

Campaigns and the Selection of Policy-seeking Representatives

Abstract

Can voters learn meaningful information about candidates from their electoral campaigns? As with job market hiring, voters, like employers, cannot know the productivity of candidates, especially challengers, when they elect them. The real productivity of representatives only reveals itself after the election. We explore if the information revealed during the “hiring process” is a good signal of the legislative effort of elected representatives. In the incomplete information environment of election campaigns, candidates should turn to credible signals to indicate their “type” to voters. Campaigns – and campaigning – are means by which candidates can, in principle, signal their motivations to voters. Is a candidate’s behavior on the campaign trail informative about their behavior and effort as a legislator? Does it, for example, reveal whether a candidate will be more hard working and legislatively active? Using evidence from the European Parliament we show that campaign activity prior to the election is not related to policy-seeking behavior in the legislature post-election. The finding also holds in two national-level settings and across a variety of measures of legislative effort. Those who campaign harder do seem more likely to win the election, but campaign effort seems to provide a poor guide to what the winner does once elected.

Introduction

In this paper, we explore whether or not voters can learn meaningful information about candidate type from their campaigns. As with job market hires (Spence 1973), voters, like employers, cannot know the productivity of candidates, especially challengers, when they elect them. The productivity of representatives only reveals itself over time. We explore if the information revealed during the “hiring process” of candidates for political office is a good signal of the legislative effort of elected representatives. Do election campaigns, a time of high voter-politician interaction, afford voters some means of differentiating between politicians’ motivations? Are campaigns good devices for helping to sort through who will, for instance, be a policy-seeking as opposed to an office-seeking representative?

Campaigns and campaigning are seen as a means by which candidates signal their qualities to voters (see e.g. Fridkin and Kenney 2011, and discussion below). But while campaigning may be an observable signal this does not necessarily make it a reliable signal. In this paper we examine whether campaign efforts are a good or a noisy signal. We test whether campaigns tell voters something useful about the behavior of legislators inside the European Parliament. In contrast to many chambers in which the government dominates the legislative agenda, the European Parliament provides a great deal of scope for legislators, of all parties and all levels of seniority, to take part in the policy-making process and, hence, offers a good case for us to be able to connect policy-seeking legislators with legislative effort. Additionally, this is not a legislative assembly in which representatives engage in significant levels of pork barreling or constituency service (Yoshinaka et al. 2010). As such, hardworking members focus their attention on the policy making process.

We begin by outlining the arguments within the literature that link campaigns and campaigning with candidate valence and in particular the policy-seeking motivations of candidates. From here we move to establish the relevance of policy seeking within the

European Parliament. Using candidate surveys from 19 democracies, we first test whether campaign effort is a predictor of electoral success. We find consistent evidence that candidates who work hard at election time are ones more likely to win, which validates our measure of campaign effort and shows that incumbents and non-incumbents can profit from working hard at election campaigns. We then turn to examine a range of legislative behaviors within that chamber in order to identify those who engage in policy seeking to see whether their activities as candidates would allow them to be identified as policy seeking prior to the election. In other words, the hard working candidate may well win the election, we then ask whether hard working candidates are also hard working legislators? Using several established measures of legislative effort (e.g. speeches, formal legislative activities, and participation in roll call votes), we do not find that more active campaigners are also more active in parliament. As a robustness check, we also test this relationship in two very different legislative assemblies, the Irish Dáil and the German Bundestag.

One of the patterns we find and emphasize here is that campaign effort does increase the probability of a candidate winning a seat. That is, voters do seem to respond positively to campaign effort. But what we do not observe is a consistent relationship between campaign effort and legislative effort. The candidates who work hard at election time and who, consequently win, are not the ones who seem to be very active within the legislature, as assessed by a series of measures of legislative effort that are standard within the literature.

The Role of the Campaigns in Identifying Good Legislators

Working hard at election time would seem to help candidates win. So far so straightforward. But the question remains – what kinds of candidates become successful? A familiar distinction is that between office-seeking and policy seeking candidates (Helboe Pedersen 2012; Müller and Strøm 1999). We should note that the differing motivations of candidates are not always

mutually exclusive: policy-seeking candidates still need to seek votes and win the election. But the distinction between policy- and office-seeking sets up ideal types that are useful in pointing up differing motivations that will result in different behaviors within the chamber on the part of legislators. The distinction between office- and policy-seeking is also useful in helping highlight that voters may not want to support candidates mostly driven by office-seeking motivations. Despite differences in policy preferences, voters share an interest in electing candidates who are not simply office-seekers. As voters, we do not want candidates who are only be interested in pursuing office for the kinds of instrumental reasons noted by Schumacher and Elmelund-Præstekær (2018). Rather, we want “representatives whom we can trust, and we want representatives who can get the job done” (Mondak 1995: 1045). Candidates not only have policy positions but also have qualities and traits – such as integrity or conscientiousness – that voters value (see e.g. Adams et al. 2011; Adams and Merrill 2008, 2013; Besley 2005; Carter and Patty 2015; Franchino and Zucchini, 2015; Green 2007; Groseclose 2001; Martin 2016; Nyhuis, 2016, 2018). In general the growing literature on the importance of candidate competence or valence does not see office seeking motivations in a good light. Candidate valence overlaps with ideas on policy-seeking motivations because valence attributes have an impact on legislation. Policy-making requires commitment to engaging in the legislative process and working hard within the chamber.

