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How Local Factions Pressure Parties: Activist Groups and Primary Contests in the Tea Party Era

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Abstract
The contemporary Republican Party has been the site of asymmetric partisan entrenchment and factional infighting. We test whether factional pressure from a far-right faction (the Tea Party) exacerbated the party's rightward movement with a granular analysis of Republican factionalism at the congressional district level. We develop a measure of local factionalism using novel datasets of activist presence and primary contests. Then, we conduct a difference-in-differences analysis to assess whether local factionalism in the Tea Party era heightened Republican partisanship and legislative extremism at the district level. We find that districts that experienced factional pressure moved rightward on both measures. These findings help clarify how the Tea Party captured the Republican Party and support a focus on the role of party factions in fomenting partisan conflict.

Recent decades have seen a pronounced rightward shift in the Republican Party (Hacker and Pierson 2006; Lewis et al. 2021; Theriault 2013). Republican representatives in Congress have become entrenched in their partisan positions (McCarty, Poole, and Rosenthal 2006; Theriault 2008) as their voters have embraced partisanship as a social identity (Mason 2018). Moreover, with the rise of the Tea Party as an electoral force in 2010, the Republican Party became the site of intense factional infighting. Between 2010 and 2014, Tea Party-aligned candidates sought to oust 'establishment' Republicans in elections (Blum 2020), and the Tea Party caucus fought with the Republican Party leadership in Congress (Bloch Rubin 2017; Clarke 2020; DiSalvo 2012; Gervais and Morris 2018). And the party's rightward movement does not appear to be abating. This raises the question, to what extent is today's Republican partisan entrenchment the result of an extreme faction drawing its party rightward?

In this study, we assess the effect of Tea Party factionalism on the Republican Party. Theoretically, we seek to clarify the mechanisms by which the Tea Party gained influence over the Republican Party. Empirically, we perform the first systematic analysis of the impact of factionalism at the local (congressional district) level, hypothesizing that voters and representatives from districts experiencing local factionalism would move further to the right between 2008 and 2016 than areas which did not experience such pressure. We test this hypothesis using a difference-in-differences (DiD) design, constructing a proxy for local factionalism (treatment) as the combined presence of Tea Party activist groups and Tea Party-supported candidates in Republican congressional primaries. Specifically, we compare congressional districts that experienced local factional pressure from the Tea Party between 2010 and 2014 to those that did not on two outcomes: (1) district-level Republican presidential vote share and (2) the position of the district's representative in the U.S. House of Representatives.

We find that districts that experienced local factionalism moved rightward under both metrics between the 2008 election/111th Congress and the 2016 election/115th Congress compared to other districts. These findings are consistent with claims that Tea Party groups exercised disproportionate influence during the candidate selection process (Blum 2020), which contributed to a transformation of the Republican Party (Rouse, Hunt, and Essel 2022). Our findings also underscore the importance of district-level analyses for understanding contemporary US parties.

How Party Factions Matter

The Republican Party's marked rightward movement appears, at least in part, to be a consequence of efforts from an extreme faction during and since the Obama presidency (Skocpol and Tervo 2020; Tarrow 2021). The Tea Party insurgency was characterized by reactionary conservatism, anti-establishment posture, and scorched-earth tactics which sought to take control of the party by any means necessary (Blum 2020; Parker and Barreto 2014; Skocpol and Williamson 2012). Notably, this faction applied pressure over multiple institutions, including Congress (Gervais and Morris 2018) and state legislatures (Institute for Research & Education on Human Rights 2022; Rouse, Hunt, and Essel 2022). Qualitative and case study evidence suggests that the Tea Party's efforts also relied on strong state and local operations (Blum 2020; Skocpol and Williamson 2012). However, we know less about the connection between these local efforts and the national Republican Party's rightward movement. Using two original measures of Tea Party factionalism at the congressional district level, we test whether and how local factionalism in the Tea Party era – roughly 2010 to 2014 – caused the Republican Party to move rightward.

In what follows, we define factions and their goals. Next, we identify venues where we might observe factional behaviour and discuss how local factionalism might matter. Finally, we focus on the impact factions might have on different parts of the party, including elected officials, party organizations, and voters.

Operationalizing Factions

In keeping with existing scholarship, we define factions as organized sub-party groups. Several recent studies focus on factions in Congress, where factions organize into voting blocs or caucuses that allow them to pressure their party and its leadership effectively (Bloch Rubin 2017; Clarke 2020; Cowburn and Kerr 2023). However, in her 2020 book on the Tea Party, Rachel Blum provides a broader framework for factions, defining them as miniature parties within parties or as shadow parties (Blum 2020, 17). In Blum's account, factions like the Tea Party target their host party across multiple types of political terrain by shadowing the party's structure. In a sub-national context, this might involve creating shadow state and local party organizations taking over these party organizations or running an alternative slate of candidates for public office.

Party members might organize as an insurgent sub-party apparatus to meet the goal of a faction to overhaul its host party from within. Factions contest their host party's identity, seeking to redefine what it means to be Republican or even what it means to be conservative. Accordingly, DiSalvo (2012) describes factions as the engines of ideological change in the US party system. We consider the Tea Party as a shadow party that sought to systematically challenge the Republican Party and empirically test the extent to which its local factional efforts contributed to the rightward trend in the contemporary Republican Party.

We consider the most likely scenario of factional presence in a district. If the Tea Party faction had a foothold in a district, then we should expect to observe, at minimum, the following two things. The first is the presence of multiple organized factional activist groups in the district. As we explain, we operationalize factional organization using a directory of local Tea Party

groups. Existing scholarship suggests that these groups played a significant role in organizing members against the established party apparatus (Blum 2020; Skocpol and Williamson 2012) and, therefore, serve as a proxy for the extent of the faction's shadow-party organization.

Second, we look for a pattern of contested Republican primaries in the district. If a faction seeks to challenge its party, we should see evidence of this pressure in party nominating contests. We focus on contested Republican primaries for the U.S. House. House primaries are appealing for a couple of reasons. First, with the potential to occur in every district every two years, they provide a large enough sample to evaluate them systematically (as opposed to Senate primaries). These primaries are also the most localized contests for which we have reliable data on a variety of metrics. Taken together, these two components provide the most likely conditions under which we might observe factional activities moving the party rightward.

Party Factions and Local Party Change

Here, we explain the mechanisms by which local factionalism might push the party rightward. A faction aims to internally reshape its party, requiring it to take over some of the party's functions. At the local level, this could happen in a couple of ways. First, the faction might target the local party organization and persuade officials to embrace the faction's issues and candidates. This is important, as local parties primarily recruit and nominate candidates who can win (Broockman et al. 2021; Crowder-Meyer 2013; Hassell 2018; Masket 2009). However, persuading the party to support a factional candidate might be difficult, especially if an incumbent is running.

If an incumbent from the party is not on the ballot, a faction might attempt to change the party's perception of the faction and its candidates through the efforts of local activists. Activists can 'barrage local elites with expressions of support for extreme policies, via direct communication, at town halls, with protests, through partisan media, and more' (Broockman et al. 2021, 5). By amplifying extreme positions and candidates, activists can subtly alter voters' preferences and party leaders' perceptions of these preferences (Miler 2009). For example, activists on the right have been especially successful at convincing Republican officials that nominating extremists will drive turnout among the 'base' (Broockman et al. 2021), thereby persuading local leaders to look favourably on the candidate preferred by the most vocal segment of their supporters.

