CAN INTEREST GROUPS INFLUENCE ELECTIONS? EVIDENCE FROM BRITISH TRADE UNIONS 1900-2019

Alexander Fouirnaies Harris School at University of Chicago

> First version: September 2018 This version: December 2022

Abstract

Trade unions sponsored the political campaigns of thousands of candidates running for office in many countries throughout the 20th century. Yet little is known about the electoral consequences of these sponsorship arrangements. I study how union sponsorship affected the electoral fortunes of parliamentary candidates in Great Britain from 1900 to 2019. On the basis of archival material, I collect new data on the universe of union-sponsored candidates and the organization of parliamentary campaigns. Employing a difference-in-differences design, I document that sponsorship on average caused a six percentage-point increase in candidate vote shares. Next, I outline potential theoretical mechanisms and examine whether sponsees improved their electoral performance because of better constituencies, weaker opponents, more resources, mobilization, or information. I find evidence in support of the constituency and resource mechanisms: sponsorship helped candidates win nominations in electorally attractive constituencies, accounting for approximately two-thirds of the main effect, and sponsorship caused an inflow of financial and human resources into constituency-party organizations. I do not find evidence consistent with the opponent, mobilization, or information mechanisms. Taken together, these findings suggest that sponsorship promoted the representation of union-friendly candidates in parliament, but while this may have strengthened the political influence of unions, it only led to moderate shifts in the balance of power between parties.

For helpful comments and suggestions, I thank Scott Ashworth, Chris Berry, Dan Black, Peter Buisseret, David Broockman, Julia Cagé, Gary Cox, Arnaud Dellis, Edgard Dewitte, Steven Durlauf, Wiola Dziuda, Benjamin Egerod, Olle Folke, Anthony Fowler, Matt Gentzkow, Scott Gehlbach, Josh Gottlieb, Simon Hix, Will Howell, Dmitri Koustas, Steve Levitt, John Marshall, Greg Martin, Gerard Padró i Miquel, Pablo Montagnes, Vincent Pons, Johanna Rickne, Jim Robinson, Francesco Trebbi, and Adam Zelizer, as well as the participants in PECA at Northwestern University, the Economics Seminar at the University of Montreal, the Leitner Seminar at Yale, the Political Economy Seminar at Stanford GSB, the CSDP seminar at Princeton University, the Comparative Politics Seminar at UCL, the Riker Seminar at Rochester University, the Money in Politics Workshop at Copenhagen Business School, and the Political Economy Seminar at the University of Chicago's Harris School. For excellent research assistance, I thank George Beknazar-Yuzbashev and Rachel Dec. All remaining errors are my own.

1. Introduction

The political influence of special interests has been debated since the founding of modern democracies. Businesses, landowners, labor, consumers, and other organized groups with vested interests in public policy engage in a range of political activities (Gordon, Hafer, and Landa, 2007; Grimmer and Powell, 2013; Palmer and Schneer, 2019; Shepherd and You, 2020; Weschle, 2021), and in many parts of the world one of their most common political strategies is to promote the election of particular candidates running for office. If special interests can advance the election of like-minded candidates, this could sway policy making unduly to their advantage (Abdul-Razzak, Prato, and Wolton, 2020; Anzia, 2011; Austen-Smith, 1987; Baron, 1994; Grossman and Helpman, 1996; O'Grady, 2019).

Organized labor is an archetypal example of a politically active special interest group, exerting influence at the bargaining table as well as the ballot box (Acemoglu and Robinson, 2013; Duverger, 1972). In many countries, one of the most frequently employed political strategies by the labor movement was to sponsor union-friendly candidates running for office (Ebbinghaus, 1995; Taylor, 1989). In addition to the public endorsement, trade unions typically funded the political campaigns of their sponsees, hired party employees in their constituencies, and supplemented the salaries of elected officials (Minkin, 1991; Müller, 1977). Throughout the 20th century, trade unions sponsored the electoral campaigns of thousands of candidates running for national office, especially in western and northern Europe, and in many countries union funding was the most important source of campaign finance for most left-leaning candidates (Streeck and Hassel, 2003).¹

Despite widespread use of union sponsorship, little is known about the electoral consequences of these sponsorship arrangements.² Theoretically, as discussed in an extensive literature, the electoral effects of interest-group support are ambiguous (Ashworth, 2006; Coate, 2004; Prat, 2002; Sasso and Alexander, 2021). While candidates may benefit from interest-group resources

¹For a comparative overview of the development of Labour parties in the 20th century, see Benedetto, Hix, and Mastrorocco (2020)

²See Potters and Sloof (1996) and Van Winden (2004) for reviews of the literature on the electoral influence of interest groups.

and mobilization efforts, voters may also update their beliefs about candidates, either positively or negatively, in light of the interest-group support. Further, union sponsorship may induce opponent parties and opposing interest groups to strengthen their counter-campaign efforts. The net effect of sponsorship is not obvious – it depends on the mechanisms of electoral influence and the strategic behavior of interest groups and electoral candidates.

Empirically, historians and social scientists have long documented the existence of financial links between unions and political parties in many contexts, but empirical challenges concerning data availability and identification have hindered comprehensive empirical work that studies how union sponsorship has shaped the electoral prospects of individual parliamentary candidates in modern democracies.

In this paper, I study how union sponsorship affected parliamentary elections in Great Britain over the course of the 20th century. On the basis of material from archives of the Labour party and British trade unions, I collect new data on the universe of sponsorship agreements from the founding of the party in 1900 up until the sponsorship institution was abolished in 1996, producing the longest-spanning dataset on financial links between electoral candidates and interest groups ever collected.

Union sponsorship in the British Labour party could potentially influence all stages of the electoral process – from candidate and opponent nominations by constituency-party organizations to campaign spending and mobilization efforts in the general election. To shed light on how sponsorship shapes the different stages of electoral campaigns I also collect new data on the organization of local parties and individual candidate campaigns throughout the 20th century, and I match this information to published data on candidates and constituencies.

The sponsorship institution in the British Labour party provides a unique opportunity to study the electoral consequences of financial ties between interest groups and legislative candidates. Compared to most other electoral contexts, in which a myriad of interest groups support electoral candidates through complex financial transactions, the sponsorship treatment in the British Labour party is incredibly simple, clean, and strong: Either a candidate is completely beholden to a single trade union, or not financially tied to any interest group at all. Using the new data, I document how union sponsorship affected the electoral performance of parliamentary candidates over the course of the 20th century. The sponsorship institution and its abolishment give rise to within-candidate and within-constituency variation in union support, and my empirical design taps into this variation. To address various selection concerns, I implement a series of difference-in-differences designs in which I compare how the electoral fortunes of candidates changes when they attain a union sponsorship relative to changes in other Labour candidates in the same election.





NOTE: The solid line pertaining to the Union-Sponsored Candidates reports the average vote share of Labour candidates that switched status from non-sponsored to sponsored at some point in their careers, and the first sponsored election is centered on zero on the x-axis. The dashed line pertaining to the Other Labour Candidates is constructed by calculating the average vote share of all never-treated Labour candidates in a particular year, and then matching these averages to relevant years for the candidates in the treatment group. The numbers that the figure is based upon can be found in Section B of the appendix.

Figure 1 illustrates the empirical design and foreshadows the main finding. The figure shows how the average vote share of union sponsees develop relative to other Labour candidates. In the pretreatment period, sponsees and other Labour candidates more or less followed the same trend, but once they attain a union sponsorship, sponsees systematically improve their electoral fortunes relative to other Labour candidates. On average, union sponsorship caused a six percentage-point increase in candidate vote shares. The effect of sponsorship is identified under a standard parallel-trends assumption. In this context, one might reasonably worry about reversed causation: Does sponsorship improve a candidate's electoral performance, or does improved electoral performance affect the probability that a candidate attains a sponsorship? To support the identifying assumption and alleviate concerns about reversed causality, I show that there are no pretreatment trends, i.e. improved electoral performance does not precede sponsorship attainment, and that the findings are robust when I relax the parallel-trends assumption in various ways. To rule out further selection concerns, I show that the findings are robust when estimated exclusively based on variation in the sponsorship treatment induced by the ban of sponsorship in 1996 – in this subsample *all* sponsees lost their sponsorships deals, but for reasons that were unrelated to the individual candidates or their constituencies. Further, in the appendix, I also show that the findings are robust when the estimates are based on variation from sponsorship agreements that were legally terminated by union amalgamations – another source of variation which does not depend on the performance of the individual candidate or their constituency.

To understand the mechanisms of electoral influence, I discuss whether union sponsorship affected the electoral fortunes of Labour candidates through changes in constituencies, opponents, resources, mobilization, or information. Examining intermediate outcomes and treatment-effect heterogeneity, I show that the electoral effects are primarily driven by better constituencies and more resources. Consistent with the constituency mechanism, I show that sponsorship helps candidates win nomination in electorally attractive constituencies, and I document that this can account for approximately two-thirds of the main effect. Consistent with the resource mechanism, I find that sponsorship causes an inflow of financial and human resources into constituencies, engendering a professionalization of political campaigns. I do not find evidence in support of the opponent, mobilization, or information mechanisms. Taken together, the results suggest that union sponsorship promoted the representation of union-friendly candidates in parliament. However, while this may have shifted the balance of power between factions within the Labour party, it only had a moderate impact on the balance of power between political parties.

These findings first and foremost shed new light on the way trade unions influenced British

electoral politics over the course of the 20th century, but they may have broader implications for our understanding of how interest groups shape elections. First, one may conjecture that the main effect documented in this paper constitutes an upper bound on the electoral influence of interest groups more generally. Although similar sponsorship arrangements exist in other political contexts, the institutional environment in the British case – limited competition in the Labour party from other interest groups, no residency requirement for parliamentary candidates, and limited donation-side restrictions on campaign finance – gave trade unions a unique and advantageous opportunity to influence multiple stages of the electoral process. Second, the results may inform us about the fundamental mechanisms of electoral influence. Clearly, one should be careful about extrapolating to other political contexts, but even though institutional details vary, the underlying mechanisms through which interest groups affect elections, may be similar. By documenting the relative importance of the different channels of influence in the British case, we may learn about the mechanisms of electoral influence more generally.

The paper proceeds as follows. First, I present a brief overview the historical and institutional context. After that I introduce the new data that I collected. Then I outline potential theoretical mechanism through which union sponsorship may shape the electoral process. Then I describe the empirical design. In the subsequent section, I present the findings. Finally, I conclude with a short discussion.

2. Brief Institutional and Historical Background

In 1900, the Labour Representation Committee, the precursor of the Labour Party, was founded by the Trades Union Congress and a group of socialist societies in an attempt to coordinate political activities and to prevent vote splitting among supporters of left-wing candidates. The founding documents gave trade unions a range of privileges, among these the exclusive right to sponsor individual parliamentary candidates.³

³Trade-union sponsorship was only a phenomenon in the Labour party, but presumably trade associations, businesses, and wealthy individuals engaged in similar sponsorship arrangements with Liberal and Conservative candidates. These parties, however, did not disclose their funding arrangements for individual candidates and were not legally required to do so. For more details on the historical funding of political parties in Great Britain





The different stages of the electoral process in the Labour party is summarized in Figure 2, and in the three subsections below I briefly describe what happens at each stage.