For this reason, legislative scholars emphasize the importance of legislators being present and participating in day to day legislative activities such as committee work, asking questions (e.g. Martin and Rozenberg 2014) or taking part in debate and making speeches (e.g. Bäck and Debus 2016; Proksch and Slapin 2015). Candidates with an interest in policy will work hard at election time precisely because they are interested in working on issues within the legislature.

As Papp notes “[t]he voters’ task at election time is to identify candidates with the promise of being ‘good’ representatives, and political campaigns should assist voter decision by providing clues on the candidates’ future behavior” (Papp, 2018: 910). The difficulty, of course, is that what candidates are actually like only becomes apparent after the election. That means policy-seeking and “high valence” candidates need to be able to signal to voters, and voters need to be able to recognize, that they are not simply office seekers but high quality candidates who will work hard once elected. The campaign and campaigning play an important role in helping voters sort out whether candidates are interested in more than just getting elected (see e.g. Fridkin and Kenney 2011: 62).

The growing literature on candidate valence is especially explicit in emphasizing the role of campaigns as a signal of candidate qualities. That is, voters may have no direct assessment of a candidate’s honesty, and probably none at the time of the election but have to rely on proxy measures provided by the campaign and a series of papers develops this idea. A “candidate’s ability to convince voters of his superior personal qualities – his leadership skills, honesty, and reliability – may depend less on his résumé than on these campaign skills...” (Bruhn 2010: 29). Serra’s model similarly contains a valence parameter that is interpreted as “the candidate’s campaigning skill” (Serra, 2011:25). Poutvaara and Takalo explicitly see campaigning as a signal of candidate ability that is increasing in ability, and a series of works makes a broadly similar point (Poutvaara and Takalo 2003: 5; see also Adams and Merrill 2008, 2013; Adams et al. 2011; Aragonés and Palfrey 2004; Buttice and Stone 2012; Carson et al. 2007; Green and Krasno 1988; Nyhuis 2016; Stone and Simas 2010). Campaigns thus become an important means by which candidates can signal to voters that they are interested in working hard once elected. In that sense, campaigns can be seen as “pledges for future behavior” (Papp 2018: 923). Papp argues that these pledges are increasingly important because personalization of campaigns and elections places a greater emphasis on personal

characteristics. The problem being that: “If there is no connection between the campaign and legislator behavior voters are not provided with the right hints on how well MPs are likely to represent their interests, which leads to the breaking of the electoral connection” (Papp 2018: 909). That is, within the literature, and especially within the literature on candidate valence, we see the argument advanced that campaign effort itself is a signal of candidate valence, but how plausible is this tie between campaigning and valence? It is the case that, as Giebler and Wessels show, campaign effort by a candidate (time devoted to a campaign) is positively related to name recognition (Giebler and Wessels 2017). This pattern sets up the straightforward expectation that we should see a relationship between campaign effort and campaign success. But this point only reinforces the questions posed by Papp and others: if the candidates who work hardest during the campaign are the ones most likely to win what kinds of legislator are they after they have won? The valence literature suggests that campaign effort is a signal of underlying candidate traits and a straightforward expectation is that a hard-working candidate will be a hard-working legislature. The plausibility of this expectation is buttressed by empirical work on campaigns and candidate traits.

Nyhuis, for example, points out that “effective campaign efforts are likely to showcase aspects of the candidates’ personality and thus alter public perceptions of candidates’ character valence” (Nyhuis 2016: 34). Campaigning can make a candidate’s characteristics clearer to the voters, i.e. voters will receive more information on the candidates who are campaigning hardest and therefore they should know more about the candidates. If a candidate has made a lot of campaign effort (i.e. sent many signals), voters (as principals within a principal-agent framework) should be able to scrutinize their potential agents thoroughly. With more information about a given candidate then voters are potentially better able to “weed” out bad candidates, since they have more information, and they thus get “better” legislators. As Spence puts it in terms of the hiring decision (one example of the kinds of principal-agent relationship

at play here): “In most job markets the employer is not sure of the productive capabilities of an individual at the time he hires him ... The fact that these capabilities are not known beforehand makes the decision one under uncertainty” (Spence: 1973: 356). Some signals may help reduce the uncertainty and be good signals of the underlying qualities being sought. At other times employers (voters) may have to rely on proxy measures which may not, in the end, be good measures.

The problem facing voters, of course, is that the campaign may well provide a noisy signal. For incumbents, voters will have the record of the candidate in office to rely upon, for many challengers the main signal will be provided by the campaign. But, for many candidates and many voters, the campaign is the proxy signal being sent and received. Sometimes, the noisiness is quite evident. For example, in addition to demographic traits such as race or gender “one element that is generally associated with electoral results is candidate attractiveness.... Moreover, perceptions of competence are also positively related to electoral outcomes, although not independent of candidate appearance as voters might apply visual cues to make judgments on candidate competence” (Nyhuis 2016: 34). Work in political psychology on implicit bias provides an account of how these factors may work at the micro-level of vote choice. In his work on candidate traits and electoral success Hayes, for example, shows that candidate behavior creates trait ownership of such traits as compassion and decency: “Since citizens rarely have a chance to see candidates in person, much less carry on a one-on-one conversation, trait inference is likely to be even more important in campaigns, as this represents the only real chance to form a global impression of a candidate” (Hayes: 2005: 910; see also Clifford 2014; Fridkin and Kenny 2011; Hayes 2010). Overall, the literature is clear that voters infer from the campaign a message about the kind of person a candidate may be and so what kind of legislator they may be. Given that voters are willing to infer traits from cues such as demographics or even appearance it is reasonable to suggest that candidate behavior has a

similar effect. In other words, the empirical literature shows that, as the literature on valence suggests, voters both can and will draw inferences from comparing a candidate working hard at election time to a candidate who is not campaigning very much at all.