If a faction is unable to influence internal party decisions by persuasion alone, it might resort to more hostile means, such as taking over the party from within. Activists might target local party positions and fill them with their own members; unfortunately, no comprehensive database of local party leadership contests is available. Factional efforts to reshape the party can take another, more readily observable form. A faction can formally challenge the party's chosen candidate with a candidate of their own in a primary. The combination of minimal restrictions on candidate eligibility, decentralized selectorates, low voter turnout, and less media attention in down-ballot primaries make parties vulnerable to factional primary challenges (Dominguez 2011; Manento 2019; Masket 2009). Indeed, ideological and factional primary contests have been increasing since at least 2006, especially on the right (Boatright 2013; Boatright 2014; Cowburn 2022).

Drawing from a large body of research, we view activists as an essential component of credible local factional primary challenges. Since the primary reforms of the 1970s, a para-party apparatus of issue activists and interest groups have increasingly taken on roles that used to fall to the formal party (Grossmann and Dominguez 2009; Koger, Masket, and Noel 2009; Schlozman and Rosenfeld 2019; Tarrow 2021), providing the resources and volunteers necessary to conduct successful campaigns (Enos and Hersh 2015) and mediating between party elites and the voting public (Carmines and Stimson 1989; Carmines and Woods 2002; Layman et al. 2010; Layman and Carsey 2002). Activists also played an invaluable role in supporting Tea Party-style candidates in congressional elections (Bailey, Mummolo, and Noel 2012).

The complex network of local Tea Party organizations staffed by local activists that proliferated between 2010 and 2014 was most prominent in Republican-leaning areas of the country. As an example, Blum discusses Republican incumbent Eric Cantor's 2014 surprise defeat in the Republican primary in Virginia's 7th district at the hands of Tea Party-backed candidate, David Brat. Brat lacked support from the Republican Party (local or otherwise) and brought in few outside donations. Nevertheless, he defeated Cantor in the primary due to the volunteer campaign efforts of the eleven active Tea Party groups in Virginia's 7th District (Blum 2020, Ch. 4). Drawing on such studies, when we talk about local faction members, we are talking about Tea Party activists.

Factions and district position

Activist-backed primary challenges are a key way that factions might force party change. Here, we describe the mechanisms by which Tea Party challenges might move a district rightward. However, we first explain what we mean by moving a district 'rightward', a term with distinct meanings with reference to political elites and voters.

The elites we focus on are US representatives. Factional pressure from the right could result in a district being represented by a member with more extreme issue positions or a more stridently partisan posture via two pathways: adaptation and replacement. A primary challenge from the right could incentivize an incumbent Republican representative to adapt their position towards the faction in an attempt to maintain their seat in Congress (Brady, Han, and Pope 2007). Alternatively, the district could move rightward by replacing a more moderate incumbent Republican with someone more extreme (Theriault 2006). A Tea Party factional challenger might successfully primary an incumbent, as famously happened in several contests. Alternatively, an incumbent might react to changing local conditions, such as a faction gaining control over a local party organization by declining to run for another term, thereby leaving the field open to more extreme candidates, possibly fielded by a more extreme party organization. Our empirical analyses will evaluate whether and how the district's representative moved rightward.

We operationalize the rightward movement of voters as a higher percentage of voters in a district supporting the Republican candidate in the highest-turnout elections – presidential general elections. This ought to provide the hardest possible test for our theory, given that general election voters are thought to exert a somewhat moderating effect on a district (Hirano et al. 2010), and presidential elections are, clearly, the most nationalized.

We propose two mechanisms by which a district might become more solidly Republican at the presidential level due to activity from a far-right faction, which likely has a cumulative effect. The first involves the efforts of local Tea Party activists to shape the opinions of and mobilize fellow voters in the district. As Skocpol and Tervo suggest, when comparing the efforts of factional activists in the Tea Party and the left's Resistance, 'organized local citizens made a difference for their respective causes and parties by influencing local public opinion, boosting like-minded voter participation, or both' (Skocpol and Tervo 2021). The second mechanism is elite persuasion (Broockman and Butler 2017). In districts where the Tea Party faction was successful in reorienting elites, voters were represented by and recipients of messaging from officials who endorsed Tea Party-style positions involving no-compromise extremism and hyper-partisanship. As Republican-leaning voters are receptive to such messaging, we expect to see an intensification of mass partisanship in the district.

Expectations of Factional Pressure

We evaluate two hypotheses about the impact of factional pressure – understood as the presence of both activist groups and factional candidates – and party change. First, as discussed above, we

operationalize change in terms of voter and legislator shifts in two mutually reinforcing hypotheses shown below.

H1 Voter shifts: Voters in districts that experienced factionalism will vote for the Republican presidential candidate at higher levels in 2016 than in 2008, compared with those districts that did not experience factionalism.

H1 Null: Factionalism will not result in more partisan voting behaviour.

H2 Legislator shifts: Representatives from districts that experienced factionalism will move further rightward in their roll-call voting between the 111th and 115 congresses than representatives from districts that did not experience local factionalism.

H2 Null: Factionalism will not result in more extreme legislative voting behaviour.

We also consider the possibility that parties may change for reasons bearing little relationship to factions. Increased partisanship at both the mass and elite levels may stem from a secular trend towards greater polarization, especially on the right (Arceneaux, Johnson, and Murphy 2012; Druckman, Peterson, and Slothuus 2013; Prior 2013), institutional factors such as redistricting (Altman and McDonald 2015; Carson, Engstrom, and Roberts 2007), or the novel candidacy of Donald Trump. To address these possibilities, we isolate the impact of factionalism through our identification strategy.

Data and Research Design

Our identification strategy leverages a canonical difference-in-differences (DiD) design with a single treatment period.[1] The treatment variable, factionalism, is operationalized as the combined presence of Tea Party activist groups and Tea Party candidate(s) in a congressional district during the treatment period; that is, the three election cycles between 2010 and 2014, when the Tea Party was active in national elections (Blum 2020; Gervais and Morris 2018). The final pre-treatment period was, therefore, 2008 (111th Congress for H2), and the first post-treatment period was in 2016 (115th Congress). We estimate the effects on vote share and legislator position in separate models.

Dataset Construction

Our dataset contains original sources on Tea Party activism and Tea Party candidacy, which we combine with data on district-level characteristics. Finally, we summarize the key variables in our analysis, with an overview in Table 1.

Outcome variable H1: Republican presidential vote share

The first outcome variable is the Republican presidential candidate's total district-level vote share. Presidential vote share is the most commonly used measure of district partisanship in both the political science literature and popular media coverage when discussing the partisan identity of a district. In short, we think this measure is substantively meaningful. The measure also benefits from uniformity across all districts, with the same candidates running across the country, serving as a control for district-level differences in candidate quality or contest dynamics. Finally, the presidency is manifestly the most important single office in the US political system, meaning the outcome of these elections is important because of its implications for who holds power.

