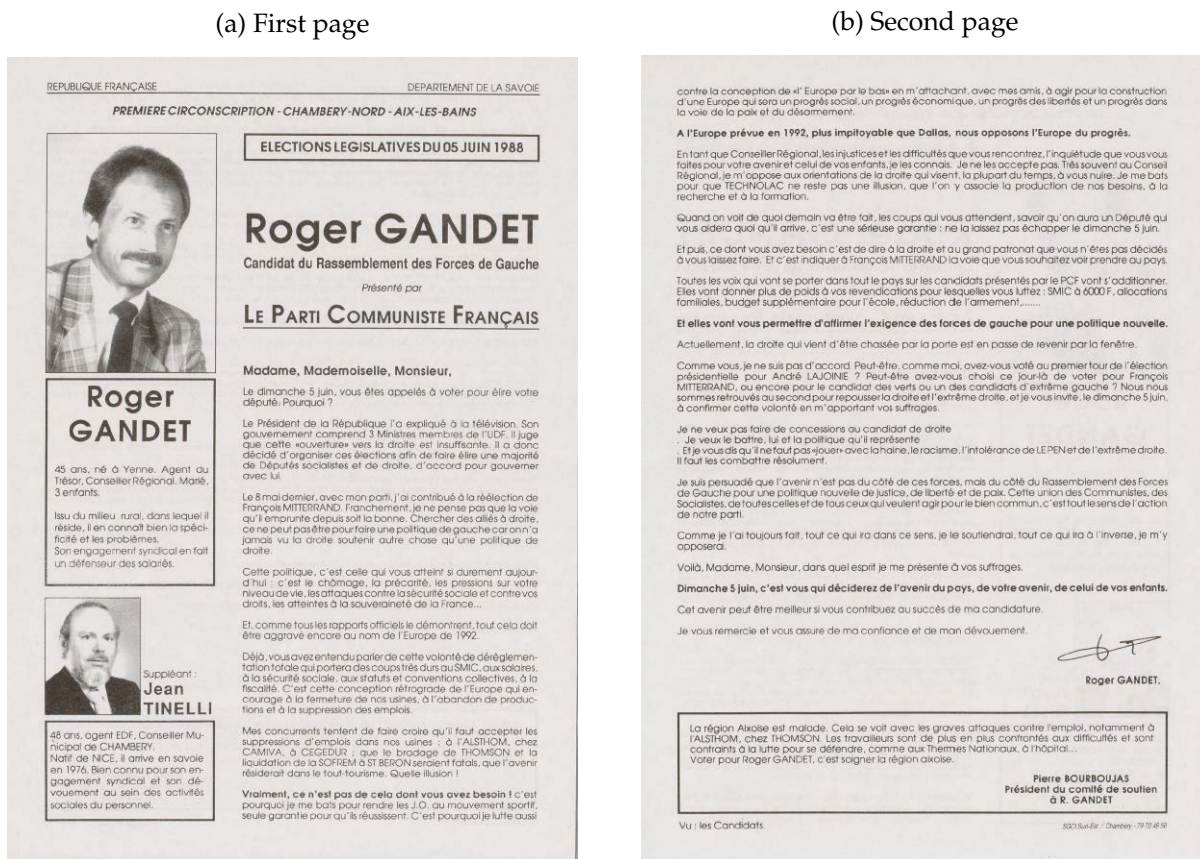
D.3 Electoral coalitions

Beside tracking parties over time, we mapped them into national coalitions. The two main coalitions typically gather centre-right and centre-left forces around the UMP on the one hand, and the SOC on the other. These two opposite core parties never belonged to the same coalition. Our approach is thus the following: for each year, we considered a left- and a right-wing coalition formed respectively by the SOC or the UMP and all the parties that signed national-level agreements with them. These agreements may take place either in the first round, when parties avoid to present a candidate in certain districts to increase the chances of victory of their ally, or in the second round, when allied parties sign national agreements to withdraw the least voted candidates and endorse the most voted candidate of the coalition. Information on national alliances is taken from [Williams \(1970\)](#) for the first part of our sample, and from other sources including [Knapp \(2004\)](#), [Chabal \(2015\)](#) and Wikipedia for the second part.