Another argument for the plausibility of the link between campaign effort and legislative effort developed within the literature on valence rests within the literature on policy-seeking motivations. The literature on valence, and especially the more formal literature, argues that campaigning – and campaign effort – are a means by which candidates may signal, albeit noisily, to voters that they are interested in being a representative for reasons more than simply seeking office for its own sake. As Schumacher and Elmelund-Præstekær put it “A policy-seeking politician cares about parliamentary elections because more seats for the party mean more bargaining power over policy. An office-seeking politician cares about elections because of their instrumental rewards” (Schumacher and Elmelund-Præstekær 2018: 331). Importantly, policy-seeking candidates can *only* realize their policy ambitions if elected to office while candidates with other ambitions may be able to satisfy those ambitions in other arenas. Thus policy-seeking candidates should be especially motivated to work hard at election time because no other career or venue will serve those interests. In short, while the empirical literature suggests voters do draw inferences about candidate qualities from campaigns which may or may not be correct, it is also the case that there is an argument for voters being sensible to do so, grounded in how policy-seeking motives may be satisfied.

Drawing together these different strands what we see is an argument that candidate valence is important and that campaigns provide a (noisy) signal of that valence. The empirical literature shows that voters can and do draw inferences from that noisy signal but that there are reasons, both from the empirical literature and the argument of policy-seeking, to see that while the signal may be noisy it is at least plausible. This leads to two hypotheses which center on the tie between campaigning and legislative effort. Our focus is on whether campaigning does

indeed, as the literature suggests, signal that the candidate will be interested in policy-seeking i.e. that the candidate is working hard to get elected in order to take part in policy-making.

The first of which is straightforward and falls out of the literature on valence to the effect that campaigning should have consequences at election time.

H1: Candidates who work hard during the campaign are more likely to be elected.

If this hypothesis holds candidates who work hard during the election will be more likely to get elected. But that still leaves open the question of what kind of legislator these candidates will be after they have won election. This we address with our second hypothesis, which is grounded in the literature on valence and policy-seeking motivations noted above:

H2: Conditional on getting elected, candidates who work hard during the campaign are more likely to be policy seeking/legislatively active within the legislature, than candidates who exert less effort during the campaign.

The implication of this hypothesis is that – assuming H1 holds – then those candidates who work hard to win elections will also be ones who will spend time within the legislature on activities related to policy making. If, by contrast, there exists no relationship between campaigning and legislative effort then these would-be candidates – once elected – do not engage in policy making activities. This would be evidence more consistent with office-seeking motivations.

Matching behavior during campaigns to behavior in the chamber post-election will then help us understand the goals and motivations of candidates. It is worth emphasizing that the null hypothesis does have some troubling implications. Campaigns offer a means for candidates to signal, and voters to observe, candidate qualities. If the observable behaviors are not a useful signal (i.e. active campaigners tend not to engage the legislative process once

elected) then this is problematic for the broader role of campaigns in helping choose quality candidates and identifying the most motivated policy-seeking candidates.

Case Selection

The European Parliament (EP) provides a good case for us to test this argument for two main reasons. First, the legislature itself allows scope for individual legislators to engage in policy-making (see for example discussions of the EP within Corbett et al. 2000; Judge and Earnshaw 2003; Hix et al. 2007; Hix and Høyland 2013; Kreppel, 2002; McElroy and Benoit 2007, 2012; Wilson et al. 2016). This stands in contrast to other legislatures where policy entrepreneurship by individual legislators is more constrained. Government dominance of the legislative agenda and a relatively weak committee system mean legislators in many parliaments, such as that of the UK (Döring 2001), have limited opportunity to engage in policy-making. The EP's process of legislative reports and strong committee system provide more opportunity for individual legislators to engage in policy and, hence, provides opportunities to candidates with policy-seeking motivations (Bowler 2000; Yoshinaka et al. 2010). Furthermore, given the relative lack of pork to distribute within the EP (Moravcsik 2008; Yordanova 2009; see also McElroy 2006, 2007 for a discussion) and weaker than average electoral connections, we can interpret legislative activity as being largely policy driven (as opposed to, for instance, being motivated by office seeking/distributive incentives). Secondly, any tie between elections and legislative behavior in single member district systems is shaped by the electoral system. Campaign activities and legislative activities may well be linked for policy seeking candidates, but one complicating factor is that in districted elections – and especially single member districts – candidate effort may not signal “type” of candidate so much as the competitiveness of the race. Competitive seats tend to produce harder working legislators and campaigning per se may not

be a direct and reliable predictor of legislator quality.¹ However, members of the European Parliament are all elected via multi-member districts in proportional representation systems.

More pragmatically, we also need to be able to tie measures of campaign activity to measures of legislative activity at the level of individual legislator and we do this by matching candidate surveys to measures of legislative activity. Measures of both campaign activity and legislative activity are well established within their respective literatures. For example, candidate surveys commonly include questions that are aimed at measuring individual campaign effort and these are used to understand campaign activity in a variety of ways, from the impact of activity and effort on turnout to the effect of electoral system on activity (see for example Fisher and Denver 2008; Karlsen and Enjolras 2016; Pattie et al. 1995; Sudulich et al. 2013; Sudulich and Trumm 2019; Vergeer et al. 2013; Zittel 2015; Zittel and Gschwend 2008). The literature on campaigning, then, sees campaign effort as a meaningful aspect of campaign activity and has well-developed metrics of activity and effort. Thus, a third, subsidiary, reason for choosing the EP as a case is that appropriate (non anonymized campaign) data are available to test the hypotheses.