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[1]We repeat both analyses using a series of alternative DiD estimators, including doubly robust estimators (Sant'Anna and Zhao 2020), in the supplementary materials. Our results are unchanged.

Table 1. Full list of variables

Variable	Values	Measurement periods	Time invariant	Source
Outcome variables				
Republican presidential vote share	5.2% to 76.99% (2008); 4.9% to 80.37% (2016)	2000 to 2016	No	FEC Data
Legislator position	−1 (liberal) to +1 (conservative)	2004 to 2016	No	Nokken-Poole
Treatment variable				
Factionalism (Activist presence & Candidate presence)	1 (factionalism), 0 (no factionalism)	2010 to 2014	Yes	Blum 2020 and Cowburn 2020 data
District variables for propensity score estimation				
Per cent white	0.026% to 96.6%	2006 to 2018	No	American Community Survey
Median income	$23,773 to $129,821	2006 to 2018	No	American Community Survey
Median age	21 to 55.7	2006 to 2018	No	American Community Survey
Rural-Urban	Pure rural (1); Rural-suburban mix (2); Sparse suburban (3); Dense suburban (4); Urban-suburban mix (5); Pure urban (6)	2002–2010; 2012–2020	No	CityLab data
Democratic 2008	1 (district represented by a Democrat in 2008), 0 (Republican in 2008)	2008	Yes	FEC Data

Outcome variable H2: Legislator position (Nokken-Poole scores)

We operationalize our second outcome variable using first-dimension Nokken-Poole ideal points. Nokken-Poole scores are one-congress-at-a-time snapshots of a legislator's roll-call voting behaviour aggregated across a single congress (Nokken and Poole 2004). As with NOMINATE (Poole and Rosenthal 1985), Nokken-Poole ideal points scale legislators from −1 to 1, where negative scores correspond with a more 'liberal' voting record, and positive scores correspond with more 'conservative' voting. We use this dynamic measure of representative position to capture adaptation and replacement effects. We expect that representatives in districts experiencing factionalism will either adapt their voting practices towards the right or be replaced by someone whose preferences align more closely with those of the conservative faction in their district. In our analysis section, we isolate the replacement effect using NOMINATE scores[2] to better understand the underlying mechanism driving our results.

Treatment variable: factionalism

We operationalize local factionalism as the interaction of two components: Tea Party activist presence and Tea Party candidate presence. The interaction of these variables produces the treatment variable, an indicator where one corresponds with districts where activists and candidates are both present. We explain each component below.

Activist presence

The activist presence proxy comes from an enhanced version of Rachel Blum's list of local Tea Party groups (Blum 2020). This list includes all Tea Party activist groups with an online presence (for example, website, meetup page, ning, Facebook, Twitter) between 2012 and 2014. Initially, these groups were geocoded using the district boundaries of the 113th Congress (2013–2015).[3] In 2020, this list was updated to include group ZIP codes using archived versions of Tea Party group pages, enabling precise identification of Tea Party group locations both pre- and post-2010 redistricting.

   We construct the indicator variable for activism presence by referencing the distribution of Tea Party group-per-district. As Fig. 1 shows, all but 17 congressional districts hosted at least one Tea Party group during the treatment period.[4] The average number of groups per district was 6.25, the median was six, the 25th percentile marker was three, and the 75th percentile marker was nine. To identify districts where the Tea Party was strong enough to pressure the local party, we collapsed this count variable into an indicator variable where one (1) corresponds with districts above the 25th percentile (three or more groups), and zero corresponds with districts containing fewer than three groups. Collapsing this count variable to an indicator also prevents at-large and highly populated districts at the right-hand side of the distribution from skewing our estimates. To ensure our results are not an artefact of the cutoff decision made here, we repeat our main analyses moving this boundary to the robustness checks section of our supplementary materials.[5]

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[2]Which use the same scaling method as Nokken-Poole scores aggregated across a representative's career, meaning they do not allow for intra-representative adaptation.

[3]By 2015, most groups had either stopped updating their websites, switched to a different web hosting platform, or transitioned exclusively to a social media platform (typically Facebook) which they primarily used to share memes, making it impossible to use group websites to draw accurate conclusions about changes over time. These data thus provide a maximum count of the number of active Tea Party groups in a given district during the faction's heyday. These data overlap substantially with the list of local groups in Skocpol and Williamson (2012).

[4]The district with the most Tea Party groups was Montana's at-large congressional district (32). Other districts towards the maximum end of the distribution were either at-large or highly populated districts.

[5]Our results for H2 are robust regardless of the number of TP groups used as the cut-off (Table C2, supplementary material); our results for H1 lose significance when we use one or two groups as the treatment cut-off (Table C1, supplementary material). The results and implications of our robustness checks are discussed at the end of our analysis section.
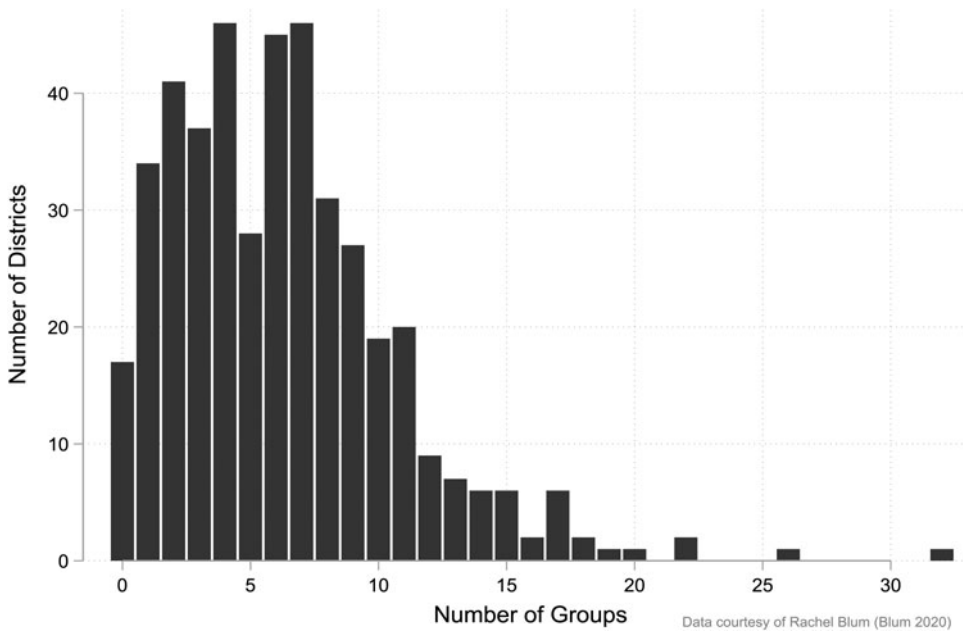
Figure 1. Distribution of Tea Party groups by congressional district.

Candidate presence

The Tea Party candidate presence was adapted from Mike Cowburn's dataset of primary candidates (Cowburn 2022). Candidate presence was hand-coded as one (1) when a district had at least one contested primary featuring a Tea Party-aligned candidate during our treatment period and zero if it did not. We define contested primaries as those where two or more candidates are listed on the Republican primary ballot. We include contested nominations from all fifty states. For states with nonpartisan primaries (California, Louisiana, and Washington), a contested primary means that two or more Republicans compete in the same district.