D.4 Campaign manifestos

Two-page campaign manifestos issued by candidates are a key component of French electoral campaigns. In each constituency, all manifestos are mailed to all voters, together with ballots, at most four days before the first round, and three days before the second round in case of a runoff. They allow candidates to tailor their campaign communication to the specific voters in their district. An example is provided in Figure D.1. Candidates are responsible for printing their own manifestos, but this cost is reimbursed by the state if they gather at least 5% of the votes during either round of the election (Electoral law, articles R39 and L216).

Figure D.1: Example of candidate manifesto



Source: Archelec Project – <https://archive.org/details/archiveselectoralesducevipof>

We exploit manifestos issued before the first round of nine parliamentary elections: 1962, 1967, 1968, 1973, 1978, 1981, 1993, 1997, and 2017. Manifestos issued before the parliamentary elections held between 1962 and 1993 were systematically collected and digitized by the CEVIPOF and the

Sciences Po Library for the Archelec project (Gaultier-Voituriez 2016). They are available in PDF version and machine-readable text at the following link: <https://archive.org/details/archiveselectoralesducevipoc>. We use the dataset assembled by Le Pennec (2020). Over the corresponding period (i.e., the parliamentary elections from 1962 to 1988), next-election manifestos are available for 92% of the candidates ranked first or second in the decisive stage of the current election who run again in the next election.

Manifestos issued in 1997 were collected from the National Archives by Cagé et al. (2022). For the 1993 parliamentary election, next-election manifestos are available for 95% of the candidates who run again in the next election.

Manifestos issued in 2017 were, in part, made available online by the Ministry of the Interior shortly before the election, scraped by Regards Citoyens (<https://www.regardscitoyens.org>), and linked to the electoral results by Le Pennec (2020). For the 2012 parliamentary election, next-election manifestos are available for 75% of the candidates who run again in the next election.

D.5 Similarity between manifestos

Text pre-processing We pre-process the content of candidate manifestos following standard steps in the literature. Specifically, we tokenize documents at the single word level, remove stopwords and special characters, and lemmatize each word using Spacy’s French model (<https://spacy.io/models/fr>).

Cosine similarity Our first measure of similarity between manifestos relies on a simple bag-of-words approaches. For each election year separately, we represent the corpus of first round manifestos as a document-term matrix, where each manifesto is represented as a vector of word frequencies over the vocabulary (between 4,000 and 6,000 words depending on the year, after excluding words that appear in less than 0.5% of the documents). We then calculate the cosine similarity between any two manifestos (i.e., vectors of word frequencies) issued by candidates from the same party, for each of the seven main parties in our sample. This measure may take any value between -1 and 1, and it indicates how similar two documents are from each other in terms of the words they use, while accounting for differences in length between them. Next, we calculate each manifesto’s average pairwise similarity to all other manifestos issued in the same election year by candidates from the same party.

We repeat this exercise for four different vector representations of manifestos: frequencies of unigrams, Tf-Idf weights of unigrams, frequencies of bigrams, and Tf-Idf weights of bigrams. Tf-Idf weights give more weight to document-specific words which are frequent in a given manifesto but infrequent in others.

Latent Semantic Indexing Our second measure of similarity follows [Bertrand et al. \(2021\)](#) and uses Latent Semantic Indexing. We first represent each manifesto as a vector of Tf-Idf weights over the vocabulary. We then apply a singular value decomposition to the large and sparse document-term matrix to reduce its dimensionality and obtain a dense matrix, where each document is represented as a vector of 200 latent dimensions. We measure the cosine similarity between any two such dense vectors, and calculate each manifesto's average pairwise similarity to all other manifestos from the same party x year.