2.1. Stage I: The Selection of Unions Sponsees

Before an upcoming parliamentary election, each trade union prepared a panel of possible trade union sponsees. Interested individuals would indicate their interest to the relevant unions, and based on this list the sponsees would get appointed by union leaders, elected by union members, or selected by external examiners,⁴ depending on the selection procedures of the sponsoring union. Candidates could only be sponsored by a single union in a particular election, but the sponsoring union could change from one election to the next. Once a sponsee had been selected, the sponsoring union would typically support them over multiple elections, and in many cases until the sponsee retired, or the union amalgamated or dissolved.

Importantly, unions selected their sponsees *before* constituency-party organizations nominated their parliamentary candidates. When an individual had been chosen as a sponsee, local branches of the sponsoring union would put forward the sponsee for parliamentary candidacies in vacant Labour constituencies. The next step for the sponsee would be to get nominated by one of the Constituency Labour Parties.

see Ewing (1987) and Pinto-Duschinsky (1981).

⁴Some unions delegated the selection to a group of people outside the union who would search for the most qualified sponsees among the interested candidates using a series of written and oral examinations. For more details on these procedures, see Müller (1977).

2.2. Stage II: The Nomination of Parliamentary Candidates

To run for a parliamentary seat for the Labour party, an individual had to be officially nominated by a Constituency Labour Party. Candidates were nominated using multi-round runoff voting at selection conferences organized by constituency-party organizations.⁵

Importantly, there are no legal residency requirements to represent a constituency in the House of Commons, and hence Labour candidates from all over the country would often compete in these intra-party primary elections. Selection conferences were always contested and highly competitive, especially in safe Labour constituencies. Typically, candidates sponsored by different unions competed against each other and against candidates put forward by the local branches of the Labour party.

2.3. Stage III: The Election of Members of Parliament

The seats in the House of Commons are up for election at least every five years. The candidates nominated by the different political parties compete in single-member constituencies, and the outcome is determined using simple plurality rule.⁶ Campaign finance is primarily regulated on the expenditure side through limits on how much electoral candidates are legally permitted to spend. Candidates may raise campaign finance from any source they want, and they are not required to disclose their donors.⁷

⁵More formally, the selection process followed the party's five-step candidate-nomination procedures. First, the Constituency Labour Party would create a long list of potential candidates based on nominations from Local Labour Parties and affiliated local unions. Second, the Constituency Labour Party's Executive Committee would shortlist the most competitive candidates among the nominees. Third, the shortlisted nominees would participate in a selection conference. Local Labour Parties could send delegates in proportion to their local membership, and local unions and other Labour-affiliated organizations were allowed to send delegates as well, typically one delegate per 50-100 members. At the selection conference, each shortlisted nominee would give a speech and answer questions. Then the delegates would proceed to select the final candidate using multi-round runoff voting. Each delegate would cast one vote in each round, and the candidate with least support would be eliminated while the remaining candidates would proceed to the next round of voting – this process was repeated until one candidate was supported by a majority of the delegates. The electoral rule is sometimes referred to as the exhaustive ballot. Finally, Labour's National Executive Committee would approve or veto the parliamentary candidacy. For additional information on the nomination procedure in the Labour party see Rush (1969) and Ashe (2019).

⁶Prior to 1945, a few constituencies returned two members to the House of Commons, and a single constituency returned three members.

⁷Since 2005, candidates have been required to disclose larger donations.

Figure 3: Development in Union-Sponsored Parliamentary Candidates



NOTE: The figure on the left plots the development in the number of union-sponsored candidates and other Labour candidates from 1900 to 2019. The figure on the right illustrates the development in the sectoral composition of union-sponsored Labour candidates. The numbers that the figure is based upon can be found in Section B of the appendix.

Figure 3 illustrates the development in the number of union-sponsored general-election candidates from the founding of the Labour party to the present day. From 1900 to the early 1920s, the number of parliamentary candidates grew dramatically. The number of sponsored candidates was more or less constant from the 1920s and onwards. The mining, manufacturing, and transport sectors account for the majority of sponsorship agreements over the studied period.

2.4. Labour Abolished the Sponsorship Institution in 1996

Following a political corruption scandal in 1994, in which journalists from *The Guardian* documented that two Conservative MPs had performed various parliamentary tasks in exchange for cash from a lobbyist, a committee chaired by Lord Nolan published a report on the financial interests of British MPs. Among other things, the report criticized the union-sponsoring practices in the Labour party. Tony Blair, who had recently won the leadership election in the Labour party, was a trade-union sponsee himself, receiving financial support from the Transport and General Workers' Union, and in the wake of the public debate brought about by the Nolan report, the Labour party abolished the sponsorship institution in 1996 (Labour, 1996). Under the new party rules, unions were no longer allowed to directly sponsor individual parliamentary candidates, but could contribute to the party organization.⁸ While unions still helped out with campaigns in some constituencies, the direct and personal financial ties between unions and individual parliamentary candidates had been significantly weakened.⁹

	Un	ion-spon	sored (Candida	tes	C	Other La	bour C	andidat	es
	Mean	St.Dev.	Min.	Max.	Obs.	Mean	St.Dev.	Min.	Max.	Obs.
Constituency and Electoral Information										
Labour Vote %	52.74	14.94	5.08	100.00	3,088	37.69	16.32	1.76	100.00	13,448
Turnout %	75.61	9.09	29.73	100.00	3,088	72.06	8.64	26.23	100.00	13,448
Safe Labour Constituency	0.45	0.50	0.00	1.00	3,088	0.21	0.41	0.00	1.00	13,448
Member of Parliament	0.64	0.48	0.00	1.00	3,088	0.31	0.46	0.00	1.00	$13,\!448$
Campaign and Party Organization										
Log Total Spending	9.42	2.37	0.00	12.36	3,088	9.20	1.51	0.00	11.95	13,448
Log Ads Spending	8.89	2.24	0.00	11.80	3,088	8.44	2.36	0.00	11.33	13,448
Log Managers Spending	6.09	3.02	0.00	10.67	3,088	3.55	3.53	0.00	10.06	13,448
Log Staff Spending	5.56	3.39	0.00	10.77	3,088	2.57	3.26	0.00	9.99	13,448
Log Facilities Spending	6.26	2.10	0.00	9.35	3,088	5.18	2.52	0.00	9.17	13,448
Log Public Meetings Spending	5.57	2.63	0.00	9.72	3,088	4.01	3.05	0.00	9.89	$13,\!448$
Log Miscellaneous Spending	7.01	1.99	0.00	10.32	3,088	5.37	3.04	0.00	9.90	$13,\!448$
Log Personal Spending	5.81	2.91	0.00	10.02	3,088	4.05	3.26	0.00	9.35	13,448
Spending at Legal Maximum	0.27	0.45	0.00	1.00	2,917	0.18	0.39	0.00	1.00	13,198
Campaign Spending %	44.05	12.78	3.11	100.00	2,927	32.50	13.71	0.00	100.00	13,210
Full-time Party Staff	0.51	0.49	0.00	1.50	1,400	0.23	0.41	0.00	1.33	$3,\!910$
Politically Experienced Opponent	0.30	0.46	0.00	1.00	971	0.36	0.48	0.00	1.00	6,761

Table 1: Descriptive Statistics by Sponsorship Status

NOTE: Each observation pertains to a Labour candidate in a given election.

3. New Digitized Data from Archival Material

To study how union sponsorship shapes the electoral process, I collect new information from archival sources, and I contribute the longest-spanning dataset ever collected on financial links between interest groups and parliamentary candidates.

⁸See Pilkington (1997) for additional details on the abolishment of the sponsorship institution.

⁹While the direct financial ties between unions and individual candidates were formally cut by the ban on sponsorship, some candidates may still have had informal arrangements with their previous sponsors. To the extent that formal sponsorship was replaced by informal sponsorship, this should bias against the findings presented later in the paper because some observations in the control group actually received a sponsorship treatment.

3.1. New Data on Union Sponsorship

On the basis of archival material, primarily from the Labour party's historical archives and the reports from the party's annual conferences, I construct a list of union-sponsored candidates in every general election from 1900 to the present day.¹⁰ Unfortunately, information about the specific terms of each agreement is relatively scarce. In most cases, I only observe the name of the trade union, the constituency and candidate name, and the year in which the candidate became a sponsee. Using this information, I create a dummy variable indicating a sponsorship link between a trade union and a parliamentary candidate in a given electoral cycle.

Throughout the studied period, I observe 127 different unions entering more than 3,000 sponsorship agreements with parliamentary candidates. Most trade unions sponsor relatively few candidates in a given electoral cycle; among the sponsoring unions, the median number of sponsees is 2. A few trade unions sponsor a large number of parliamentary candidates, for example the unions organizing mining, manufacturing, and transport workers.¹¹

As indicated by figure 3, approximately 25% of the candidate-election observations from 1900 to 1996 received the union-sponsorship treatment. In terms of individuals, approximately 6,000 individual candidates were never sponsored by unions, and approximately 1000 candidates were sponsored at some point in their electoral careers. Among the sponsored candidates approximately half were sponsored in all their electoral campaigns. Approximately half of the switching candidates switch into the treatment (unsponsored \rightarrow sponsored), a quarter switch out of the treatment (sponsored \rightarrow unsponsored), and the last quarter switch both in and out of the treatment (unsponsored \rightarrow unsponsored).¹²

¹⁰The internal Labour Party rules required that funding arrangements had to be disclosed to the party's National Executive Committee before a candidature could be officially approved. This allows me to identify the complete list of sponsorship links between parliamentary candidates and trade unions over the course of the 20th century.

¹¹See the appendix for additional details on the sponsoring unions.

 $^{^{12}}$ See the appendix for additional descriptive information on variation in the sponsorship treatment.

3.2. New Data on the Professionalization of Local Party Organizations

I also collect new data on the professionalization of local party organizations. Based on archival resources, I record the number of local party employees. I have complete information for all constituency-party organizations, but unfortunately only for the period 1922 to 1955. In some cases, local parties in adjacent constituencies jointly hired and shared full-time employees. When n constituencies share a full-time employee, I code it up as if each of the participating constituencies hired 1/n full-time employees.

3.3. Existing Data Sources

I match the new datasets to previously published information on candidates, constituencies, and campaign spending used in Fournaies (2021). The electoral information used in the paper (e.g. vote shares, turnout, constituency type, and MP status) as well as campaign spending information (e.g. spending level, composition, and legal limits) come from this dataset.

I link all these data source together and keep all the Labour party candidates in the final the dataset. In other words, each row in the dataset pertains to a Labour candidate in a particular general election.

4. Theoretical Mechanisms of Electoral Influence

Union sponsorship could affect the electoral fortunes of candidates through many different mechanisms, and the empirical findings can shed light on some of these. In this section, I briefly discuss how union sponsorship could influence the nomination stage (constituency and opponent mechanisms) and the campaign stage (resource, mobilization, and information mechanisms). The mechanisms are summarized in table 2.

4.1. Nomination-Stage Mechanisms: Constituencies and Opponents

Sponsorship could potentially influence *where* candidates secure their parliamentary nominations and *whom* they compete against in the general election.