At the level of the legislature, the literature on the EP contains several metrics of legislative activity designed to assess a concern for the substance of legislative activity (see e.g. Hix et al. 2007; Hix and Høyland 2013; Whittaker, 2014 Wilson et al. 2016). These measures of activity are also ones found within other legislatures and include the frequency in which legislators use the question procedure (see for example; Martin 2011; Martin and

¹ Although Volden and Wiseman (2014) uncover a nonlinear relationship between electoral security and legislative effectiveness. They find that legislators who are least secure electorally are also not very effective – presumably because they have to spend more of their energies attending to their districts (and perhaps engaging in more active campaigning raising money and so on) than engaging in lawmaking activities. Hence, their results suggest that we should not expect to see a positive relationship between election activities and lawmaking effectiveness, which is loosely consistent with the findings that we see in this paper. We would like to thank one of our reviewers for drawing our attention to this work.

Rozenberg 2014) the writing of reports (e.g. Bailer and Ohmura 2018; Høyland 2006; Kaeding 2005; McElroy 2006; Sozzi 2016), speech making (e.g. Bäck and Debus 2014, 2016; Baumann et al. 2015; Jensen et al. 2013; Slapin et al. 2018) and attendance (Attina 1990; Yoshinaka et al. 2010). To be sure, these activities may be aimed at impressing party leadership and so advancing careers within the party. Although it is easy to make too much of this point. Not least because there are many activities within party organizations that would likely be more directly helpful to party careers. Furthermore, the literature on legislature notes these measures as policy engagement. Even if these legislative activities also serve or are correlated with internal party purposes, in addition to being policy-seeking, the point is that these are activities that are widely seen within the literature as being meaningful measures of policy-seeking behavior and engagement in policy i.e. valence.²

Data and Measures

We examine the impact of campaign activity on legislative activity for two legislative cycles in the European Parliaments 6 (2004–2009) and 7 (2009–2014). To establish a connection between candidate surveys and legislative activities, we merge two data sources through the disclosed ID of the survey respondents. The data for measuring campaign activity come from the MEP surveys of the European Parliament Research Group (Farrell et al. 2011).

The dependent variable for Hypothesis 1 is a dummy indicating whether a candidate was elected to parliament. To test Hypothesis 2, we use the measures of legislative activity outlined in the previous section, i.e., formal legislative activity, participation in roll call votes and legislative speechmaking (see Table A 2). The main independent variable for both

² Relatedely, arguments that legislatively activity could be interpreted as a signal of office seeking behavior on the part of ambitious politicians, trying to curry favor with the party leadership are hard to sustain in the EP, given the very high turnover in each session. For instance, only 39% of MEPs in the 8th legislature (2014–2019) were returned for the 9th (2019–2024).

hypotheses is *CAMPAIGN ACTIVITY*, an additive index capturing how many campaign items a candidate has used during the election campaign. Table A 3 lists the campaign items that were included in the candidate surveys.

Data for measuring the legislative activity of members of the European Parliament are derived from the website *Votewatch Europe*.³ For both legislative cycles we used the number of oral questions, prepared questions for question time, the number of reports written, and opinions and motions drafted by an MEP to create an additive index. We used participation in roll call votes as an alternative measure of legislative activity. Given the very high turnover in membership of the European Parliament between elections (Yoshinaka et al. 2010), we divide these measures of legislative activity by the number of months a MEP has served in the European Parliament.

The legislative process, particularly in the EP, is labyrinthine and we expect representatives who have served one term or more to be more effective at getting reports written and legislative activity in general. Parliamentarians from smaller party groups may have more tasks to deal with and are therefore more active in parliament. For this reason, we include dummy variables for each *PARTY GROUP* and control for the MPs' *COUNTRY* of origin.

Two, additional, individual level factors that may affect legislative productivity are ambition and gender. Meserve et al. (2009: 1018) use age as a proxy for personal ambitions, arguing that “age influences the career opportunities of MEPs. Specifically, the proportion of nationally ambitious MEPs in the EP should quickly decrease as a function of age.” Although we are aware that age is a far from perfect proxy for personal ambition, we follow their approach, and include the *AGE* and *SQUARED AGE* of every legislator.⁴ The relationship is

³ <http://www.votewatch.eu/>.

⁴ We also run the models with a dummy variable that indicates whether a MP/TD is younger than 40 years of age (as suggested by Meserve et al. 2009). The results remain the same. See also Bailer and Ohmura (2018) for a discussion of the life cycle of legislative activity within the Bundestag.

expected to be non-linear with *AGE* having a positive sign, *AGE SQUARED* a negative one, representing a decline in ambition as representatives approach retirement age. Gender has also been found to play an important role in explaining legislative activity (Swers 2002; Box-Steffensmeier et al. 2004; Salmond 2006; Volden et al. 2013; Wängnerud 2009), with female politicians largely found to be more legislatively entrepreneurial than their male counterparts, thus we include a dichotomous variable that takes the value 1 if a politician is *FEMALE*. We also control for *COMMITTEE (CO-)CHAIRMANSHIP*, and political group leadership (*PARTY OFFICE*). Within the literature, activities such as report writing are highly correlated with committee chairmanship (Yoshinaka et al. 2010), while parliamentary leadership is significantly related to roll call activity.