We perform this exercise for two different vector representations of manifestos: Tf-Idf weights of unigrams and Tf-Idf weights of bigrams.

Originality index Taking into account both similarity measures and their different vector representations, we are left with six different measures of a manifesto's mean similarity to other manifestos from the same party x year. We standardize each of these measures by election year. We then define the originality index as the average of these standardized measures. The index is further divided by its standard deviation to facilitate interpretation.

D.6 Definition of key outcomes

Candidate level To construct candidate-level outcomes, we match candidate names across election years. More precisely, we perform fuzzy string matching on candidates' first names, last names, and political orientations, and we resolve uncertain matches manually. In parliamentary elections, we match candidates with candidates in the same constituency over the next election cycle. In local elections, we match candidates with candidates in the same canton two cycles later, since cantons elect their council members only every other cycle. A few cantons hold an election in two consecutive cycles, due for instance to the death of the incumbent, in which case we

match candidates with candidates in the next cycle. Candidates whose constituency or canton is redistricted before the next election cycle are left unmatched.

Our key candidate-level outcomes are defined as follows:

- A dummy equal to 1 if the candidate runs again and wins the next election, and equal to 0 if the candidate does not run again or runs and does not win. This outcome, like all subsequent ones, is set to missing for candidates whose district is redistricted before the next election.
- A dummy equal to 1 if the candidate runs again in the next election.
- The candidate's vote share in the first round of the next election. It is measured in percentage points, relative to the number of expressed votes (cast votes which are neither null nor blank), and set to 0 if the candidate does not run again.
- The candidate's total campaign expenditures and total contributions received for the next election. These quantities are measured in euros and set to 0 for candidates who do not run in the next election, when estimating bounds on the effect of winning on these outcomes.
- The candidate's originality index (as defined in Section [D.5](#)) in the next election. It is set to 0 for candidates who do not run in the next election, when estimating bounds on the effect of winning on this outcome.
- A dummy equal to 1 if the candidate qualifies for the runoff in the next election: they are either among the top-two candidates, in races where the second-ranked candidate does not pass the qualification threshold, or their vote share is above the qualification threshold, in other races. This outcome is set to 0 if the candidate does not run again, and it is defined whether a runoff election is held or not.

Party level To construct party-level outcomes, we use the party classification described in Appendix [D.2](#). We restrict the sample to candidates affiliated with one of the seven main parties and aggregate, in each district, candidate-level variables at the party level. We then link each candidate to the corresponding party-level outcomes in the next election.

Our key party-level outcomes are defined as follows:

- A dummy equal to 1 if any candidate from the candidate's party runs again and wins the next election (regardless of whether the candidate themselves runs and wins the next election), and equal to 0 if no candidate from the candidate's party runs again or if some candidate runs but does not win. This outcome, like all subsequent ones, is set to missing for candidates whose district is redistricted before the next election, candidates who are not affiliated with any of the seven main parties, and candidates facing a contender from the same party.
- A dummy equal to 1 if any candidate from the candidate's party runs again in the next election.
- The vote share of the candidate's party in the first round of the next election. It is defined as the sum of vote shares received by all candidates from the candidate's party running in the same district, and measured in percentage points, relative to the number of expressed votes. It is set to 0 if no candidate from the candidate's party runs again.
- A dummy equal to 1 if any candidate from the candidate's party qualifies for the runoff in the next election. This outcome is set to 0 if no candidate from the candidate's party runs again.

Orientation level We classify candidates between six political orientations (far-left, left, center, right, far-right, and other), using political labels provided for each candidate by the Ministry of the Interior and following [Granzier et al. \(2019\)](#). Unlike the seven party labels, the orientation is defined for *all* candidates – with the exception of a few candidates with a missing label. In particular, the orientation is also defined for independent candidates who are not affiliated with any party, but who were assigned a label reflecting their ideological leaning (e.g., "divers droite" for right-wing independent candidates). Candidates who cannot be classified on the left-right scale are labeled as "non-classified". We exclude such candidates and aggregate candidate-level variables at the orientation level in each district, for the five well-defined orientations. We then link each candidate to the corresponding orientation-level outcomes in the next election.