To get nominated in an electorally attractive constituency, an individual would have to win the nomination contest held by the relevant constituency-Labour party. By covering transportation and accommodation expenses for their sponsees, unions may help financially constrained candidates participate in more nomination contests than they otherwise would have (Norris and Lovenduski, 1993). Further, union funding is potentially appealing to constituency-party selectors because it reduces the financial burden on constituency-party organizations. Some party selectors may even personally extract financial resources from unions via employment on the sponsee's campaign.

The opponent party may strategically respond to the nomination of a union sponsored candidate in a constituency. The resource advantages enjoyed by union sponsees may deter strong opponents from running against the Labour candidate. A high quality Conservative candidate might be scared off and attempt to run in a more attractive constituency when the Labour candidate is backed by a national union with deep pockets and armies of volunteers.

Electoral Stage	Mechanism	Candidates improve their electoral fortunes as sponsees because union sponsorship	Who is influenced?
Nomination	Constituency	helps candidates get nominated in better constituencies	Own party
	Opponent	scares off high quality opponents	Opponent party
Campaign	Resource	supplies candidates with more campaign resources	Electors
	Mobilization	boosts turnout among Labour voters	Electors
	Information	sends information to voters about candidate types	Electors

Table 2: Summary of the Mechanisms of Electoral	Influence
---	-----------

4.2. Campaign-Stage Mechanisms: Resources, Mobilization, and Information

Sponsorship could potentially influence the intensity and organization of candidates' electoral campaigns.

Union sponsorship could affect general election outcomes by relaxing the resource constraints faced by Labour candidates. An extensive literature documents that campaign spending positively correlates with the performance of candidates in the general election (Cagé and Dewitte, 2020; Pattie, Johnston, and Fieldhouse, 1995; Johnston and Pattie, 1995, 2014). If costly campaign activities effectively mobilize or persuade voters, financial support from unions that facilitates such activities may improve the performance in the general election.

Trade unions also could improve the electoral performance of their sponsees by organizing get-out-the-vote campaigns and other efforts to increase general-election turnout among union members. According to Flavin and Radcliff (2011, p. 634), unions "notoriously encourage their members to turn out and vote for union supported candidates", and since many unions have local branches they could potentially use these tight-knit networks to boost turnout by increasing the social pressure to vote or by reducing the cost of voting.

Finally, union sponsorship may also influence general election outcomes by sending credible information to voters about endorsed candidates. Sponsorship is a public and costly signal to voters about candidate quality or ideology, and voters may update their beliefs about the type of Labour candidate based on this information (Ashworth, 2006; Prat, 2002).

5. Difference-in-Differences Design

Union sponsees differ systematically from other Labour candidates on many important dimensions. Unions carefully select their sponsees, and these selection effects will likely induce bias in cross-sectional studies of the impact of sponsorship on candidates' electoral fortunes. If the average sponsee electorally outperforms other Labour candidates because of preexisting differences between the two groups, this would induce an upward bias in the estimated effect. To address selection problems of this nature, I implement a series of difference-in-differences designs at the level of the individual candidate and at the level of the Constituency Labour Party. The basic idea is to compare how the performance of candidates changes when they attain a union sponsorship relative to changes in the electoral performance of other Labour candidates. The difference-in-differences estimator compares changes in performance of sponsees to changes in other Labour candidates in the same election. This approach will estimate the net effect of sponsorship on the electoral fortune of the average nominated Labour candidate.

I implement the baseline difference-in-differences design by estimating twoway fixed-effects models of the following form using OLS:

$$Y_{ict} = \alpha_i + \delta_t + \beta_1 Union \ Sponsored_{ict} + \varepsilon_{ict} \ , \tag{1}$$

where Y_{ict} is an outcome pertaining to Labour candidate *i* running in constituency *c* at time t; α_i represents candidate-fixed effects that wash out time-invariant candidate characteristics; δ_t represents time-fixed effects that absorb common shocks that hit all Labour candidates in a particular general election; *Union Sponsored*_{ict} is a dummy variable that takes on the value one if candidate *i* in constituency *c* was sponsored by a union at time *t*; ε_{ict} is the disturbance term. The key coefficient of interest is β_1 .

In some analyses, where the unit of interest is a Constituency-Labour Party or a candidate in a particular constituency, I augment equation 1 with constituency-fixed effects, or substitute the candidate-fixed effects with either constituency-fixed effects or constituency-by-candidate-fixed effects.

5.1. Parallel Trends and Robustness Checks

The key identifying assumption underpinning the difference-in-differences design is parallel trends between treated and untreated units: in the absence of attaining a union sponsorship, the sponsees would have trended in the same way as other Labour candidates. While one cannot test the parallel-trends assumption directly, I can provide three types of indirect empirical evidence that lend support to the parallel-trends assumption.

First, I implement event-study designs in which the effects of union sponsorship are allowed to vary non-parametrically over time. If treated and untreated candidates followed the same trends in the pretreatment period, it is more plausible that they would continue to do so once the sponsorship treatment kicks in. However, if the effect is driven by unions who are able to select positively trending candidates (e.g. candidates who already secured nomination in a good constituency), one should be able to detect this in the pretreatment trends. To implement these analyses, I restrict the sample to units that do not change treatment status more than once, and I estimate dynamic specifications of the following form using OLS

$$Y_{ict} = \alpha_i + \delta_t + \sum_{\substack{\ell=T_0\\\ell\neq-1}}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict} , \qquad (2)$$

where D_{ict}^{ℓ} is a variable that takes on the value 1 if at time t it is ℓ elections since candidate i in constituency c attained a union sponsorship, -1 if at time t it is ℓ elections since candidate i in constituency c lost a union sponsorship, and 0 otherwise; T_0 is the largest number of pretreatment periods observed in the data, and T_1 is the largest number of posttreatment periods observed in the data;¹³ λ_{ℓ} are the coefficients of interest, indicating the pretreatment effects for $\ell < 0$ and posttreatment effects for $\ell \geq 0$.

Second, I show that the estimated effects are robust when I relax the parallel-trends assumption in various ways. In particular, I augment the econometric specification with candidatespecific linear trends, control for whether a candidate is already an MP, and substitute time-fixed effects with region-by-time-fixed effects to ensure all comparisons are made between geographically proximate areas. I show that the estimated effects are unaffected by these robustness checks.

As a third robustness check, I show that the findings are robust when the effects are estimated based on particular sources of variation in the treatment variable that enables me to rule out

¹³Note that the variable D_{ict}^{-1} is excluded from the regression such that all estimates are reported relative to $\ell = -1$. All other D_{ict}^{ℓ} are included in the regressions, but for presentational purposes I only report the estimates of λ_{ℓ} for $-6 < \ell < 6$ because there are relatively few observations outside this window.

certain types of selection concerns. Even if the pretreatment trends look good, one may still worry that unions may be able to select or deselect candidates who dramatically change their electoral prospects between elections. To address this type of concern, I estimate the effects based on variation in sponsorship induced by events that are plausibly unrelated to individual candidates or their constituencies, and I show that the results confirm the findings:

- Diff-in-Diff estimates based on variation from the ban of sponsorship confirm the results. I exploit that the sponsorship institution was completely abolished in 1996 against the backdrop of an unanticipated corruption scandal in the Conservative party. I modify the sample such that variation in the sponsorship variable is exclusively induced by the abolishment of the sponsorship institution in 1996. I show that the results are similar in magnitude when the effects are estimated on this subsample where unions do not control selection in and out of the treatment.
- IV estimates, based on variation from sponsorship agreements that get terminated because of union amalgamations, confirm the results. Throughout the 20th century, many small, local, craft-based British unions amalgamated into fewer, large, national, industry-based unions (Waddington, 2013). I exploit that sponsoring unions had to legally terminate their sponsorship agreements during these amalgamation processes. The dissolution of a sponsoring union as part of the amalgamation process induces a negative shock to the probability that previously sponsored candidates will be sponsored in future elections, and the shock is driven by factors that are plausibly unrelated to trending patterns among sponsees. Most amalgamations occurred after the members of multiple unions voted in favor of an amalgamation, and the specific timing depended on factors beyond the control of the sponsoring union, making the exogeneity assumption plausible when one conditions on the twoway-fixed effects. I instrument union sponsorship using the amalgamation shock, and I show that the results are qualitatively similar when estimated based on this variation.¹⁴

¹⁴The strategy is described in greater details in the appendix.

Finally, scholars have recently shown that two-way fixed-effects models may in certain contexts be subject to bias when previously treated units enter as controls (Callaway and Sant'Anna, 2020; De Chaisemartin and d'Haultfoeuille, 2020; Goodman-Bacon, 2018). In particular, in the presence of within-unit temporal heterogeneity in the treatment effect, the trend among early treated units may constitute a poor counterfactual for the trend among late treated units. For example, this could potentially happen if unions gradually increase the financial support to sponsored candidates over the course of their parliamentary careers. To address issues of this nature, I show in the appendix that the results are robust and quantitatively similar when they are estimated using the estimator proposed by De Chaisemartin and d'Haultfoeuille (2020).

6. Main Results: Union Sponsees Get an Electoral Boost

In this section, I document how union sponsorship affected the electoral fortunes of Labour candidates. First, I present the event-study design in the left panel of figure 4. Consistent with the averages plotted in figure 1, figure 4 shows that the estimated coefficients for the pre-treatment period are relatively small in magnitude and in most cases statistically indistinguishable from zero, lending credibility to the parallel-trends assumption. Once sponsorship kicks in at time 0, the average candidate experience a substantial vote-share increase. On average, candidates experience a six percentage-point boost in their share of the votes. In the post-treatment period, the estimated effects are relatively stable.

These findings are also reflected in the results presented in table 3. In the first column, I present the results from the baseline difference-in-differences analysis. Consistent with the graphical evidence, the estimated effect suggests that union sponsorship almost leads to a sixpercentage-point increase in a candidate's share of the votes. In the next three columns, I relax the parallel-trends assumption in various ways. First, I control for MP status, next I substitute the time-fixed effects with region-by-time fixed effects, and finally I include candidatespecific linear trends. Across these specifications, the estimated effect is positive and statistically significant, but the magnitude is slightly smaller than the baseline estimate. Finally, in the last



Figure 4: Candidates who Attain a Union Sponsorship Experience an Electoral Boost

NOTE: The figure in the left panel is constructed by estimating the following model using OLS: % Labour Vote_{ict} = $\alpha_i + \delta_t + \sum_{\ell=T_0, \ell \neq -1}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict}$. The x-axis corresponds to ℓ (i.e. the time relative to change in union sponsorship status), and the y-axis reports to the estimates of λ_ℓ . Each black circle pertains to a point estimate of λ_ℓ . The figure on the right is constructed by by interacting the sponsorship treatment with decade dummies and including these variables in an OLS regression with candidate- and time-fixed effects: % Labour Votes_{ict} = $\beta_{1,1910}$ Union Sponsored_{ict} × 1910_t + $\beta_{1,1920}$ Union Sponsored_{ict} × 1920_t + ... + $\beta_{1,1990}$ Union Sponsored_{ict} × 1990_t + $\alpha_i + \delta_t + \varepsilon_{ict}$. The grey squares report point estimates. In both figures, the fat lines report the 90% confidence interval, the thin lines correspond to the 95% confidence intervals, and the confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figures are based upon can be found in Section B of the appendix.