Candidates were coded as Tea Party-aligned if they met one or more of the following criteria: (1) they expressed support for or publicly associated with the Tea Party on platforms including active or archived campaign websites, media interviews, and speaking appearances at Tea Party events; (2) they received direct endorsements or funding from Tea Party political action committees (PACs) such as Tea Party Express, FreedomWorks, and Tea Party Patriots; (3) they received direct endorsements from notable figures in the Tea Party (for example, Michele Bachman, Sarah Palin, Jim Jordan, Ted Cruz, Jim DeMint); and (4) if serving in Congress, they held membership in a Tea Party-aligned caucus, defined as the Tea Party Caucus, Liberty Caucus, or House Freedom Caucus (Bloch Rubin 2017; Blum 2020). When a candidate's alignment with the Tea Party was unclear based on these criteria, campaign positions were referenced (5), with direct expressions of hostility towards the Republican Party establishment taken as indicative of Tea Party alignment.[6]

Figure 2 shows the breakdown of contested Republican primaries in the three congressional election cycles during our treatment period (2010, 2012, and 2014). Although the number of contested primaries varied (274 in 2010, 223 in 2012, and 188 in 2014), the proportion of contests

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[6]Similar methods for coding primary candidates' factional affiliation have been undertaken elsewhere, most comprehensively in *The Primaries Project* (Kamarck and Podkul 2018) and most similarly in coding Tea Party affiliation of candidates in the 2010 primary and general election cycle (Jewitt and Treul 2014).
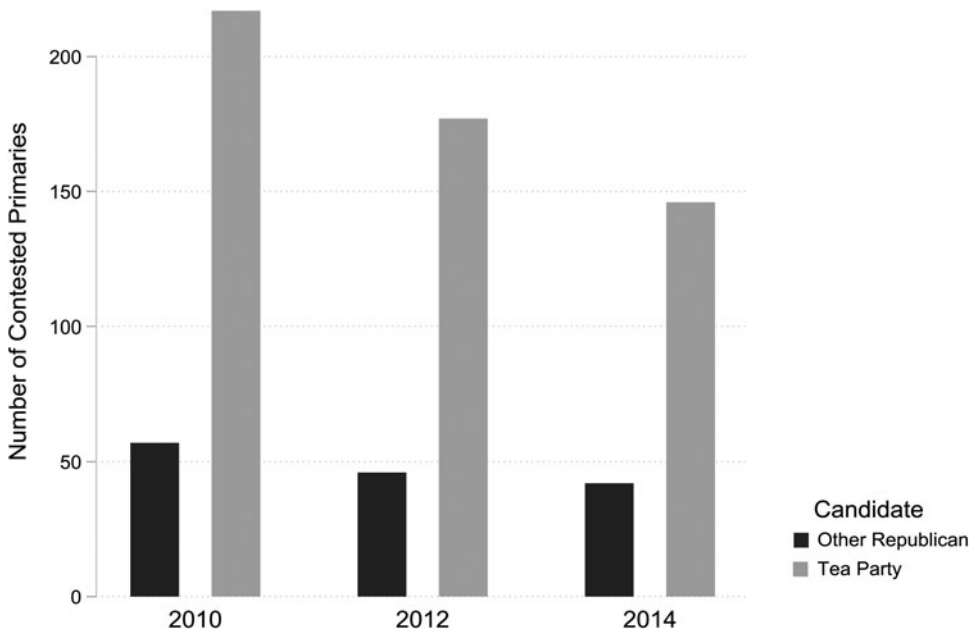
Figure 2. Tea Party candidates in contested republican primaries.

featuring at least one Tea Party candidate remained stable. For example, in 2010 and 2012, 79 per cent of contested primaries featured at least one Tea Party-supported candidate; in 2014, 78 per cent did.

District-level controls

We balance our control and treatment groups on factors that might offer alternative explanations for why a district could experience factionalism or move rightward. Table 1 summarizes these 'true confounders' (Austin 2011): percentage of white voters, median household income, median age, rural-urban population, and pre-treatment partisan control. These variables are exogenous to but predictive of both our treatment variable of Tea Party presence (Walker 2011; Willer, Feinberg, and Wetts 2016), our outcome variables of voting behaviour (Gelman et al. 2007; Gramlich 2020), and ideological position (Jardina 2019; McCall and Manza 2011). Data on district whiteness, median household income, and median age come from one-year American Community Survey (ACS) estimates.[7] Our measure of district density comes from the CityLab project (Montgomery 2022) and is balanced according to CityLab's fuzzy-c means clustered groups, ranging from pure rural to pure urban. Even balancing on these diverse explanations of the Republican Party's rightward movement, underlying partisan differences may contribute to the distance between our control and treatment districts, meaning we also balance pre-treatment partisanship in the form of partisan control of the district in the final pre-treatment period, 2008.[8]

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[7]Using the GETCENSUS Stata module (Zippel et al. 2022).

[8]Given that we can demonstrate 'raw' partisan trends absent the balancing of districts (Figure B1 & B2, supplementary materials), balancing on pre-treatment outcomes does not violate the assumptions for a DiD design. In our robustness checks, we include more granular levels of partisanship, including an originally constructed partisan index and 2008 PVI (Table C17, supplementary materials). As in several of our other checks, our findings for H2 are robust to these more granular controls, though our results for H1 lose some significance.

Redistricting

Our analysis time frame overlaps with the post-2010 census redistricting cycle. Measurements up to and including 2010 are based on the 2000 census district boundaries, and our measurements from 2012 onwards are based on boundaries drawn using the 2010 census. We address incongruences by matching districts based on shared populations, using the method detailed by Crespin (2005) and data from the Geographic Correspondence Engine (Missouri Census Data Center 2014). This approach spatially intersects boundaries of the old and new districts using census tract files of population counts to match new (post-2010) districts with their 'most similar' or 'parent' districts prior to redistricting based on population overlap (Cox and Katz 2002). This approach enables us to track continuity even in defunct or newly created districts and in states where boundaries or district numbers were reconfigured following redistricting (for example, California, and Florida). In districts with a minimal change in district boundaries, the shared populations are at or close to 100 per cent. In all states, this approach ensures that incumbents are held constant when the geographic territory they represent is reconfigured by redistricting. We control for other district-level differences between our control and treatment groups through our identification strategy.

Identification Strategy

Here, we discuss how our treatment and control groups differ in ways that might affect our outcomes and how our identification strategy mitigates these differences. We focus on the components necessary to satisfy the stable unit treatment value assumption (SUTVA): that is, comparable units and parallel trends prior to treatment. First, we balance districts that do and do not experience local factionalism by estimating propensity scores from district-level characteristics not affected by our treatment or outcomes. We then use the inverse probability of treatment weighting (IPW) to balance our groups. Next, we demonstrate the validity of this process by presenting the weighted distributions of our propensity scores and balancing statistics. Finally, we demonstrate that both models meet the parallel trends assumption (PTA).