Our key orientation-level outcomes are defined as follows:

- A dummy equal to 1 if any candidate from the candidate's orientation runs again and wins the next election (regardless of whether the candidate themselves runs and wins the next

election), and equal to 0 if no candidate from the candidate's orientation runs again or if some candidate runs but does not win. This outcome, like all subsequent ones, is set to missing for candidates whose district is redistricted before the next election and for candidates classified as "other." It is also set to missing for candidates facing a contender from the same orientation.

- A dummy equal to 1 if any candidate from the candidate's orientation runs again in the next election.
- The vote share of the candidate's orientation in the first round of the next election. It is measured in percentage points, relative to the number of expressed votes, and set to 0 if no candidate from the candidate's orientation runs again.
- The number of other candidates from the candidate's orientation in the next election. It is equal to the total number of candidates from that orientation in the next election if the candidate does not run again or if they run again but with another orientation. Conversely, it is equal to the total number of candidates from that orientation minus one if the candidate runs again and with the same orientation.
- The number of other candidates from the candidate's orientation that are affiliated with a party, in the next election. It is equal to the total number of candidates from that orientation that are affiliated with a party if the candidate does not run again, or if they run again but with another orientation, or if they run again and with the same orientation but without a party affiliation. Conversely, it is equal to the total number of candidates from that orientation that are affiliated with a party minus one if the candidate runs again, with the same orientation, and with a party affiliation.
- The number of other candidates from the candidate's orientation that are not affiliated with a party, in the next election.

D.7 Balance test covariates

To run the general balance test shown in Figure 1 and Table 1, we predict treatment assignment by regressing a dummy equal to 1 if the candidate wins on the following covariates, and use the fitted values as outcome in the RDD:

- A dummy equal to 1 if the candidate is a woman.
- A set of six dummies indicating the candidate's orientation: far-left, left, center, right, far-right, non-classified.
- A dummy equal to 1 if the candidate is affiliated with a party vs. an independent.
- The number of other candidates from the candidate's orientation in the current election. It is equal to the total number of candidates from that orientation minus one.
- A dummy equal to 1 if the candidate already ran and won the previous election, and equal to 0 if the candidate did not previously run or ran and did not win. This covariate, like all subsequent ones, is set to missing for candidates whose district was redistricted after the previous election.
- A dummy equal to 1 if the candidate already ran in the previous election.
- The candidate's vote share in the first round of the previous election. It is measured in percentage points, relative to the number of expressed votes, and set to 0 if the candidate did not run previously.
- A dummy equal to 1 if any candidate from the candidate's party already ran and won the previous election, and equal to 0 if no candidate from the candidate's party previously ran or if some candidate ran but did not win.
- A dummy equal to 1 if any candidate from the candidate's party already ran in the previous election.
- The vote share of the candidate's party in the first round of the previous election. It is defined as the sum of vote shares received by all candidates from the candidate's party running in the same district, and measured in percentage points, relative to the number of expressed votes. It is set to 0 if no candidate from the candidate's party previously ran.
- A dummy equal to 1 if any candidate from the candidate's orientation already ran and won the previous election, and equal to 0 if no candidate from the candidate's orientation previously ran or if some candidate ran but did not win.

- A dummy equal to 1 if any candidate from the candidate's orientation already ran in the previous election.
- The vote share of the candidate's orientation in the first round of the previous election. It is defined as the sum of vote shares received by all candidates from the candidate's orientation running in the same district, and measured in percentage points, relative to the number of cast votes. It is set to 0 if no candidate from the candidate's orientation previously ran.
- The number of other candidates from the candidate's orientation in the previous election. It is equal to the total number of candidates from that orientation in the previous election if the candidate did not previously run or if they ran but with another orientation. Conversely, it is equal to the total number of candidates from that orientation minus one if the candidate previously ran and with the same orientation.