		% L	abour Vo	otes	
Union Sponsored	5.94 (0.55)	5.05 (0.53)	4.43 (0.48)	2.94 (0.63)	7.78 (1.03)
Observations	$16,\!536$	$16,\!536$	$16,\!533$	16,533	$1,\!659$
Constituencies	$3,\!017$	$3,\!017$	3,016	3,016	689
Candidates	7,012	7,012	7,010	7,010	315
Outcome Mean	40.50	40.50	40.51	40.51	49.41
Sample	Full	Full	Full	Full	Ban
Candidate-Fixed Effects	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Time-Fixed Effects	\checkmark	\checkmark			\checkmark
MP-Fixed Effect		\checkmark	\checkmark	\checkmark	
Region-by-Time-Fixed Effects			\checkmark	\checkmark	
Candidate-Linear Trends				\checkmark	

Table 3: Candidates Experience an Electoral Boost when They Get Sponsored

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

column, I limit data to the subsample where the only variation in sponsorship status comes from the ban on union sponsorship introduced in 1996. In other words, unions do not influence the selection into or out of sponsorship in this subset of the data. When estimated on this subset, the effect is a bit less than 8 percentage points.¹⁵

In right panel in figure 4, I show how the main effect varies over time. Overall, the electoral effect of sponsorship was fairly constant over the course of the 20th century: all decade-specific vote-share estimates are in the interval from four to eight percentage points. The electoral influence of union sponsorship appears to diminish from the 1970s and onwards.

Finally, I document how the electoral effects of sponsorship vary across trade unions. I include union-specific dummies in the baseline difference-in-differences specification and plot the coefficients on in figure 5. The figure illustrates that there is substantial heterogeneity in the treatment effect across unions. Unions that organize workers in industries such as postal service, mining, and railways, are some of the electorally most influential unions whereas unions organizing workers in agriculture and non-manual industries are among the least electorally influential. Interestingly, the electoral influence appears to be strongest for unions operating in industries that were nationalized or heavily regulated by the government over the course of the 20th century.

7. Mechanisms: Electoral Effects are Driven by Better Constituencies and More Resources

In this section, I provide evidence on the mechanisms that produced the main electoral effects. To shed light on the plausibility of the different mechanisms, I estimate effects on intermediate outcomes and examine heterogeneity in the treatment effects. First, I examine two nominationstage mechanisms – better constituencies and weaker opponents; then I discuss three campaignstage mechanisms – more resources, more mobilization, and better information.

¹⁵In the appendix, I show that the average electoral effect of sponsorship is positive and statistically significant when the estimates are produced using an instrumental-variables approach where legally dissolved sponsoring unions provide a negative shock to the sponsorship status of their sponsees.

Figure 5: Electoral Effect of Sponsorship by Sponsoring Trade Union



NOTE: The figure is constructed by estimating the following model using OLS: % Labour Votes_{ict} = $\sum_{\omega \in \Omega} \beta_{1,\omega} Union Sponsor_{ict} + \alpha_i + \delta_t + \varepsilon_{ict}$, where ω pertains to a particular union in the set of unions Ω . I include separate union-specific dummies for each union of the fifty unions that sponsor most candidates. The remaining unions are grouped in the dummy variable "Other Unions". The x-axis corresponds to the estimated effect of union sponsorship on % Labour Votes. Each hollow square reports a point estimate of $\beta_{1,\omega}$. The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

7.1. Nomination-Stage Mechanisms: Sponsorship Helps Candidates into Better Constituencies, but Does not Scare Off Opponents

First, I examine whether sponsorship status affects the probability that a candidate wins the local nomination in an electorally attractive constituency. The two key outcomes are *Safe Constituency_{ict}* and *Borough Constituency_{it}*. The former is a dummy variable indicating whether candidate i at time t won the nomination contest in a constituency, c, where the Labour Party *always* wins the general election, and the later is a dummy variable indicating whether candidate i at time t was nominated in a constituency officially classified as a borough by the electoral authorities – borough constituencies are more urban, densely populated and tend to have more working-class residents, whereas county constituencies are more rural, thinly populated and tend to have more middle- and upper-class residents.





NOTE: The figures are constructed by estimating the following model using OLS: $Y_{ict} = \alpha_i + \delta_t + \sum_{\ell=T_0, \ell \neq -1}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict}$. The x-axis corresponds to ℓ (i.e. the time relative to change in union sponsorship status), and the y-axis reports to the estimates of λ_ℓ . Each black circle pertains to a point estimate of λ_ℓ . The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

In figure 6, I show the results from the event-study designs. In both panels, the estimated pretreatment coefficients are small in magnitude and statistically indistinguishable from zero. This suggests that sponsees did not move from electorally unsafe to safe Labour constituencies or from county to borough constituencies *before* attaining sponsorship, but rather that changes in

constituencies occurred downstream from the sponsorship treatment. Once sponsorship kicks in, sponsees experience a systematic increase in their probability of securing a nomination in safe Labour constituencies and borough constituencies. These results are confirmed by statistical analysis presented in table 4.

To speak to the opponent mechanism, I examine whether sponsorship affects the probability that the Conservative party nominates a candidate with political experience from local government. Candidates who have previously held elected office must possess some quality that voters value, and perhaps those high quality candidates are strategically deterred by union sponsorship. These results are presented in figure 7. Overall, there does not appear to be much of an effect.

Table 4: Sponsorship Helps Candidates Win Nominations in More Attractive Con-stituencies, but Does Not Scare off Politically Experienced Opponents

	Safe L Consti	abour tuency	Borc Consti	ough tuency	Exper Oppo	ienced onent
Union Sponsored	0.13 (0.02)	0.21 (0.05)	0.08 (0.02)	0.06 (0.03)	$0.06 \\ (0.05)$	0.14 (0.31)
Observations	$16,\!536$	$1,\!659$	$16,\!526$	$1,\!659$	7,732	500
Constituencies	$3,\!017$	689	$3,\!015$	689	$2,\!159$	344
Candidates	7,012	315	7,006	315	4,798	232
Outcome Mean	0.26	0.57	0.51	0.62	0.35	0.44
Sample	Full	Ban	Full	Ban	Full	Ban
Time FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Candidate FE	\checkmark	\checkmark	\checkmark	\checkmark		
Candidate×Constituency FE					\checkmark	\checkmark

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

In table 5, I disentangle how much constituencies, opponents, and campaigns contribute to the aggregate effect of union sponsorship. To the extent that the effects are additively separable, we can separate these mechanisms by modifying the fixed-effects structure. By substituting candidate-fixed effects with candidate×constituency-fixed effects, one can wash out the effects that are produced by the constituency mechanism, and by substituting with candidate×constituency×opponent-fixed effects, one can further wash out effects that are driven by the opponent mechanism.

Figure 7: Union Sponsorship Does Not Scare Off Experienced Opponents



NOTE: The figure is constructed by estimating the following OLS: model using Politically Experienced Opponent_{ict} = $\gamma_c + \theta_t + \sum_{\ell=T_0, \ell \neq -1}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict}$. The x-axis corresponds to ℓ (i.e. the time relative to change in union sponsorship status), and the y-axis reports to the estimates of λ_ℓ . Each black circle pertains to a point estimate of λ_{ℓ} . The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

I present these results in table 5. In the first column, I present the baseline within-candidate difference-in-differences estimate (this is the same estimate as the estimate in the first column of table 3). This estimate constitutes the effect of sponsorship jointly produced by constituencies, opponents, and campaigns. In the second column, the estimates are based on variation from the same candidate running in the same constituency. In this specification, the estimated effect roughly drops from six to a bit less than two percentage points, suggesting that selection into better constituencies can account for approximately two-thirds of the boost in electoral performance. In the third column, the estimates are based on variation from the same candidate running in the same constituency against the same opponent. In this specification, the estimated effect is still a bit less than two percentage points. This suggests that the opponentselection mechanisms does not really account for any part of the effect. In other words, better constituencies account for two thirds of the main effect, and better campaigns accounts for the remaining third. In the next section, I examine exactly how sponsorship affects the organization of electoral campaigns.

		% Labour Vote	
	Constituency Effects+ Opponent Effects+ Campaign Effects	Opponent Effects+ Campaign Effects	Campaign Effects
Union Sponsored	5.94	1.88 (0.42)	1.79
	(0.50)	(0.12)	16.596
Observations	16,536	16,536	16,536
Constituencies	3,017	3,017	3,017
Candidates	7,012	7,012	7,012
Outcome Mean	40.50	40.50	40.50
Time FE	\checkmark	\checkmark	\checkmark
Candidate FE	\checkmark		
Candidate×Constituency FE		\checkmark	
Candidate×Constituency×Opponent FE			\checkmark

Table 5: Disentangling Effects from Constituencies, Opponents, and Campaigns

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

7.2. Campaign Mechanisms: Sponsorship Boosts Campaign Resources, but Does Not Appear to Affect Mobilization or Information

In this section, I study how sponsorship affects electoral campaigns, and to disentangle campaign effects from the nomination effects discussed above, all estimates in this section are based on within-constituency variation.

First, I study how sponsorship affects campaign resources. The two key outcomes are the (log of) campaign spending and number of full-time constituency-party staffers. The results from the event-study designs are presented in figure 8. In both panels, the estimated pretreatment coefficients are close to and statistically indistinguishable from zero, suggesting that constituencies with sponsees and constituencies with other Labour candidates did not follow different trends in the pretreatment period. When sponsorship comes into effect, constituencies with sponsees experience a systematic increase in financial and human resources. The results are confirmed by the statistical analyses presented in table 6.

To further examine how sponsorship affects the organization of electoral campaigns, I study the allocation of campaign finance across various campaign activities in figure 9. In this figure, I present the estimated effect of sponsorship on (log) spending on various types of campaign expenditures. The results reveal that the effects of sponsorship varies considerably across different types of expenditure. Spending on paid staff increases dramatically by almost 0.7 log points, and spending on campaign managers also increase substantially. This could indicate that union-sponsored campaigns become more professionalized and rely less on people helping out on a voluntary basis. Spending on advertisement only increases moderately and expenses related to public meetings appear to be completely unaffected by union sponsorship. The resources allocated to internal activities aimed at building a more professional party organization are boosted substantially, while those allocated to external activities aimed at attracting new voters only increase moderately.