Difference-in-differences design

We use a 2×2 DiD identification strategy to isolate the impact of local factionalism on district partisanship. Our analyses of presidential vote share use data beginning in 2000, with the 2008 presidential election as the final pre-treatment period and the 2016 presidential election as our post-treatment period. Our analyses of legislator change include data beginning in the 109th Congress and consider the congresses immediately after the 2008 and 2016 presidential elections as the final pre- (111th) and post-treatment (115th) periods.

Our DiD estimator $\hat{\delta}_{it}$ is the difference in the sample average outcome for treated districts pre- and post-treatment $(\bar{Y}_1^T - \bar{Y}_0^T)$ minus the difference in the sample average outcome for untreated districts pre- and post-treatment $(\bar{Y}_1^C - \bar{Y}_0^C)$. We model the treatment effect on our outcome variables using pooled ordinary least squares (OLS) regression rather than two-way fixed effects (TWFE) because our panel ID (district) is unbalanced by redistricting, making OLS more precise (Lechner, Rodriguez-Planas, and Fernández Kranz 2016). In addition, we report results using robust standard errors clustered at the district level to correct autocorrelation and heteroscedasticity (Bertrand, Duflo, and Mullainathan 2004). Finally, we use the following additive form for both models:

$$Y_{it} = \alpha + \lambda_t^{2016} + \gamma_i^{\text{Factionalism}} + \delta_{it}^{(2016 * \text{Factionalism})} + \varepsilon_{it}$$

where Y is our respective outcome variable in district i at time t. α is the constant, the value of the control group in the pre-treatment period. λ indicates the post-treatment period, labelled as '2016 (Time)' below. A district assigned to the treatment group is denoted by γ and reported as 'Factionalism (Treatment)'. The interaction of the effect of treatment and time, δ, is our main DiD estimator, labelled 'Diff-in-Diff (Time × Treatment)' in the analyses below.

Comparable units

Identifying comparable units in the pre-treatment period is a key challenge for estimating DiD using observational data. We first estimate propensity scores using the district-level controls discussed above and then use IPW to balance our treatment and control groups (Abadie 2005; Desai and Franklin 2019), thereby satisfying the assumption of conditional independence.[9] The propensity scores are the probability of a district being assigned to the treatment group based on observable covariates (Rosenbaum and Rubin 1983). This mitigates bias and endogeneity issues that can result from generating propensity scores from outcome variables (Rosenbaum 2012; Rubin 2007). We estimate propensity scores via a fitted logistic regression, where all observations are on a common support, meaning we do not trim our data. We estimate weights separately for districts in the pre- and post-treatment periods – as validated elsewhere (Stuart et al. 2014) – enabling us to include all 435 districts before and after redistricting, including districts that only exist in one time period.[10]

Prior to weighting, districts with high propensity scores were disproportionately assigned to the treatment group (Fig. 3, left). These districts tended to be older, whiter, and in rural areas of Republican-leaning states; examples include Indiana's 9th, Kentucky's 4th, Missouri's 7th, Nebraska's 3rd, and West Virginia's 2nd districts. Ninety-eight districts in 2008 had propensity scores above 0.7 in the treatment group, compared to 37 in the control; in 2016 there were 110 and 37 districts in the respective groups. We show the greater similarity of propensity score distribution after weighting in Fig. 3 (right).

Table 2 clarifies how IPW alters our data, with weights for both groups and a comparison of means and sample variances of our unweighted and weighted baseline covariates, in line with IPW best practice (Austin and Stuart 2015). Our weighting process reduces the standardized mean differences (SMD) between our control and treatment groups' characteristics to zero, giving confidence that we satisfy the conditional independence requirement.

Parallel trends assumption (PTA)

DiD estimation assumes that the treatment and control groups should follow parallel trends with respect to the pre-treatment outcome variables, conditional on confounders (see for example, Heckman, Ichimura, and Todd 1997). To satisfy SUTVA, we must be reasonably sure that differences between the two groups were constant prior to treatment and would have remained constant over time absent treatment. We evaluate PTA by graphing the differences between treatment and control groups across three pre-treatment observations in Figures 4 (H1) and 5 (H2). Both figures indicate parallel trends with similar differences between groups during the pre-treatment period. These trends deviate during our treatment period, consistent with PTA, indicating the suitability of our control and treatment groups.

Analysis

We present the full results of both main models, including weighted means and coefficients, in Tables 3 and 4. Finally, we extend each of the analyses in Fig. 6 and Table 5.

Presidential Vote Share

In Table 3 (and Fig. 4), we show the weighted means and regression coefficients for Republican vote share in treated and control districts in our pre- and post-treatment periods to evaluate the district-level factionalism's impact on the district Republican presidential vote share (H1). Voters

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[9]IPW has the additional advantage of allowing us to assign weights that vary over time instead of having a weight fixed to the pre-treatment panel ID of congressional districts.

[10]Using fixed weights or coarsened exact matching removes many redistricted congressional districts and gives potential spurious weights to districts that were radically transformed by the redistricting process.
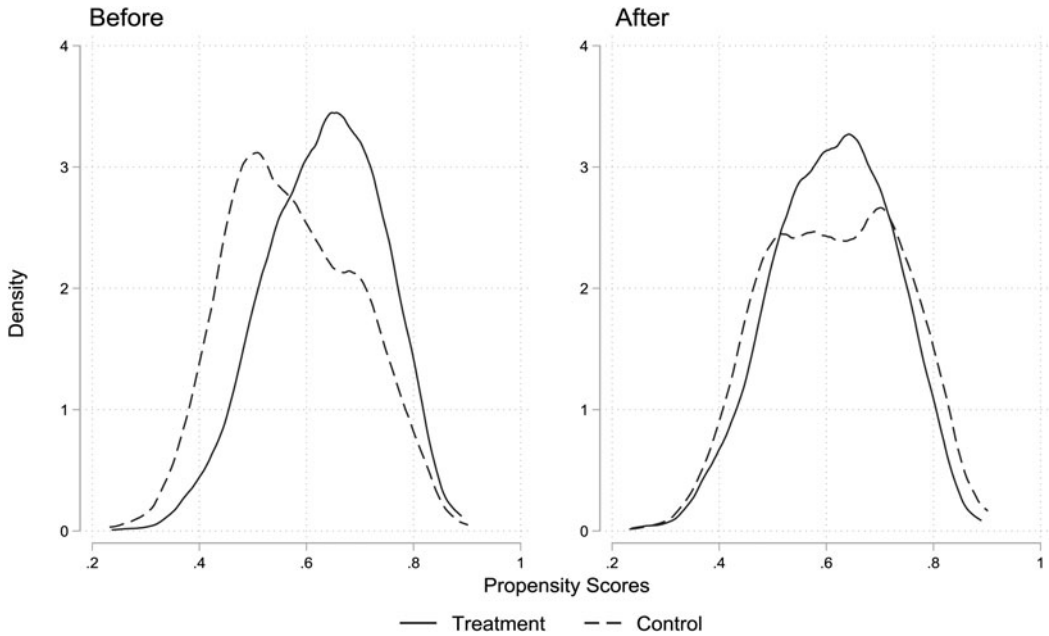
Figure 3. Congressional district propensity scores before and after weighting.