E Bounds on Treatment Effect Conditional on Running Again

This section describes in detail how we estimate bounds on the treatment impact of winning at t , conditional on running again at $t+1$.

Following [Anagol and Fujiwara \(2016\)](#) and [Granzier et al. \(2019\)](#), let T be an indicator equal to 1 if the candidate wins the current election and R_0 and R_1 dummy variables taking value 1 when the candidate runs in the next election after winning ($T = 1$) and losing ($T = 0$), respectively. For simplicity, we drop the implicit t subscript from the T dummy, and the implicit $t + 1$ subscript from the R and W dummies. Note that the data only allow us to observe $R = TR_1 + (1 - T)R_0$ but not both potential outcomes R_0 and R_1 : We may observe a candidate's decision to run again after winning the current election but we cannot determine whether they would have run had they lost instead, and conversely. Analogously, we define W_1 and W_0 as potential indicators taking value 1 if the candidate wins conditional on running in the next election when $T = 1$ and $T = 0$, respectively. The same logic implies that only $W = R(TW_1 + (1 - T)W_0)$ is observable in the dataset. When the candidate is absent from the next election ($R = 0$), they lose ($W = 0$) and the outcome that would have occurred had they decided to run ($R = 1$) is unknown. Likewise, among candidates who run again ($R = 1$), we observe whether the current winner wins the next election, but not whether they would have won the next election had they lost the current election, and conversely.

This formulation yields four compliance strata in the sample: the "always-takers" that run in the next election irrespective of their current performance; the "never takers" that never run again (and never win again either); the "compliers" that only run again if they win the current election; and the "defiers" that only run again when they lose the current election. We rule out the presence of defiers by imposing the monotonicity condition that no candidate is less likely to run again after winning than after losing: $R_1 \geq R_0$. Under this assumption, the following decomposition holds:

$$\begin{aligned}
E[W_1 - W_0 | Marg = 0, R_1 = 1] &= \frac{1}{\underbrace{E[R_1 | Marg = 0]}_{\lim_{Marg \downarrow 0} E[R | Marg]}} \underbrace{(E(W_1 R_1 - W_0 R_0 | Marg = 0))}_{\text{RD effect on W}} \\
&\quad - \underbrace{P(R_1 > R_0 | Marg = 0)}_{\text{RD effect on R}} \underbrace{E(W_0 | Marg = 0, R_1 > R_0)}_{\text{Unobservable}}
\end{aligned}$$

The left-hand side of this equation is the quantity that we seek to measure: the effect of winning on winning the next election, conditional on running (i.e., conditional on being an always-taker or a complier). The first term present on the right-hand side, $E[R_1 | Marg = 0]$, is the probability of running again for close winners at the cutoff. The second term, $E(W_1 R_1 - W_0 R_0 | Marg = 0)$, is the unconditional effect of winning on the probability of winning the next election, which we estimate in Section 4.1. The third term, $P(R_1 > R_0 | Marg = 0)$, denotes the share of compliers at the cutoff. It corresponds to the effect of winning on the probability of running again, which we estimate in Section 4.2. All three quantities can be recovered from the data, but the fourth term, $E(W_0 | Marg = 0, R_1 > R_0)$, cannot. It corresponds to the likelihood that compliers who lost the present election (and, therefore, did not compete in the next one) would have won the next election, had they run again. Since compliers never run again after losing, by definition, this term is never observed. Therefore, we need to make assumptions on its size to derive bounds on the left-hand side variable.

Number of competitors from the same orientation We build on the strategy described above to derive bounds on the effect of winning on the number of other candidates from the same orientation in the next election, conditional on running again. Note that this outcome differs from other outcomes like winning, since the effect of a current victory on the number of candidates from the same orientation is not necessarily null for never-takers: even if they do not run again, winning

the current election may affect the number of ideologically-close candidates who enter the race in the next election.