Figure 8: Resource Mechanism: Sponsorship Induces an Inflow of Financial and Human Resources into Constituency-Party Organizations



NOTE: The figures are constructed by estimating the following model using OLS: $Y_{ict} = \gamma_c + \theta_t + \sum_{\ell=T_0, \ell \neq -1}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict}$. The x-axis corresponds to ℓ (i.e. the time relative to change in union sponsorship status), and the y-axis reports to the estimates of λ_ℓ . Each black circle pertains to a point estimate of λ_ℓ . The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

Next, I examine whether the empirical evidence is consistent with the mobilization mechanism. If union-sponsored candidates improve their electoral fortunes because the sponsoring unions mobilize groups that otherwise would not have voted, one would expect to see a net increase in turnout. I explore this question in figure 10. There is no evidence of any pretreatment trends in this figure, but there is not any clear evidence of any post-treatment effects either. Maybe there is small increase in turnout beginning three elections downstream from the Figure 9: Effect of Union Sponsorship on Log Campaign Spending by Expenditure Types



NOTE: The figure is constructed by estimating the following model using OLS for each of the spending outcomes: $Log \ Campaign \ Spending_{ict} = \sum_{m=0}^{1} \beta_m Union \ Sponsored_{ic,t+m} + \gamma_c + \theta_t + \varepsilon_{ict}$. The x-axis corresponds to the estimated effect of union sponsorship on (log of) spending on a particular type of campaign expenditure, and the y-axis corresponds to the particular type of expenditure. Each hollow square reports a point estimate of $\beta_{m=0}$, and each hollow circle reports the point estimate of $\beta_{m=1}$. The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

	Log Sp	ending	Party Staff	% Tu	rnout
Union Sponsored	0.09 (0.05)	0.07 (0.05)	$ 0.10 \\ (0.05) $	0.22 (0.23)	0.50 (0.72)
Observations	16,536	1,659	5,310	16,536	1,659
Constituencies	9,931	689	1,202	$3,\!017$	689
Candidates	7,012	315	2,208	7,012	315
Outcome Mean	9.24	9.34	0.31	72.72	67.49
Sample	Full	Ban	1922 - 1955	Full	Ban
Time FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
$Candidate \times Constituency FE$	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 6: Sponsorship Leads to an Inflow of Financial and Human Resources intoConstituency-party Organizations, but Does not Affect Turnout

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

sponsorship, but the effects are mostly statistically insignificant and all estimates are small in magnitude. These findings are confirmed in the results presented in table 6. Since sponsorship causes an increase in the Labour vote share, but does not appear to affect net turnout, it could mean that sponsored campaigns successfully persuade certain swing voters to vote for the Labour candidate. An alternative interpretation is that is consistent with the empirical finding is that sponsorship has opposing turnout effects among Labour and Conservative voters. If sponsorship increases turnout among Labour voters, but decreases turnout among Conservative voters, the net effect could be zero.

Figure 10: Union Sponsorship Does Not Affect Turnout



NOTE: The figure is constructed by estimating the following model using OLS: $Y_{ict} = \gamma_c + \theta_t + \sum_{\ell=T_0, \ell \neq -1}^{T_1} \lambda_\ell D_{ict}^\ell + \varepsilon_{ict}$. The x-axis corresponds to ℓ (i.e. the time relative to change in union sponsorship status), and the y-axis reports to the estimates of λ_ℓ . Each black circle pertains to a point estimate of λ_ℓ . The fat lines report the 90% confidence interval, and the thin lines correspond to the 95% confidence intervals. The confidence intervals are constructed based on robust standard errors that are two-way clustered on candidates and constituencies. The results that the figure is based upon can be found in Section B of the appendix.

Finally, I examine whether the empirical findings are consistent with an informational mechanism where voters update their beliefs about candidate quality or ideology based on the endorsement signal. To shed light on this mechanism, I examine whether sponsorship affects electoral outcomes in situations where the other mechanisms are suspended. More specifically, I examine whether the within-constituency difference-in-differences estimates are positive in constituencies where the Labour Party *always* faces a binding spending limit. In places where they always spend the legally permitted maximum on campaigns, additional resources from a sponsoring union should matter little for electoral outcomes, but signaling could still produce an electoral effect.

	Log Spending	% Spending	% Votes
Union Sponsored	0.09	2.45	2.02
	(0.05)	(0.72)	(0.46)
Union Sponsor \times Candidate	. ,		. ,
Always at Spending Limit	-0.08	-2.65	-1.38
	(0.05)	(1.23)	(0.80)
Observations	16,287	16,117	16,287
Constituencies	3,016	3,016	3,016
Candidates	6,848	$6,\!846$	6,848
Outcome Mean	9.37	34.59	40.68
Time FE	\checkmark	\checkmark	\checkmark
$Candidate \times Constituency FE$	\checkmark	\checkmark	\checkmark

Table 7: Minimal Effect where the Spending Limit Is Maxed Out

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

I examine this question in table 7 where I include interactions between the sponsorship treatment and a dummy indicating that the spending limit is always binding for a candidate in a particular constituency. In these models, the nomination mechanism is shut down by the candidate×constituency-fixed effects and the resource mechanism is shut down when the spending limit is maxed out. The table shows how the financial and electoral advantages of sponsorship correlates with binding spending limits.

Across the three different outcomes, and in both the specifications, union sponsorship only matters when the spending limit is not binding. In all models, the coefficient on the sponsorship variable positive and statistically significant. The coefficient on the interaction term, however, is negative and the sum of the two estimated coefficients is more or less equal to zero. For example, the result in the first column suggests that constituencies experience a 0.09 log-point increase in campaign spending in places where spending limits do not bind, whereas the effect is essentially zero when spending limits always bind (0.09-0.08=0.01). In other words, there appear to be no electoral effects when the resource and constituency mechanisms are shut down. This suggests that the informational effect of the endorsement must be relatively limited.

8. Conclusion

In this paper, I provide empirical evidence on the electoral influence of interest groups from trade unions in Great Britain. On the basis of archival material, I collect new data on the universe of sponsorship agreements between trade unions and parliamentary candidates from the Labour party, and I use a series of difference-in-differences designs to study how union sponsorship affects the different stages of the electoral process.

The results show that attaining a sponsorship agreement caused a six percentage-point increase in the average vote share. Consistent with a constituency-nomination mechanism, sponsorship helped candidates win nomination in safe Labour constituencies, and in line with a resource mechanism, sponsorship induced an inflow of financial and human resources into constituencies, engendering a professionalization of campaigns. The evidence does not support the opponent selection, mobilization efforts or voter information mechanisms. Approximately twothirds of the electoral effect is driven by constituency effects while the remaining third can be attributed to better campaigns.

Overall, the findings suggest that interest groups influence elections in more subtle ways than often assumed in the academic literature. Most studies of the role of interest groups and money in elections tend to focus on the final stage of the electoral process. However, while the direct effect of interest-group resources on general election outcomes is relatively limited, at best it only shifts a few percent of the votes between parties, the indirect effects that shape the earlier stages of the electoral process appear to be substantial. This could indicate that special interests are primarily able to shift the balance of power within parties and not between them.

These findings shed new light on the role of trade unions in Britain and may further our understanding of the influence of interest groups on elections more generally. Of course, there are clear limits to the generalizability of the findings. The conclusions are probably most relevant for other countries with politically active trade unions operating in Westminster parliamentary systems, but it seems likely that interest groups in other contexts may employ similar strategies to influence electoral outcomes. The electoral effects are potentially smaller in institutional settings where financial ties to interest groups are weaker or muddled by competition between opposing groups, but even in these settings the aggregate effects could be substantial, especially in countries with few or no restrictions on campaign finance.

The evidence presented in this paper sheds light on the electoral influence of trade unions, but presumably employers' associations engaged in similar activities to promote the election of business-friendly candidates from the Conservative party. In equilibrium, the relative political influence of employers and employees may depend on the relative electoral influence of these groups. The ability of trade unions to influence elections may have strengthened their bargaining position in negotiations with the government and employers. Sponsored MPs may have directly influenced legislation and policy making, but perhaps more importantly leaders from both parties may strategically have adapted their policy positions in response to the electoral influence of trade unions. For example, when Churchill rewon a slim majority of parliamentary seats in 1951, he instructed his ministers "not to bring about confrontations with public-sector trade unionists, least of all the miners" (Wrigley, 2001, p. 291), and he appointed more trade unionists to consultative committees than the former Labour government. More generally, in decades after WWII where most UK governments relied on very narrow parliamentary majorities, trade unions may have been able to translate their electoral influence into policy favors, and this may help explain the growth in government expenditures and the expansion of the modern British welfare state in the post-war period.

References

- Abdul-Razzak, Nour, Carlo Prato, and Stephane Wolton. 2020. "After citizens united: How outside spending shapes American democracy." *Electoral Studies* 67: 102190.
- Acemoglu, Daron, and James A Robinson. 2013. "Economics versus politics: Pitfalls of policy advice." Journal of Economic perspectives 27(2): 173–92.
- Anzia, Sarah F. 2011. "Election timing and the electoral influence of interest groups." The Journal of Politics 73(2): 412–427.
- Ashe, Jeanette. 2019. Political Candidate Selection: Who Wins, Who Loses, and Under-Representation in the UK. Routledge.
- Ashworth, Scott. 2006. "Campaign finance and voter welfare with entrenched incumbents." American Political Science Review 100(01): 55–68.
- Austen-Smith, David. 1987. "Interest groups, campaign contributions, and probabilistic voting." Public choice 54(2): 123–139.
- Baron, David P. 1994. "Electoral competition with informed and uninformed voters." American Political Science Review 88(1): 33–47.
- Benedetto, Giacomo, Simon Hix, and Nicola Mastrorocco. 2020. "The rise and fall of social democracy, 1918–2017." American Political Science Review 114(3): 928–939.
- Cagé, Julia, and Edgard Dewitte. 2020. "It Takes Money to Make MPs." https://juliacage.com/research/#abstract123.
- Callaway, Brantly, and Pedro HC Sant'Anna. 2020. "Difference-in-differences with multiple time periods." *Journal of Econometrics*.
- Coate, Stephen. 2004. "Pareto-improving campaign finance policy." *American Economic Review* 94(3): 628–655.
- De Chaisemartin, Clement, and Xavier d'Haultfoeuille. 2020. "Two-way fixed effects estimators with heterogeneous treatment effects." *American Economic Review* 110(9): 2964–96.
- Duverger, Maurice. 1972. Party Politics and Pressure Groups: A Comparative Introduction. Nelson's political science library Crowell.
- Ebbinghaus, Bernhard. 1995. "The siamese twins: citizenship rights, cleavage formation, and Party-Union Relations in Western Europe." *International review of social history* 40(S3): 51– 89.
- Ewing, Keith D. 1987. The Funding of Political Parties in Britain. Cambridge University Press.
- Flavin, Patrick, and Benjamin Radcliff. 2011. "Labor union membership and voting across nations." *Electoral Studies* 30(4): 633–641.
- Fournaies, Alexander. 2021. "How Do Campaign Spending Limits Affect Elections? Evidence from the United Kingdom 1885–2019." American Political Science Review 115(2): 395–411.