Finally, we control for national level variations in the electoral system, specifically the incentive to cultivate a personal vote. *OPEN LIST* captures whether parliamentarians have been elected under preferential voting rules. If an elector has the choice to vote for individual candidates, the system is considered as a preferential one. The data are derived from the *Centre Virtuel de la Connaissance sur l'Europe* (2014a, 2014b).

Results

We present the results in three steps. First, we analyze whether self-reported measures of campaign activity are meaningful proxies of campaign effort. Afterwards, we analyze whether more active campaigners are indeed more active in parliament, which would support the policy-seeking perspective. Finally, we test the robustness of these findings in two national-level settings (the Irish Dáil and the German Bundestag).

Campaign Activity and Winning a Seat

Before analyzing whether active campaigners are also active in parliament, we need to address the consequences of campaign effort (our first – and very straightforward – hypothesis). As campaign activity is constructed from a self-reported measure, politicians might under- or overstate their activities. The campaign activity index could, additionally, be distorted due to biased perceptions of the candidates themselves. We address this measure validity concern by examining whether those who campaign harder are more likely to get elected (H1). The campaigning index, our key variable of interest, should approximate both campaign “quality” and campaign effort. Thus, candidates with a higher score in the campaign activity should be more likely to get elected. If higher scores on the campaign index do not influence election probabilities at all, we face serious measurement issues.

We merge Waves I and Wave II of the Comparative Candidate Study to get the largest possible sample of respondents (CCS 2016, 2018). While the comparative datasets are fully anonymized, many candidate studies include an item that indicates whether the respondent was elected or not. Thus, we use a binary measure of getting elected as our dependent variable, and the additive campaign activity as our main independent variable. The impact of campaign effort on election probabilities should be stronger for non-incumbents than for incumbent candidates. Incumbents profit from name recognition and often have more experience in campaigning. Therefore, engaging in more activities might not drastically increase re-election probabilities.

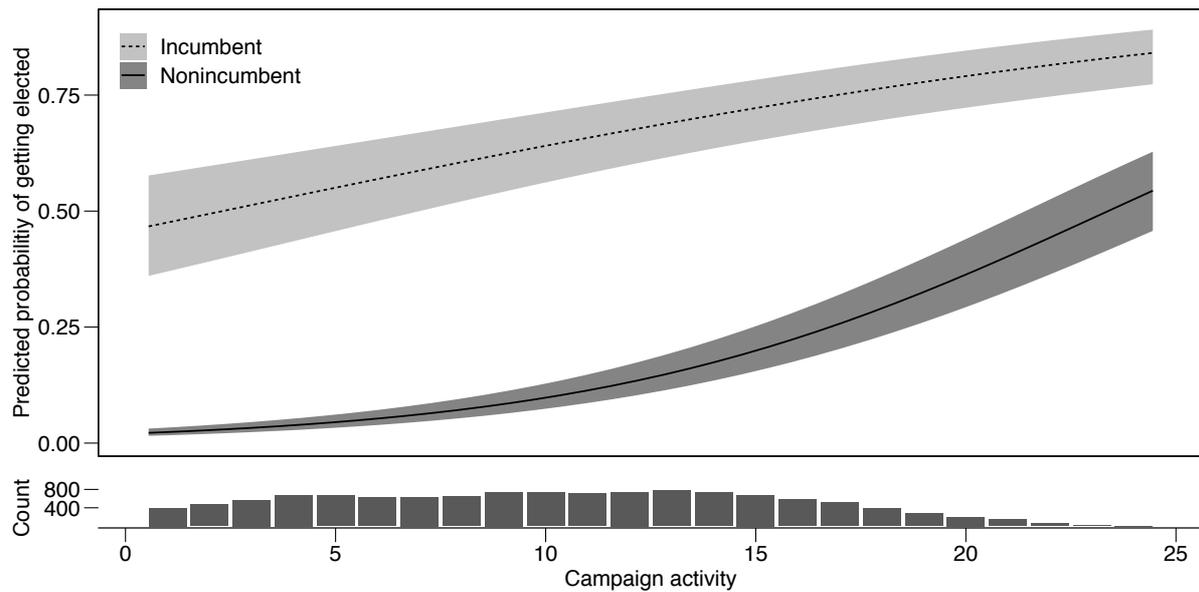
The availability of control variables differs markedly across the surveys. Therefore, we only control for the gender (*FEMALE*) of a respondent. As observations are clustered into elections, we run a multilevel logistic regression with random intercepts for each of the 29 elections. Overall, we estimate the (re)election probabilities of over 11,000 candidates who replied to the campaign activity questions and for whom information on incumbency, gender and winning a seat was available.

Figure 1 plots the predicted probabilities of winning a seat for incumbents and nonincumbents, conditional on the campaign activity (based on Model 1 of Table A1). Generally, as pointed out previously (Eggers et al. 2015; McElroy and Marsh 2010), incumbents have a much higher chance of getting elected than challengers and added value of campaigning more is lower for incumbents. Non-incumbents who reported using fewer than 10 campaign items have a probability of getting elected of around 0.1. Yet, non-incumbents who reported high levels of campaign activity (20 plus items) have a significantly higher estimated chance of winning a seat with predicted probabilities exceeding 0.3.⁵ In Figure A 1 in the Supplementary Material we run the model separately for each country where we have information on the incumbency status and the gender of a respondent.⁶ Overall, we find support that that report they campaigned harder are significantly and substantively more likely to win a seat. As such we have confidence that these self-reported measures do reflect actual campaign effort.