Table 2. Summary of balance and weighting scheme

Values of Weights (IPW)	Mean	Sd	p50	Max	Min	SMD
Control	2.601	0.982	2.287	10.171	1.302	–
Treatment	1.631	0.318	1.565	4.232	1.12	–
Unweighted values						
Per cent white (Control)	37.911	33.622	33.500	96.6	0.026	–
Per cent white (Treatment)	48.000	36.305	62.925	95.8	0.098	0.288
Median Income (Control)	$54,555	$16,778	$51,647	$125,675	$19,311	–
Median Income (Treatment)	$54,992	$15,244	$51,700	$129,821	$25,630	0.027
Median Age (Control)	36.591	3.956	36.7	51.1	22.3	–
Median Age (Treatment)	37.929	3.468	37.8	55.7	21.0	0.360
Rural–Urban (Control)	3.443	1.846	3	6	1	–
Rural–Urban (Treatment)	3.408	1.551	4	6	1	−0.021
Democratic 2008 (Control)	0.682	0.466	1	1	0	–
Democratic 2008 (Treatment)	0.524	0.500	1	1	0	−0.327
Weighted values						
Per cent white (Control)	44.607	35.029	48	96.6	0.026	–
Per cent white (Treatment)	44.234	36.398	56.1	95.8	0.098	−0.010
Median Income (Control)	$54,584	$16,216	$51,738	$125,675	$19,311	–
Median Income (Treatment)	$54,751	$15,353	$51,576	$129,821	$25,630	0.010
Median Age (Control)	37.598	4.045	37.7	51.1	22.3	–
Median Age (Treatment)	37.480	3.542	37.4	55.7	21.0	−0.031
Rural–Urban (Control)	3.416	1.81	3	6	1	–
Rural–Urban (Treatment)	3.421	1.585	4	6	1	0.003
Democratic 2008 (Control)	0.570	0.495	1	1	0	–
Democratic 2008 (Treatment)	0.580	0.494	1	1	0	0.021

in treated districts shifted towards the Republican candidate between 2008 and 2016 compared to voters in control districts. In 2008, there was roughly a six-point difference (5.740) in Republican vote share between districts in treatment and control groups, with treated districts voting for the
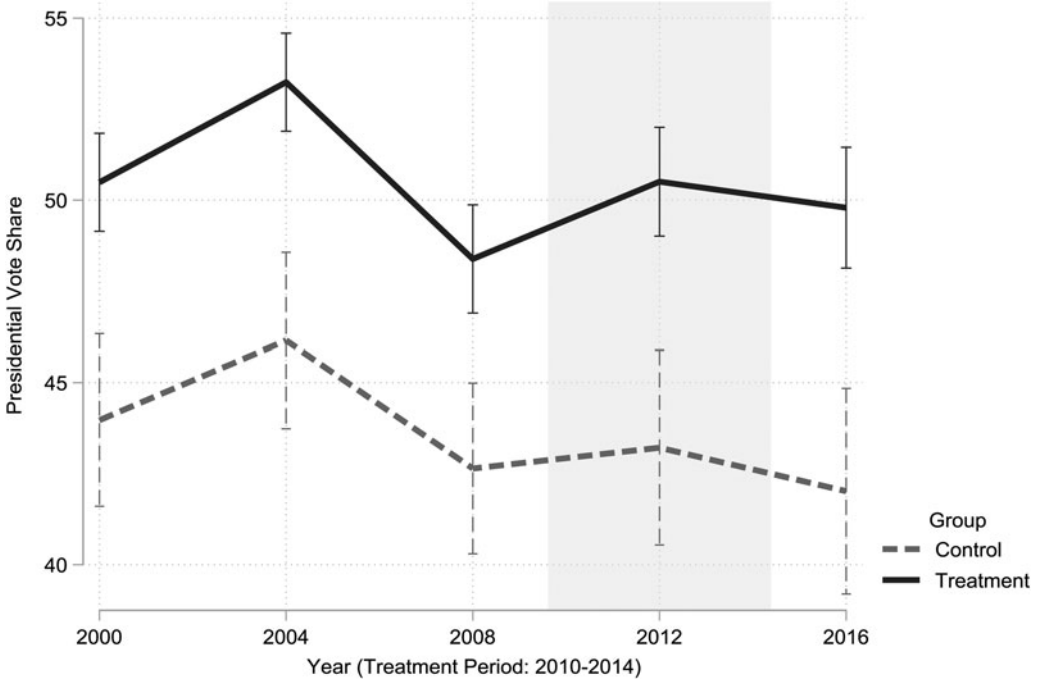
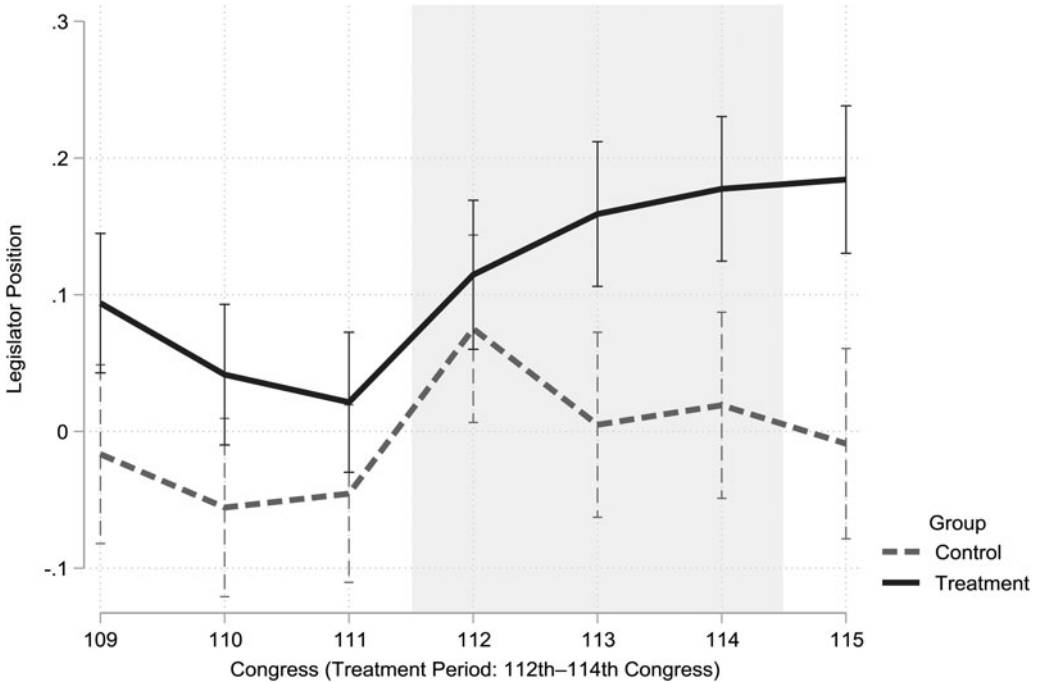**Figure 4.** Presidential vote share parallel trends.

Figure 5. Legislator position parallel trends.