- Goodman-Bacon, Andrew. 2018. Difference-in-differences with variation in treatment timing. Technical report National Bureau of Economic Research.
- Gordon, Sanford C, Catherine Hafer, and Dimitri Landa. 2007. "Consumption or investment? On motivations for political giving." *The Journal of Politics* 69(4): 1057–1072.
- Grimmer, Justin, and Eleanor Neff Powell. 2013. "Money in exile: Campaign contributions and committee access." *Unpublished manuscript*.
- Grossman, Gene M, and Elhanan Helpman. 1996. "Electoral competition and special interest politics." *The Review of Economic Studies* 63(2): 265–286.
- Johnston, R., and C. Pattie. 2014. Money and Electoral Politics: Local Parties and Funding at General Elections. Policy Press.
- Johnston, Ronald J, and Charles J Pattie. 1995. "The impact of spending on party constituency campaigns at recent British general elections." *Party Politics* 1(2): 261–273.
- Labour. 1996. New Life for Britain: NEC Report 1996. London: Labour Party.
- Minkin, Lewis. 1991. The contentious alliance: Trade unions and the Labour Party. Edinburgh University Press Edinburgh.
- Müller, William D. 1977. The kept men?: The first century of trade union representation in the British House of Commons, 1874-1975. Harvester Press; Atlantic Highlands, NJ: Humanities Press.
- Norris, Pippa, and Joni Lovenduski. 1993. "If only more candidates came forward': Supplyside explanations of candidate selection in Britain." *British Journal of Political Science* 23(3): 373–408.
- O'Grady, Tom. 2019. "Careerists versus coal-miners: Welfare reforms and the substantive representation of social groups in the British Labour party." *Comparative Political Studies* 52(4): 544–578.
- Palmer, Maxwell, and Benjamin Schneer. 2019. "Postpolitical Careers: How Politicians Capitalize on Public Office." The Journal of Politics 81(2): 670–675.
- Pattie, Charles J, Ronald J Johnston, and Edward A Fieldhouse. 1995. "Winning the local vote: the effectiveness of constituency campaign spending in Great Britain, 1983–1992." American Political Science Review 89(04): 969–983.
- Pilkington, Colin. 1997. Representative democracy in Britain today. Manchester University Press.
- Pinto-Duschinsky, Michael. 1981. British political finance, 1830-1980. Vol. 330 Aei Pr.
- Potters, Jan, and Randolph Sloof. 1996. "Interest groups: A survey of empirical models that try to assess their influence." *European journal of political economy* 12(3): 403–442.
- Prat, Andrea. 2002. "Campaign advertising and voter welfare." *The Review of Economic Studies* 69(4): 999–1017.

Rush, Michael. 1969. The Selection of Parliamentary Candidates. Nelson.

- Sasso, Greg, and Dan Alexander. 2021. "Buying Campaign Investments with Policy Concessions.".
- Shepherd, Michael E, and Hye Young You. 2020. "Exit strategy: career concerns and revolving doors in Congress." *American Political Science Review* 114(1): 270–284.
- Streeck, Wolfgang, and Anke Hassel. 2003. "10 Trade unions as political actors." *International handbook of trade unions* 335.
- Taylor, Andrew J. 1989. Trade Unions and Politics: A comparative introduction. Macmillan International Higher Education.
- Van Winden, Frans. 2004. "Interest group behavior and influence." In *The encyclopedia of public choice*. Springer pp. 118–129.
- Waddington, Jeremy. 2013. The Politics of Bargaining: Merger Process and British Trade Union Structural Development, 1892-1987. Routledge.
- Weschle, Simon. 2021. "Parliamentary Positions and Politicians' Private Sector Earnings: Evidence from the UK House of Commons." *The Journal of Politics* 83(2): 706–721.
- Wrigley, Chris. 2001. "Churchill and the trade unions." Transactions of the Royal Historical Society 11: 273–293.

${f Part} {f Appendix}$

Table of Contents

A A.1	Additional Descriptive Information Variation in Sponsorship Treatment	35 40
В	Robustness: IV Based on Variation from Sponsorships Terminated by Union Amalgamations	41
С	Robustness: New Diff-in-Diff Methods for Staggered Treatments	43
D	Robustness: Alternative Outcomes	44

A. Additional Descriptive Information

In the tables below, I provide descriptive information on the sponsoring unions in the sample. The tables contain information on the founding and dissolution of the unions, the industry in which they operate, the total number of sponsees, and the number of sponsees disaggregated by general elections.

Sponsoring Trade Union	Abbrev.	FoundDissolv.	Industry T	otal Sponsees								11-	#Spc	onsee	s II.	Gen	eral]	Elect	ion								
					0061	0061 nsj0191	29b0101	8161	1922	1923	\$761	1861 6761	1635	£‡61	1950	1961	1955	1959	1961	9961	0261	d914701	t504701	6261	2861	2861	7661
Amale. Enzineering Union	AEU	1920-1968	Manufacturing	127			.	.	16	-	2		۰۰	5	10	13	12	15	19	17
Amale. Engineering Union of 1986	AEU86	1986-1992	Manufacturing	19												•										16	
Amale. Instrument Makers' Soc.	IMS	1887-1920	Manufacturing					-																			
Amale. Marine Workers' Union	AMWU	1922-1927	Transport	. 05				•	·	·			• •					• •		• •							
Amalg. Soc. of Carpenters and Joiners	ASCJ	1860-1921	Other	12			0	5							•	•		• •		• •		•					
Amalg. Soc. of Coopers	ASC	1878-1926	Other	3		1	-	-					•		•	•		•		•							
Amalg. Soc. of Dyers	ASD	1878-1936	Manufacturing	33			•	•	•			-	_	•	•	•	•	•		•							
Amalg. Soc. of Engineers	ASE	1851 - 1920	Manufacturing	28		1 4	Г	19	•				•			•		•		•							
Amalg. Soc. of Lithographic Printers	ASLP	1879-1969	Manufacturing	1		•	•	•	·				•	•	•	•	•	•	•	•	•						
Amalg. Soc. of Railway Servants	ASRS	1871-1913	Transport	1		•	•	•	·				•	•	•	•	•	•	•	•	•						
Amalg. Soc. of Textile Workers and Kindred Trades	ASTWKT	1919-2000	Manufacturing	ç			•		-	г			•	•	•	•	•	•		•							
Amalg. Soc. of Watermen, Lightermen and Bargemen	ASWLB	1912 - 1922	Transport	1			•	1					•	•	•	•	•	•		•							
Annalg. Soc. of Woodworkers	MSW	1921-1970	Other	51			•		S	9	9	99	5	4	ŝ	ŝ	2	ŝ									
Amalg. Union of Building Trade Workers	AUBTW	1921-1971	Other	6			•		•				-	-		-	-	•									
Amalg. Union of Engineering Workers	AUEW	1971-1986	Manufacturing	95		•	•	•	•					•	•	•	•	•		•		26	23	24	22		
Amalg. Union of Engineering and Foundry Workers	AEF	1968 - 1971	Manufacturing	21		•	•	•	·				•	•	•	•	•	•	•	•	21						
Amalg. Union of Foundry Workers	AUFW	1946 - 1967	Manufacturing	ç			•						•	•		-	-	•		•							
Amalg. Union of Operative Bakers	AUOB	1861-	Other	5			•	1	-	1			-	•	•	•	•	•		•							
Army Clothing Employees' Union	ACEU	1895-	Manufacturing	1		•		1					•	•	•	•	•										
Assoc. of Cinematograph, Television and Allied Technicians	ACTT	1933 - 1991	Non-Manual	1		•	•	•	•					•	•	1	•	•	•	•	•						
Assoc. of Engineering and Shipbuilding Draughtsmen	AESD	1913 - 1960	Manufacturing	×		•	•	•	·				•	•	0	2	2	0	•	•	•						
Assoc. of Professional, Executive, Clerical and Computer Staff	APEX	1972 - 1989	Non-Manual	26				•					•	•		•	•	•		•		9	9	9	ŝ	5	
Assoc. of Scientific, Technical and Managerial Staffs	ASTMS	1969 - 1988	Non-Manual	57		•							•	•		•	•	·		·	4	14	13	12	10	4	
Assoc. of Supervisory Staffs, Executives and Technicians	ASSET	1946 - 1969	Non-Manual	3		•	•						•	•	•	•	•	·	-	0	•						
Associated Blacksmiths', Forge and Smithy Workers' Soc.	ABFSWS	1845 - 1963	Manufacturing	1		•	•	•	•				•	•	•	•	•	·		•							
Associated Iron Moulders of Scotland	AIMS	1831 - 1920	Manufacturing	1		•	•	1					•	•	•	•	•	·		·		•					
Associated Soc. of Locomotive Engineers and Firemen	ASLEF	1880-	Transport	30			•	ŝ	-	1			Т	5	0	ŝ	က	က	Ч	-		г			5	-	_
British Steel Smelters' Assoc.	BSSA	1885-1917	Manufacturing	9	-	2	0						•	•		•	•	·		·							
Cardiff, Penarth and Barry Coal Trimmers' Union	CTU	1888-1967	Mining	1			•	1					•	•	•	•	•	·		·		•					
Ceramic and Allied Trades Union	CATU	1970-2015	Other	1		•	•	•	•					•	•	•	•	·		·							
Chain Makers' and Strikers' Assoc.	CMSA	1889-1977	Manufacturing	9		•	•	-		-		1		•	•	•	•	·		·							
Civil Service Clerical Assoc.	CSCA	1921 - 1998	Public Sector	2				•	Ч	п			•	•	·	•	•	•		•							
Clerical and Administrative Workers' Union	CAWU	1940 - 1972	Non-Manual	18		•	•	•					•	-	61	1	5	0	က	4	က						
Confederation of Health Service Employees	COHSE	1946-1993	Public Sector	22			·	•					•	•	•	•	•	•	•	•	•			9	ŝ	9	r-