⁵ This result also holds if we use an ordinal index that measures how much time candidates spent on each campaigning item (see Model 2 of Table A 1).

⁶ Many country-level models fail to converge when adding the interaction of *INCUMBENT* and *CAMAPAIN ACTIVITY*. Therefore, we use *INCUMBENT* as a control variable in all models, but do include the two-way interaction with *CAMPAIGN ACTIVITY*. Candidate gender was not significant in the overarching model and rarely reached significance in the country level models, with the notable exceptions of Germany (positive coefficient for *FEMALE*) and Romania (negative coefficient).

Figure 1: Predicting (re)election based on campaign activity

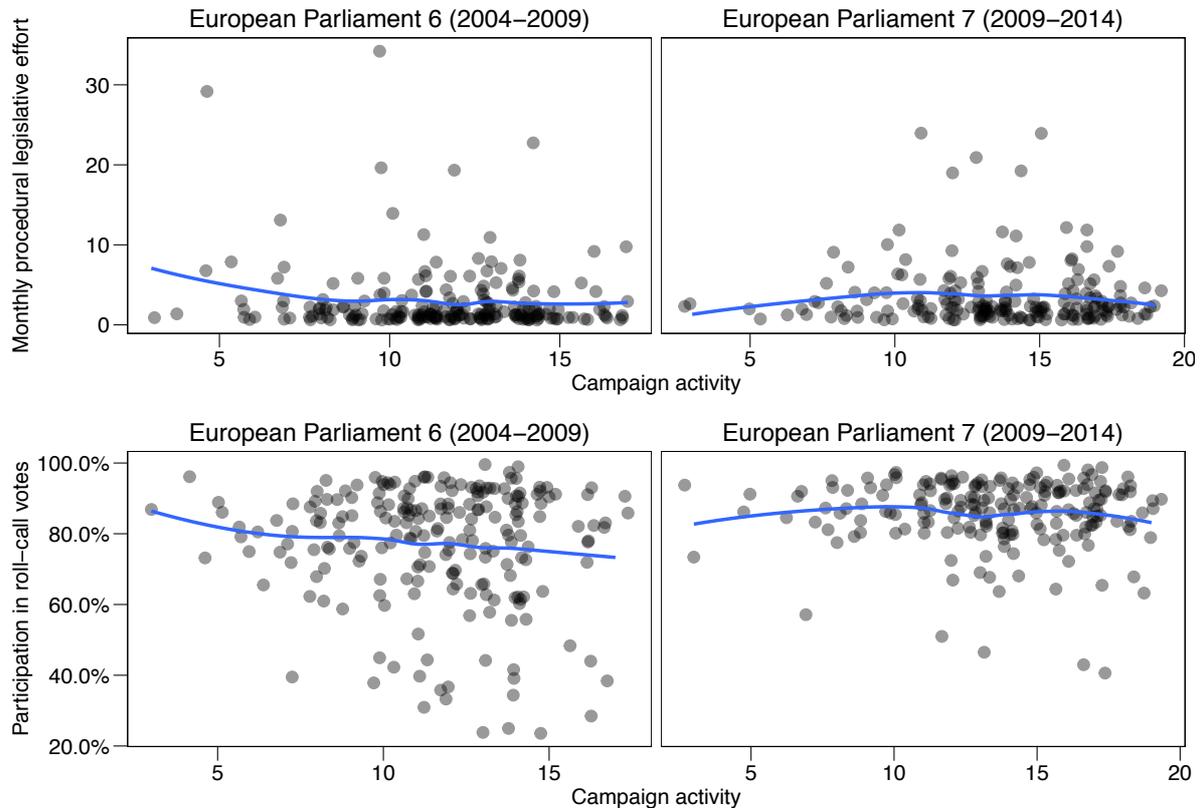


Predicted probabilities with 95% confidence intervals based on a multilevel logistic regression (Table A1). The regression model consists of 11,980 respondents, clustered into 29 elections. The histogram below the predicted probabilities displays the distribution of the campaign activity variable.

The (Mostly) Missing Link Between Campaign Activity and Legislative Effort

Next, we turn to the second question of whether or not the more campaign active MEPs are also more active in parliament. In Figure 2, we plot the bivariate relationships for the various measures separately for each legislative term and add loess regression lines. The scatterplots strongly suggest that campaign effort does not tend to be systematically positively correlated with legislative effort, no matter whether we use the cumulative activity or the percentage of roll calls participated in. If anything, there may even be a (slight) negative relationship for the 6th European Parliament (2009-14).

Figure 2: The (missing) relationship between campaign activity (based on survey responses) and legislative activity (measured as the count of monthly procedural activities and participation in roll-call votes). The dots mark the MEPs who participated in the candidate surveys.