Table 3. Presidential vote share model

	Pres vote share
2016 (Time)	−0.623
	(0.806)
Factionalism (Treatment)	5.740***
	(1.460)
Diff-in-diff (Time × Treatment)	2.032*
	(1.182)
Observations	870
R^2	0.047
Mean Control 2008	42.64
	(1.232)
Mean Treated 2008	48.38
	(0.783)
Diff 2008	5.740
	(1.460)
Mean Control 2016	42.02
	(1.552)
Mean Treated 2016	49.79
	(0.878)
Diff 2016	7.772
	(1.783)

Robust standard errors are in parentheses.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4. Legislator position model

	Legislator position
2016 (Time)	0.037
	(0.031)
Factionalism (Treatment)	0.067
	(0.044)
Diff-in-diff (Time × Treatment)	0.126***
	(0.043)
Observations	870
R^2	0.037
Mean Control 2008	−0.046
	(0.036)
Mean Treated 2008	0.021
	(0.026)
Diff 2008	0.067
	(0.044)
Mean Control 2016	−0.009
	(0.038)
Mean Treated 2016	0.184
	(0.029)
Diff 2016	0.193
	(0.047)

Robust standard errors are in parentheses.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Republican presidential candidate at a slightly higher rate. By 2016, this gap increased to roughly eight percentage points (7.772).

Most of this effect came via improved performance in factional districts, where Donald Trump's vote share (49.79 per cent) was roughly 1.5 percentage points more than McCain's (48.38 per cent). By contrast, Trump's vote share in non-factional districts (42.64 per cent) was slightly less than McCain's (42.06 per cent). Therefore, the primary object of interest
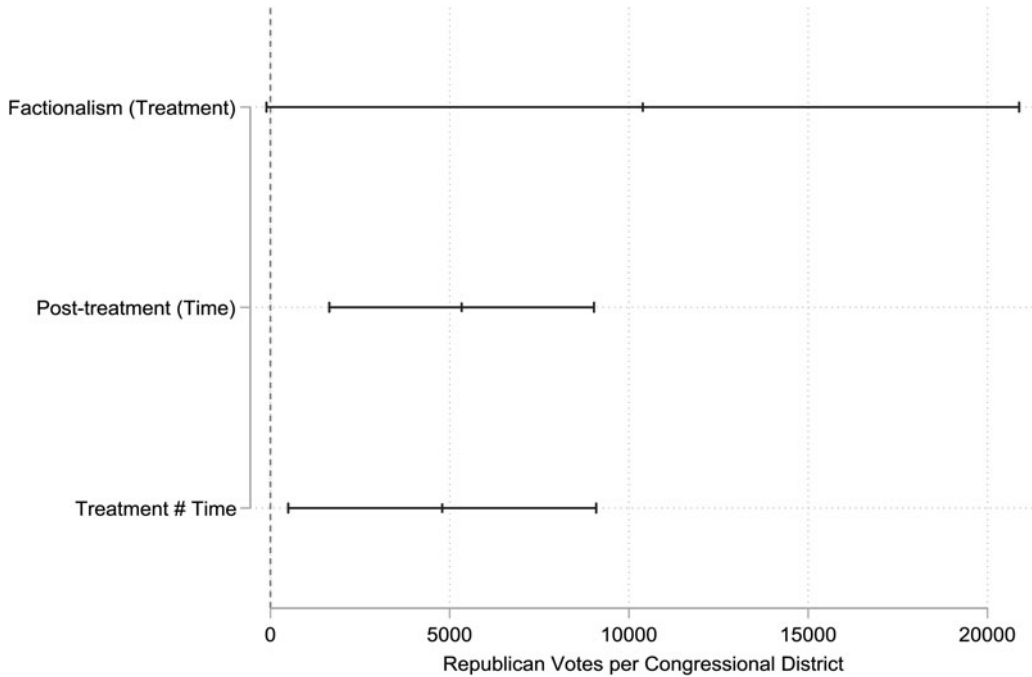
Figure 6. Republican presidential votes from 2008 to 2016.

Table 5. H2 Replacement effect only

	Leg replacement (DW-NOMINATE)
2016 (Time)	0.028
	(0.031)
Factionalism (Treatment)	0.074*
	(0.043)
Diff-in-diff (Time × Treatment)	0.103**
	(0.042)
Observations	870
R^2	0.031
Mean Control 2008	−0.026
	(0.035)
Mean Treated 2008	0.048
	(0.026)
Diff 2008	0.074
	(0.043)
Mean Control 2016	0.002
	(0.037)
Mean Treated 2016	0.179
	(0.027)
Diff 2016	0.176
	(0.046)

Robust standard errors are in parentheses.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

in Table 3 is the DiD coefficient, indicating that local factionalism had a weakly significant ($p < 0.1$) positive effect on Republican vote share. *Ceteris paribus*, local factional pressure improved Republican presidential performance by roughly two points (2.032) between 2008 and 2016, plus or minus about a point (1.182).

Raw number of republican votes

Several mechanisms could have driven the improved Republican performance in presidential elections. First, we might be observing a mobilization effect (Holbrook and McClurg 2005) due to the efforts of an engaged faction in the district. To test this mechanism, we isolate the number of Republican votes in a congressional district in 2008 and 2016 and repeat our main analysis with the raw number of votes for the Republican presidential candidate as our dependent variable, using the 2016 district boundaries for both years (Daily Kos 2016).[11] Unfortunately, due to restrictions on data availability, we cannot go back in time to demonstrate the necessary assumptions for a causal design, as in our main analysis. We nevertheless demonstrate a substantively significant relationship between the interaction of time and treatment variables and the number of votes for the Republican presidential candidate in each district in a pooled OLS regression model.

The time coefficient in Fig. 6 indicates that all districts saw higher numbers of Republican votes in 2016 than in 2008. Nevertheless, being in our treatment group was associated with almost five thousand (4,792) additional Republican votes in 2016, give or take two thousand (2,185) votes. Though the design here means that we cannot attribute causality, this significant relationship suggests that our main finding in H1 is driven by Tea Party factionalism mobilizing Republicans in our treatment districts. That most of the effect in our main analysis was the result of an increased vote share in treatment districts rather than reduced performance in control districts further aligns with this claim. The lower significance of the effect in our main analysis may indicate that factional Republican engagement also mobilized Democratic voters (see also Ballard, Hassell, and Heseltine 2020).

Legislator Position

The partisan shifts brought about by district-level factionalism might also have influenced the behaviour of elected officials. Specifically, we expect a move to the right among representatives from treated districts, compared to other representatives (H2).

Figure 5 shows the weighted means with confidence intervals for our control and treatment groups. In the 111th Congress, the ideal points of representatives from districts assigned to the treatment and control groups were not significantly different (0.067), but by the 115th Congress, a clear difference had emerged. As shown in Table 4, representatives in our control group moved only slightly (non-significantly) to the right (0.037). By contrast, representatives from districts that experienced local factionalism were significantly further to the right post-treatment, with a 0.126 DiD effect. This effect is larger than the asymmetry in partisan differences between the mean Republican and Democratic representatives in the 115th Congress (0.090). In other words, representatives from districts experiencing local factionalism moved more than three times further rightward (0.126) than those from districts that did not (0.037). In the supplementary material (Table C12), we repeat this analysis using the 116th Congress (2019–2021) as our first post-treatment observation. The effect remains in this analysis, though it decreases slightly in size, indicating an element of 'decay' post-Tea Party.