Table A.1: Sponsoring Trade Unions

Sponsoring Trade Union	Abbrev.	FoundDissolv.	Industry	Otal Sponsees						#	Spon	sees ir	1 Gen	eral I	Election	on								
					0001 8001 ав[0101	o90101	8161	1055	7661 8761	6761 5761	1501	2861	0961 9761	1961	5561	6961	9961	0261	4307261 9917261	6261	8861	7801	2661	
Constructional Engineering Union	CEU	1930-1971	Manufacturing	n	•					•	•			·			-	_	Ì	•	·	·	·	
Cumberland Iron Ore Miners' and Kindred Trades' Assoc.	CIOMIKTA	1891 - 1929	Mining	4	•	•	-	-	1	Ċ	ł		Ĵ	•		Ĵ	÷		Ĵ			•	÷	
Dock, Wharf, Riverside and General Labourers' Union	DWRGLU	1887-1922	Transport	10	. 2 1		4	ന		•	•			•			•			•	•	•	•	
Draughtsmen's and Allied Technicians' Assoc.	DATA	1960-1970	Manufacturing	6	•									•			2	4		•	•	•	•	
Durham Colliery Mechanics' Assoc.	DCMA	1874 - 1944	Mining	1	•		-				•			•			•							
Electrical Trades Union	ETU	1889-1968	Manufacturing	18	-	•				1				er 	2	4 5	2							
Electrical, Electronic, Telecommunications and Plumbing Union	EETPU	1968-1992	Manufacturing	25	•						•			•			•	ŝ	с С	4	9	-	ŝ	
Fawcett Assoc. (Postmen)	FA	1890-1919	Public Sector	1	•		-			•	•						•			•	•	•	•	
Fire Brigades Union	FBU	1930-	Public Sector	ŝ	-				Ĵ		•			•			1	-	÷.	1	1			
Flax Dressers' Trade Union	FDTU	1872 - 1920	Manufacturing	1	1					•	•			•			•			•		•	•	
Friendly Soc. of Iron Founders of England, Ireland and Wales	FSIF	1809 - 1920	Manufacturing	5 C	. 1 1	-	2							•			•			•	•	•	•	
Furniture, Timber and Allied Trades Union	FTAT	1971-1993	Other	c,	-				Ĵ		•			•		Ĵ	•		0		1			
General Union of Textile Workers	GUTW	1881-1922	Manufacturing	4	. 1		2	_		•	•			•			•			•		•	•	
General, Municipal, Boilermakers and Allied Trade Union	GMBATU	1982-	General	45	•					•	•			•			•			•	13	10	22	
Graphical, Paper and Media Union	GPMU	1991 - 2005	Manufacturing	7	-	•			Ĵ	Ċ			Ĵ	•		Ĵ	•		Ĵ				-1	
Huddersfield Trades Council	HTC	1885-	Other	1	. 1 .						•			•		Ĵ	•			•			•	
Iron and Steel Trades Confederation	ISTC	1917-2004	Manufacturing	52	•		4	 	 	5	4	2	1 2	5	2	2	-	0	3	2	2	ŝ		
Lancashire and Cheshire Miners' Federation	LCMF	1881 - 1945	Mining	1	. 1					•	•			•			•			•	•	•	·	
Leeds Trades Council	LTC	1860-	Other	1	1 .	•			Ĵ	Ċ			Ĵ	•		Ĵ	•		Ĵ	1				
London Soc. of Compositors	ΓSC	1834 - 1955	Manufacturing	19	. 1 1		2	2	2	5	2	2	2.	•			•			•	·	·	·	
London and Provincial Union of Licensed Vehicle Workers	LPULVW	1894 - 1919	Transport	1	•		-			•	•			•			•			•	·	·	·	
Manufacturing, Science, and Finance Union	MSF	1988-2001	Non-Manual	15	-	•			Ĵ	Ċ			Ĵ	•		Ĵ	•		Ĵ				15	
Midland Textile Federation	MTF	1871-1918	Manufacturing	1	•	•					•			•			•			•	•	•	·	
Miners' Federation of Great Britain	MFGB	1889-1945	Mining	374	. 1 26	24	51	53 4	6 47	7 44	43	39		•			•			•	•	•	·	
Municipal Employees' Assoc.	MEA	1888-1924	Public Sector	1	•			_		•	•			•			•			•	•	•	·	
Musicians Union	MU	1893-	Non-Manual	9	•						•			•			1	5	1					
Natl. Amalg. Furnishing Trades Assoc.	NAFTA	1902 - 1946	Other	8	. 1 1		2		-	-	•			•			•			•	·	•	·	
Natl. Amalg. Union of Enginemen, Firemen, Mechanics, Motormen and Electrical Workers	NAUEFMME	1895 - 1926	Manufacturing	4	•		-	_	-		•			•			•			•	•	•	·	
Natl. Amalg. Union of Labour	NAUL	1888 - 1924	General	ŝ	-	•	5	-	Ĵ	Ċ			Ĵ	•		Ĵ	•		Ĵ					
Natl. Amalg. Union of Life Assurance Workers	NAULAW	1919 - 1964	Non-Manual	ŝ	•	•							1	·			•		Ĵ	•	•	•	·	
Natl. Amalg. Union of Shop Assistants, Warehousemen and Clerks	NAUSAWC	1891 - 1946	Retail	13	. 2 1		-	_	-	-	-	2		•			•			•	•	•	·	
Natl. Assoc. of Colliery Overmen, Deputies and Shotfirers	NACODS	1910-	Mining	2	-	·			Ĵ		·		Ĵ	•		÷	·			•		-	-	
Natl. Assoc. of Operative Plasterers	NAOP	1859-1968	Other	1	•					1	•			•			·			•		•	·	
Natl. Asylum Workers' Union	NAWU	1910 - 1946	Public Sector	ŋ	•			5 S		•	•						•			•	·	•	•	

Table A.2: Sponsoring Trade Unions

Sponsoring Trade Union	Abbrev.	FoundDissolv.	Industry	Total Sponsees							#S	ponse	ees in	Gene	ral E	lectio	ų								
					9061 0061	nsj0191 2250191	8161	2201	\$261 \$261	1929	1861	9861	0961 eest	1961	2261	6961	†96ī	9961	0261	d914791	1007/61	6261	£861	1961	7001
Natl. Communications Union	NCU	1985-1995	Public Sector	4					•					•										~	
Natl. Federation of Women Workers	NFWW	1906-1921	General	1	•		г							•	•										
Natl. Graphical Assoc.	NGA	1964 - 1991	Manufacturing	11	•								į		•		1	5	1		_	_	~	~	
Natl. League of the Blind	NLB	1899-	General	1	•				:						•										
Natl. Soc. of Operative Printers and Assistants	NATSOPA	1889-1966	Manufacturing	11	•			-	-	-	-	_	-	-	-										
Natl. Soc. of Painters	NSP	1855-1970	Other	4	•	-					-		į												
Natl. Soc. of Pottery Workers	NSPW	1906-2015	Other	4	•				-		-				•										
Natl. Union of Agricultural Workers	NUAW	1906-1982	Other	34	•		ŝ	с С	5	-	-		5	2	ŝ	4	ŝ	-	5		_	_			
Natl. Union of Blastfurnacemen	NUB	1888 - 1985	Manufacturing	13	•	-	•	-	-	-		÷	÷		-		-	1	1	_	_	_	_	į	
Natl. Union of Boot and Shoe Operatives	NUBSO	1873-1971	Manufacturing	32		2	-	4	- 1	4	4	33 77	1 2	-	·			-							
Natl. Union of Distributive and Allied Workers	NUDAW	1921-1947	Retail	39	•			2	8	9	4	-1		•											
Natl. Union of Dock Labourers	NUDL	1889-1922	Transport	2	•		1	_					į		•										
Natl. Union of Dyers, Bleachers and Textile Workers	NUDBTW	1936-1982	Manufacturing	1	•				•																
Natl. Union of Foundry Workers	NUFW	1920-1946	Manufacturing	7	•			5	2	-	1			•											
Natl. Union of Furniture Trade Operatives	NUFTO	1947-1971	Other	3	•				•			÷	÷				5		-						
Natl. Union of Gas Workers and General Labourers	NUGWGL	1889-1916	General	9	1 2	2	·		•			÷	÷		÷									į	
Natl. Union of General Workers	NUGW	1916-1924	General	29	•		1-	8	- 1					•	•										
Natl. Union of General and Municipal Workers	NUGMW	1924 - 1982	General	133	•				•	x	8	5 11	E	5	4	r0	6	12	12	3 1	3 1	4			
Natl. Union of Journalists	IUU	-1907-	Non-Manual	1	•					·			į										-		
Natl. Union of Mineworkers	NUM	1945-	Mining	345	•				:			́с	80 80	37	34	30	29	26	21 2	12	0	×.	4	2	\sim
Natl. Union of Police and Prison Officers	NUPPO	1913-	Public Sector	5	•			_	2																
Natl. Union of Public Employees	NUPE	1928 - 1993	Public Sector	29	•								-	ŝ	0	6	2	ŝ	9	1-	~	x	-1	1	0
Natl. Union of Rail, Maritime and Transport Workers	RMT	1990-	Transport	10	•				•			÷		•	•									-	0
Natl. Union of Railwaymen	NUR	1913-1990	Transport	183	•		ŀ~	10	5	12	9	-	3 15	Ξ	Ξ	10	r~	×	9	-1	5 1		2	_	
Natl. Union of Scottish Mineworkers	NUSM	1894-2018	Mining	7	•		•	0	5	-		÷	÷		•									į	
Natl. Union of Seamen	NUS	1921-1990	Transport	11	•		•		:			_	-	•	•			-	_	2	_		_	_	
Natl. Union of Sheet Metal Workers, Coppersmiths, Heating and Domestic Engineers	NUSMWCHDE	1920-1983	Manufacturing	1	•				•						•							_			
Natl. Union of Ship's Stewards, Cooks, Butchers and Bakers	NUSS	1909-1921	Transport	1	•	÷	-					Ĵ	Ì		÷										
Natl. Union of Teachers	TUN	1870-2017	Public Sector	1	•		-		•					•	•										
Natl. Union of Textile Workers	MLUN	1922-1936	Manufacturing	9	•				5	-	_			•	·										
Natl. Union of Vehicle Builders	NUVB	1920-1972	Manufacturing	12	•			57	-	-	-	_		•	г	-	-	-	-						
Natl. Union of the Footwear, Leather and Allied Trades	NUFLAT	1971-1991	Manufacturing	2	•				•				÷		÷					_		_			
Newport Trades Council	NTC	1906-	Other	1					:				÷	•	•										
North Wales Quarrymen's Union	NWQU	1874-1923	Mining	2	•			_						•	•										

Table A.3: Sponsoring Trade Unions

Table A.4: Sponsoring Trade Unions

Loonsoning Theodo IInion	Abbrow	Found Dissolv	Inductor	Total Crossesse								0457	00000		"onor	1 El	of ion									
HOMO AND I GUIDANDI GUIDANDI			£ 10 000 0000		9061 0061	nsj0191	1918 1910460	1922	2261	6661 1761	1931	1932 1	\$104£	1950	1961	1955	6961	. \$961	9961	dəl4761	t504701	6261	2861	2861	2661	
- - - - - - -		0000																								
Operative bleachers, Dyers and Finishers Assoc.	UBDFA	1800-1930	Manufacturing	7	•		Ì				-	-	•	•						Ì	·	•	·	·	·	
Operative Soc. of Masons, Quarrymen and Allied Trades of England and Wales	OSMQATEW	1833-1921	Other	1	-							•												•		
Post Office Engineering Union	POEU	1915-1985	Public Sector	16	•														-	с С	2	4	co			
Postal and Telegraph Clerks' Assoc.	PTCA	1881-1919	Public Sector	4			4																			
Postmen's Federation	ΡF	1889-1919	Public Sector	ũ		-	. 4																			
Prudential Staff Union	DSU	1909-1984	Non-Manual	4					_	_																
Railway Clerks' Assoc. (Transport Salaried Staffs' Assoc.)	TSSA	1899-	Transport	126			9.	1-	5	9	5	10	6	Ξ	Ξ	10	x	1~	10	5	4	က	-	0	0	
Scottish Commercial Motormen's Union	SCMU	1898-1971	Manufacturing	1			•					•												•		
Scottish Union of Bakers, Confectioners, Biscuit Bakers and Bakery Workers	SUBAW	1949-1978	Other	1								•		-												
Shipconstructors' and Shipwrights' Assoc.	SSA	1882-1963	Manufacturing	5	-	1	-	1				•														
Soc. of Graphical and Allied Trades	SOGAT	1982-1991	Manufacturing	4							•	•								•	•		2	2		
Tin and Sheet Millmen's Assoc.	TSMA	1899-1921	Manufacturing	1	•		-					•												•	•	
Tobacco Workers' Union	TWU	1834-1986	Other	1	•							•					1							•		
Transport and General Workers' Union	TGWU	1922-2007	Transport	383				ŝ	8 1	0 11	17	12	19	18	17	17	20	23	7 2	23 23	24	29	21	26	35	
Typographical Assoc.	TA	1884-1964	Manufacturing	15			-	0	-	1	1	1	0	0	1	1	1									
Union of Construction, Allied Trades and Technicians	UCATT	1971-2017	Other	13							•	•								ŝ	ŝ	4	2	-		
Union of Post Office Workers (Union of Communication Workers 1980)	UPW/UCW	1920-1995	Public Sector	12				9	9	9	5	ŝ	ŝ	ŝ	4	2	2	ص		5	4	2	-	0	-	
Union of Shop, Distributive and Allied Workers	USDAW	1947-	Retail	26							•	•		6	10	10	10	01	~	9	5	9	0	9	x	
United Garment Workers' Trade Union	UGWTU	1915 - 1920	Manufacturing	1			-				1									1	1					
United Kingdom Soc. of Coachmakers	UKSC	1834 - 1972	Manufacturing	1			-				1									1	1					
United Patternmakers Assoc.	UPA	1872-1984	Manufacturing	17	•	-		1	-	_	2	-	2	-	1	-	1	-		-	•	·	•	•	•	
United Soc. of Boilermakers and Iron and Steel Shipbuilders	USBISS	1834-1982	Manufacturing	35			. 5	ŝ	5	1 6	4	2	•								•	2				
United Textile Factory Workers' Assoc.	UTFWA	1889-1975	Manufacturing	50		1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	x	4	1 3	5	2		ŝ	ŝ	2	2	_	_		•	•	•	•	•	
Workers' Union	ΜŪ	1898 - 1930	General	22		-	1 2	-	4	9		1	•	÷					÷		•	÷			÷	
					•		Ĵ					·	•	·					÷		÷	•	÷	·	·	
					•		÷				•	·	•	·						•	·	•	·	·	·	
					•							·		·							·	•	·	·	·	
					•		÷					·	•	·						•	•	•	·	·	·	
					•		Ĵ					·		·					į			•			·	
					Ì		Ĵ			Ì		ł	•	÷					÷	1	1	•	÷	•	÷	
					•		÷				•	·	•	·					÷	•	•	•	·	·	·	
					•		÷					·	•	·					÷	•	•	•	·	·	·	
					•		÷					·	•	·						•	•	•	·	·	·	
					•		1					•							Ĵ	ľ	1					