Next, we run a set of regressions with the different types of legislative activity as the dependent variable. Model 1 of Table 1 uses the monthly count of legislative activities as the dependent variable. As the count of the activity is highly skewed, we run negative binomial regressions. Model 2 is based on a linear regression model that uses the participation in roll-call votes as the dependent variable. In both models we merge the two legislative cycles. The remaining models reproduce these regressions for each term separately. Looking at the coefficients for *CAMPAIGN ACTIVITY* confirms the visual evidence. The effect of the activity variables (both as a rescaled version and the absolute measures for each term) are negative and statistically insignificant across all models. We observe a u-shaped effect of *AGE* and *AGE SQUARED* when we look at the procedural activities, generally older MEPs are less active, both in terms of roll-call participation and procedural activities. Turning to the control

variables, neither *INCUMBENCY* (having served as an MEP at election time), nor holding a *COMMITTEE CHAIR* seem to have substantial impacts on legislative activity in any model. *OPEN LIST* only attains significance for the procedural measure when both sessions are combined, the negative sign suggests that MEPs who have an incentive to cultivate a personal vote may be less legislatively active than their peers (possibly spending more time in their constituencies).

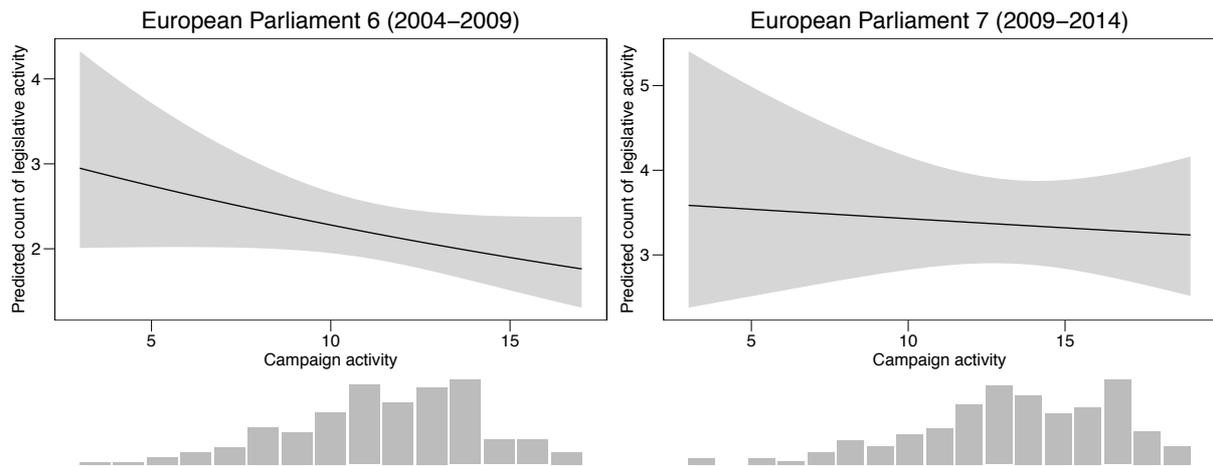
To ease the interpretation of the relationship between campaign activity and legislative effort, we plot the predicted values based on the negative binomial regressions for the procedural activities and the linear regression for the participation in roll-call votes (Figures 3 and 4). These plots confirm the bivariate scatterplot and show visually that there is (at most) a small negative relationship between campaign activity and legislative effort. What we see then is no evidence in support of policy seeking by those candidates who are active campaigners.

Table 1: Predicting formal legislative activity. Models 1 and 2 combine both legislative cycles and add a dummy variable. Models 3–6 reproduce Models 1 and 2 for each legislative cycle separately. Country dummies are included in the models, but suppressed from the model.

	M1: Procedural (stand.)	M2: Roll- call (stand.)	M3: Procedural: EP 6	M4: Formal: EP 6	M5: Procedural: EP 7	M6: Formal: EP 7
(Intercept)	1.97 (0.50)***	0.79 (0.09)***	1.64 (0.32)***	0.83 (0.07)***	1.94 (0.46)***	0.85 (0.06)***
Campaign activity (stand.)	-0.21 (0.31)	-0.08 (0.05)				
EP 7 (2009-2014)	0.59 (0.31)	0.03 (0.05)				
Female	-0.08 (0.12)	-0.01 (0.02)	-0.02 (0.17)	-0.00 (0.03)	-0.12 (0.17)	0.00 (0.02)
Age	-3.46 (0.93)***	0.21 (0.15)	-3.03 (0.91)***	0.24 (0.18)	-2.19 (0.92)*	0.02 (0.12)
Age squared	-2.05 (0.90)*	-0.04 (0.15)	0.42 (0.93)	0.09 (0.18)	-2.04 (0.86)*	-0.06 (0.10)
Open List	-0.79 (0.33)*	0.03 (0.06)	-0.23 (0.35)	0.01 (0.07)	-0.01 (0.46)	0.01 (0.07)
Committee chair	-0.27 (0.12)*	0.01 (0.02)	0.03 (0.18)	0.02 (0.04)	-0.25 (0.18)	0.00 (0.02)
Incumbent	0.14 (0.11)	-0.02 (0.02)	0.37 (0.17)*	-0.00 (0.04)	-0.03 (0.15)	-0.03 (0.02)
Party office	-0.03 (0.12)	0.02 (0.02)	0.02 (0.15)	0.04 (0.03)		-0.02 (0.02)
Party: ECR	0.05 (0.32)	0.05 (0.06)			0.17 (0.36)	0.08 (0.05)
Party: EFD	-0.04 (0.26)	-0.05 (0.05)			0.03 (0.29)	-0.01 (0.04)
Party: EPP	-0.23 (0.13)	0.04 (0.02)	-0.45 (0.18)*	0.03 (0.04)	-0.03 (0.19)	0.04 (0.02)
Party: EUL-NGL	0.39 (0.21)	-0.04 (0.04)	0.16 (0.27)	-0.02 (0.06)	0.27 (0.33)	-0.05 (0.04)
Party: Greens-EFA	0.04 (0.19)	0.07 (0.03)*	0.33 (0.25)	0.11 (0.06)*	-0.06 (0.27)	0.02 (0.03)
Party: IND/DEM	-0.23 (0.35)	-0.11 (0.06)	-0.29 (0.35)	-0.12 (0.07)		
Party: Other	0.48 (0.22)*	0.05 (0.05)	0.46 (0.28)	0.05 (0.07)	0.44 (0.36)	0.06 (0.05)
Party: SD	-0.27 (0.13)*	-0.03 (0.02)	-0.22 (0.18)	-0.08 (0.04)*	-0.37 (0.19)	0.02 (0.02)
Party: UEN	0.69 (0.28)*	-0.02 (0.05)	0.45 (0.28)	-0.04 (0.07)		
Campaign activity (stand.) * EP 7 (2009-2014)	0.05 (0.42)	0.08 (0.07)				
Female * Incumbent	-0.07 (0.18)	0.02 (0.03)	-0.24 (0.25)	0.02 (0.05)	-0.08 (0.25)	0.03 (0.03)
Campaign activity (absolute)			-0.04 (0.02)	-0.01 (0.00)	-0.01 (0.02)	-0.00 (0.00)
AIC	1720.96		850.40		886.81	
BIC	1913.50		988.21		1024.28	
Log Likelihood	-812.48		-384.20		-401.41	
Deviance	315.69		144.69		153.35	
Num. obs.	408	408	213	213	195	195
R ²		0.24		0.25		0.26
Adj. R ²		0.14		0.08		0.06
RMSE		0.14		0.16		0.09