Representative adaptation or replacement

We also analyze whether these effects are the result of representatives adapting their positions over time or being replaced by new representatives further to the right. Our dataset includes eighty Republicans in the 111th and 115th congresses who may have been subjected to an adaptative effect. An additional 161 Republican representatives are present only in the post-treatment

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[11]This approach has the additional benefit of mitigating any potential effects of our redistricting strategy, as both our pre- and post-periods use the same districts.

period and might contribute to a replacement effect.[12] Of these 161 representatives, 131 were more conservative than the equivalent representative in the pre-treatment period, and 29 were more moderate, with one representative having an identical score. One-congress-at-a-time NOMINATE, our dependent variable in our main model above, allows for variation both within and between representatives. We, therefore, repeat our analysis for H2 using DW-NOMINATE scores as our dependent variable. Because these scores are estimated over a politician's career,[13] this analysis only allows for variation *between* representatives (replacement).

Table 5 shows the results of this additional model. Replacement appears to drive our main results for H2, contributing 0.103 of 0.126, roughly four-fifths of the effect. This finding aligns with other research indicating that the replacement of more moderate members by comparatively extreme alternatives drives congressional polarization (Theriault 2006). In districts that experienced factionalism, newly elected Republican representatives were more consistently conservative in their roll call voting behaviour than the representatives they replaced. Examples of this replacement effect in factional districts include Florida's 1st District, where Jeff Miller (Nokken-Poole score of 0.591 in 2008) was replaced by the more conservative Matt Gaetz (0.931 in 2016) and Michigan's 3rd District, where Vern Ehlers (0.310 in 2008) was replaced by Justin Amash (0.558 in 2016).

Representative adaptation contributes less to our main finding, in line with research that indicates that members of Congress 'die in their ideological boots' (Hall and Snyder 2015, 28). Anecdotally, many Republican representatives in treated districts, who were present in both periods, did not become systematically more conservative in their voting behaviour, regardless of their ideological position within the party. Relative moderates such as Don Young (0.242 in 2008, 0.277 in 2016), those from the middle of the party such as Joe Wilson (0.524, 0.508), and highly conservative members such as Kenny Marchant (0.619, 0.591) remained relatively consistent in their Nokken-Poole scores. However, a few representatives from factional districts, such as John Duncan (0.694 in 2008, 1 in 2016), did adapt their positioning in a conservative direction during the treatment period.

Summary and Robustness

We find that Republican legislators moved further to the right following the entrance of the Tea Party faction (H2). This movement appears to stem from legislator replacement rather than the adaptation of incumbents. The rightward movement of voters (H1) in districts where the Tea Party was active is substantively and statistically smaller, though improved Republican performance appears connected to partisan mobilization in factional districts.

We subject both models to a series of robustness checks.[14] We summarize these results and present them in full in our supplementary materials. These checks increase our confidence that factional activity moved the party at the elite level in a more conservative direction (H2). Our findings for H2 are robust to all checks, retaining significance in the theorized direction. For both hypotheses, no matter how we measure factionalism, the direction of the results is the same. Whereas representatives appear responsive to any factional pressure, voters are more

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[12]Ninety-eight Republican representatives were present in 2008 but not in 2016.

[13]For example, Rep. Don Young scores 0.283 in each congress from the 93rd to the 117th.

[14]These include: moving the boundary for the number of Tea Party groups, using the separate components of the local factionalism variable – activist presence and candidate presence – as our treatment, restricting primary challengers who received at least 25 per cent of the vote, restricting our analyses to 'quality' challengers, restricting primary challengers who filed campaign receipts with the Federal Election Commission (FEC), using static weights based on 2008 district boundaries, extending our treatment period to include primaries in 2016, repeating our analysis of legislator position using 2018 as the post-treatment period, using lagged versions of our dependent variables, including the alternative dependent variable as a confounding variable, using a variety of alternative DiD estimators, and adding more granular controls for district partisanship.

responsive to a more visible factional presence where pressure in primaries alone does not affect voting behaviour in presidential elections. H1 appears sensitive to a 'critical mass' of factionalism, requiring a local factional structure that shadows the party structure – measured as having several groups alongside factional candidates – and is thus powerful enough to elicit a response from voters. Local factionalism may, therefore, be better conceived as a spectrum rather than as dichotomous in its effect on voters.

As a further check, we conduct two placebo tests on each model, constructing independent placebos for treatment and time. For the treatment placebo, we show that using alternative measures of district partisanship in 2008 to assign treatment does not produce significant results in equivalent models. In the second set of placebo tests, we keep the treatment assignment from our main analysis but randomize the observation dates. Again, this placebo produces null effects. These results give further confidence that our results do not merely reflect underlying trends during this period or uncontrolled differences between our treatment and control districts but are caused by local factionalism.

Discussion and Conclusion

Our results underscore the role factions can play in party change, particularly at the local level. US politics has undergone a process of nationalization where even local elections are now contested over national issues (Hopkins 2018). Our findings suggest that local factional activists have found a way to retain influence in a nationalized electoral environment by focusing on national issues, potentially exacerbating the nationalization of local politics. Further, our findings suggest that the link between intra-party homogeneity and inter-party polarization may be weaker than previously thought. The presence of a faction within the Republican Party appears to have exacerbated trends towards ideological extremism, underscoring the importance of understanding how intra-party dynamics contribute to inter-party trends.

We uncovered evidence that districts experiencing a critical mass of factional pressure from both activists and candidates shifted rightward between 2008 and 2016. These results were most pronounced when it came to elite behaviour. Such findings suggest that the intra-party strife over policy, practice, and adherence to democratic norms under Trump can be understood as a continuation of factional divisions that were exacerbated during the Tea Party era. This work also highlights the importance of factions like the Tea Party in shaping parties' policy platforms, election strategies, communication, and organizational structures (Bendix and Mackay 2017; Bloch Rubin 2017; Blum 2020; Clarke 2020; Cohen et al. 2016; Cowburn and Knüpfer 2023; DiSalvo 2012; Kamarck 2014; Masket 2020; Noel 2016; Saldin and Teles 2020; Thomsen 2017).

Our results in terms of voter behaviour were less robust. Voters in treated districts, those with three or more Tea Party groups and factional primary candidates, supported the Republican presidential candidate at slightly larger margins. Districts with fewer than three Tea Party groups did not experience this effect, indicating that Republican-leaning voters trended rightwards at the presidential level only when the local factional apparatus was strong enough to achieve its objectives of taking over the operations of the local Republican Party.

Finally, our research provides a potential template for the impact that local factions on the left might have on the Democratic Party if the influence of progressives within the party continues to grow (Schoen 2021; Wehner 2019). The Tea Party on the right and progressive groups on the left differ in organizational structure and electoral strategies (Skocpol and Tervo 2020), reflecting both the Democratic Party's historic aptitude at appeasing competing interests (Manento 2019) and the different geographies of progressive voters (Medvic 2021). Nevertheless, the Tea Party's model of combining activism with primary challenges might offer a path forward for factions on the left.

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