A.1. Variation in Sponsorship Treatment

Table A.5 provides descriptive information on the union sponsorship treatment. I group all Labour candidates into three groups depending on whether they were sponsored in all elections, sponsored in some but not all elections, or sponsored in no elections. There are 414 sometimessponsored candidates, and on average they run in approximately six elections. These candidates, who switch in or out of the sponsorship treatment, are on average sponsored in half of their electoral campaigns, and the estimated effects in the within-individual diff-in-diffs are based on variation from these switchers.

Approximately a quarter of the switching candidates were sponsored in their first electoral campaign. In other words, for a quarter of the switchers the variation in treatment status is induced by candidates that lose their sponsorship deal (for example if the sponsoring union is dissolved). Approximately half of the switchers are sponsored in their last election. These individuals begin their electoral careers without sponsorship, but attain it later. Finally, a quarter of the candidates are neither sponsored in their first, nor sponsored in their last election. These candidates both attain and lose their sponsorship deal during their electoral careers.

 Table A.5: Variation in Union Sponsorship

	Share of Elections Sponsored by Unions	Share of Candidates Sponsored in First Election	Share of Candidates Sponsored in Last Election	Mean # Elections	# Candidates
Sometimes Sponsored	0.49	0.26	0.48	6.03	414
Always Sponsored	1.00	1.00	1.00	3.30	571
Never Sponsored	0.00	0.00	0.00	2.02	6,027

NOTE: Each observation pertains to a Labour candidate.

B. Robustness: IV Based on Variation from Sponsorships Terminated by Union Amalgamations

To address the concern that unions are able to select candidates that are trending in particular ways, I implement an instrumental-variables approach in which union sponsorship is instrumented using variation from sponsorship agreements that were terminated because the sponsoring union amalgamated into a new union. Over the course of the 20th century, the structure of the labour movement changed systematically in response to technological developments and broader changes in the structure of the labor market (Waddington, 2013). At the beginning of the century, organized labor was characterized by many small, craft-based unions, and over the course of the century many of these unions amalgamated and merged into larger, industry-based unions.

As part of an amalgamation process, the participating unions had to terminate their sponsorship agreements. Some of the candidates previously sponsored by the union would be able to find a new sponsor, but typically not all sponsees would be able to do so. I exploit this negative shock to the probability of being sponsored when I estimate the following first-stage models:

Union Sponsored_{ict} =
$$\pi_1$$
Sponsoring Union Dissolved_{ict} ^{ω} + α_i + δ_t + ε_{ict} , (3)

where Union Sponsored_{ict} is the sponsorship variable indicating that candidate *i* in constituency c was sponsored by a trade union in the election at time t; Sponsoring Union Dissolved_{it}^{ω} is a dummy variable indicating that candidate *i* was no longer sponsored by union ω at the election at time t because the union had been legally dissolved as part of an amalgamation process.¹⁶ In other words, the variable is zero for all candidates, and it takes on the value one once a candidate looses his sponsorship deal due to the dissolution of the sponsoring union. The key coefficient is π_1 which indicate the share of candidates who do not attain a new sponsorship deal after the dissolution shock.

¹⁶Note that in the analyses where the unit is the constituency, the sponsoring union dissolution is also defined at the constituency level.

I then proceed to estimate the following reduced-form models:

_ . .

$$Y_{ict} = \pi_2 Sponsoring \ Union \ Dissolved_{ict}^{\omega} + \alpha_i + \delta_t + \varepsilon_{ict} \ , \tag{4}$$

where Y_{ict} is the outcome of interest, and all other variables are the same as in the first-stage model. The estimated effect of sponsorship is obtained from the simple Wald estimator, reflecting the ratio between the reduced-form estimate (π_2) and the first-stage estimate (π_1).

This IV approach identifies the causal effect under the assumption that the candidates affected by a dissolved union were not trending differently than other Labour candidates (exogeneity), and further that the dissolution exclusively affects a candidate's electoral fortune through the loss of union sponsorship (exclusion restriction).

I present the results below. Overall the results are qualitatively similar to those presented in the main paper.

Table .	A.6: IV	Based	on	Variation	from	Dissolved	Unions:	Effect	of	Union	Sponsor	-
ship o	on % La	abour \	lote	s.								

		First Union Sj	Stage: ponsored			Second % Labo	l Stage: ur Votes	
Union Sponsored					14.65	17.28	17.32	14.83
Sponsoring Union Dissolved	-0.14 (0.04)	-0.17 (0.05)	-0.17 (0.05)	-0.18 (0.05)	(6.62)	(7.40)	(7.39)	(6.25)
Observations	12,755	12,755	12,755	12,732	12,755	12,755	12,755	12,732
Constituencies	2,805	$2,\!805$	2,805	2,796	2,805	2,805	2,805	2,796
Candidates	3,231	3,231	3,231	3,225	3,231	3,231	3,231	3,225
Outcome Mean	0.23	0.23	0.23	0.23	44.95	44.95	44.95	44.97
First-stage F Statistic	14.89	10.67	11.16	11.99				
Candidate-Fixed Effects	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Time-Fixed Effects	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Candidate-specific Trends		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Member of Parliament			\checkmark	\checkmark			\checkmark	\checkmark
Region-by-time FE				\checkmark				\checkmark

NOTE: The first-stage results are estimated using OLS, and the second-stage results are estimated using IV. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.

C. Robustness: New Diff-in-Diff Methods for Staggered Treatments

A recent literature on staggered difference-in-differences designs shows that the standard twowayfixed effects implementation may be subject bias under certain conditions. In particular, in the presence of within-unit heterogeneity in the treatment effect, previously treated unit may constitute poor counterfactuals for future treated units. De Chaisemartin and d'Haultfoeuille (2020) show that twoway-fixed effects models estimate weighted sums of the average treatment effects (ATE) in each group and period, with weights that may be negative. Due to the negative weights, the linear regression coefficient may be negative even when all the ATEs are positive. They propose another estimator that solves the issue with negative weights. In the sections below, I show that the results presented in the paper are qualitatively similar when estimated using the estimator proposed by De Chaisemartin and d'Haultfoeuille (2020). I implement the estimator using Stata's did_multiplegt module and I show the results next to the findings from the main paper for the ease of comparison.

Overall, all the results have the same sign and statistical significance. The estimate on nomination in a safe constituency is smaller in magnitude but still positive and highly statistically significant when estimated using de Chaisemartin and D'Haultfoeuille's estimator. The effects on campaign resources are similar in magnitude. The effect on vote shares are smaller in magnitude but highly statistically significant.

	Lab Vot	our e %	Sa Cor	fe 1st.	Boro Cor	ough nst.	Exper Oppo	ienced onent	Log ' Sper	Total iding	Full- Stai	time fers	Vo Turne	ter out %
Union Sponsored	5.94 (0.55)	2.85 (0.28)	$\begin{array}{c} 0.13 \\ (0.02) \end{array}$	$0.08 \\ (0.01)$	0.08 (0.02)	0.04 (0.01)	0.06 (0.05)	$0.07 \\ (0.07)$	0.09 (0.05)	$0.12 \\ (0.07)$	0.10 (0.05)	$0.08 \\ (0.03)$	0.22 (0.23)	-0.36 (0.11)
Observations Twoway Fixed Effects de Chaisemartin & D'Haultfoeuille	12,755 ✓	6,459 ✓	12,755 ✓	6,459 ✓	12,750 ✓	6,456 ✓	2,909 ✓	853 √	9,794 ✓	4,527 ✓	3,191 ✓	2,087 ✓	9,794 ✓	4,527 ✓

Table A.7: Diff-in-Diff Robustnes	\mathbf{ss}
-----------------------------------	---------------

The estimate reported in the first column is obtained by estimating a OLS model with time- and constituency-

fixed effects on the full sample. The estimate reported in the second column is obtained using the de Chaisemartin

and D'Haultfoeuille estimator as implemented using Stata's did_multiplegt module.

D. Robustness: Alternative Outcomes

In the table A.8, I present the results from the analysis of the impact of sponsorship on a candidate's probability of winning the general election. The first column shows that the probability of winning the general election increases by almost 20% when a candidate attains a union sponsorship. In the subsequent columns I show the robustness to alternative specifications and to the estimation based on variation from the ban of sponsorship.

		La	abour Wi	in	
Union Sponsored	0.19 (0.02)	0.18 (0.02)	0.16 (0.02)	0.13 (0.03)	0.35 (0.04)
Observations	16.536	16.536	16.533	16.533	1.659
Constituencies	3,017	3,017	3,016	3,016	689
Candidates	7,012	7,012	7,010	7,010	315
Outcome Mean	0.44	0.44	0.44	0.44	0.82
Sample	Full	Full	Full	Full	Ban
Candidate-Fixed Effects	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Time-Fixed Effects	\checkmark	\checkmark			\checkmark
Member of Parliament		\checkmark	\checkmark	\checkmark	
Region-by-Time-Fixed Effects			\checkmark	\checkmark	
Candidate-Linear Trends				\checkmark	

Table A.8: Effect of Union Sponsorship on Labour Win.

NOTE: All models are estimated using OLS. Robust standard errors are two-way clustered on candidates and constituencies, and they are reported in parentheses.