Using similar notation, we denote N_0^R and N_1^R as the potential number of other candidates from the same orientation *when the candidate runs again* (after having lost or won, respectively), and we denote N_0 and N_1 as the potential number of candidates from the same orientation when the candidate does not run again. The number of other candidates from the same orientation can be written as:

$$N = T (R_1 N_1^R + (1 - R_1) N_1) + (1 - T) (R_0 N_0^R + (1 - R_0) N_0)$$

The unconditional RD effect can be written as:

$$\begin{aligned} E[R_1 N_1^R + (1 - R_1) N_1 - (R_0 N_0^R + (1 - R_0) N_0) | Marg = 0] &= \underbrace{E[N_1^R - N_0^R | Marg = 0, R_0 = R_1 = 1]}_{\text{always-takers}} \\ &+ \underbrace{E[N_1^R - N_0 | Marg = 0, R_1 > R_0]}_{\text{compliers}} \\ &+ \underbrace{E[N_1 - N_0 | Marg = 0, R_0 = R_1 = 0]}_{\text{never-takers}} \end{aligned}$$

where we use the assumption of no defiers.

Noting that

$$\begin{aligned} E[N_1^R - N_0^R | Marg = 0, R_1 = 1] &= \frac{1}{E[R_1 | Marg = 0]} (E[N_1^R - N_0^R | Marg = 0, R_1 = R_0 = 1] P(R_0 = R_1 = 1) \\ &+ E[N_1^R - N_0^R | Marg = 0, R_1 > R_0] P(R_1 > R_0)) \end{aligned}$$

and that

$$\begin{aligned} E[N_0 | Marg = 0, R_0 = 0] &= \frac{1}{1 - E[R_0 | Marg = 0]} (E[N_0 | Marg = 0, R_1 = R_0 = 0] P(R_0 = R_1 = 0) \\ &+ E[N_0 | Marg = 0, R_1 > R_0] P(R_1 > R_0)) \end{aligned}$$

and rearranging terms, we obtain the following equality:

$$\begin{aligned}
E[N_1^R - N_0^R | Marg = 0, R_1 = 1] &= \frac{1}{\underbrace{E[R_1 | Marg = 0]}_{\lim_{Marg \downarrow 0} E[R | Marg]}} \left(\underbrace{E[N_0 | Marg = 0, R_0 = 0]}_{\lim_{Marg \uparrow 0} E[N | Marg, R=0]} (1 - \underbrace{E[R_0 | Marg = 0]}_{\lim_{Marg \uparrow 0} E[R | Marg]}) \right. \\
&\quad - \underbrace{E[N_1 | Marg = 0, R_1 = R_0 = 0]}_{\lim_{Marg \downarrow 0} E[N | Marg, R=0]} (1 - \underbrace{E[R_1 | Marg = 0]}_{\lim_{Marg \downarrow 0} E[R | Marg]}) \\
&\quad + \underbrace{E[R_1 N_1^R + (1 - R_1) N_1 - (R_0 N_0^R + (1 - R_0) N_0) | Marg = 0]}_{\text{RD effect on N}} \\
&\quad - \underbrace{P(R_1 > R_0 | Marg = 0)}_{\text{RD effect on R}} \underbrace{E(N_0^R | Marg = 0, R_1 > R_0)}_{\text{Unobservable}} \Big)
\end{aligned}$$

The unobservable term in this equation corresponds to the expected number of other candidates from the same orientation as a losing complier in the next race, if they had run. To calculate the lower (most negative) bound for the left-hand side quantity, we assume that this unobservable term is equal to the number of candidates from the same orientation as losing candidates who do not run again in the future (i.e., compliers and never-takers). This quantity is equal to 2.3. To calculate the upper (least negative) bound, we assume that a losing complier who would have run again would have discouraged and "replaced" one of their ideologically-close opponents. We therefore set their unobserved number of opponents from the same orientation, had they run, as equal to 2.3-1=1.3.