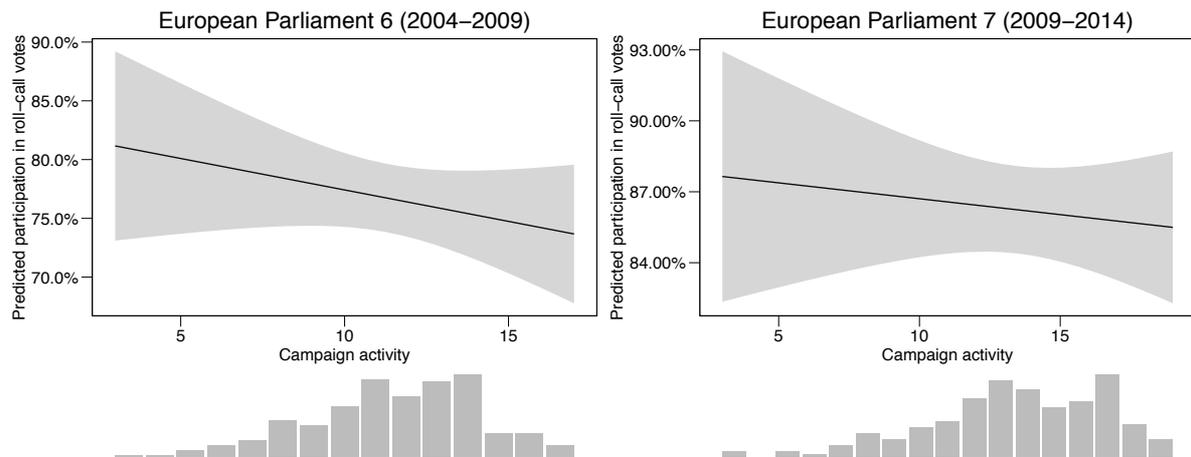
***p < 0.001, **p < 0.01, *p < 0.05

Figure 3: Predicting the count of monthly legislative procedural activities



Note: Plots are based on Models 3 and 5 of Table 1. The solid line shows the predicted values, the grey areas are 95 per cent confidence intervals. The histograms below the plot show the distribution of the rescaled campaign activity. The remaining variables are held at their mean (continuous variables) and mode (categorical variables).

Figure 4: Predicting participation in roll call votes



Note: Plots are based on Models 4 and 6 of Table 1. The solid line shows the predicted values, the grey areas are 95 per cent confidence intervals. The histograms below the plot show the distribution of the rescaled campaign activity. The remaining variables are held at their mean (continuous variables) and mode (categorical variables).

Robustness 1: Ireland and Germany

As noted earlier, the EP represents a good case against which to test ideas of policy-seeking candidates. It may nevertheless be objected that the EP presents an atypical legislature and that if we were to look at a national legislature, we would see more evidence of policy-seeking

amongst the most active campaigners. We therefore replicated the preceding analysis for two national legislatures those of Germany (2005–2009) and Ireland (2007–2011 and 2011–2016) (Gschwend et al. 2009; McElroy and Marsh 2011). Both these legislatures have data appropriate to the task, and both elect members via proportional systems. Moreover, the variation in legislative setting provided by these two legislatures allows us to look for cases that might provide even more/less promising grounds for the relationship to exist. In the case of the Ireland, the government dominates the legislative agenda, so we may expect the relationship to be weaker than in Germany, where a strong committee system permits all MPs a chance to influence policy. Furthermore, both of these cases offer interesting electoral system variations. Given the preferential electoral system used in Ireland, the Single Transferable Vote, there is a much stronger incentive for each MP to cultivate a personal vote when compared with the EP.⁷ In Germany, some members are elected through Single Member Districts, whilst others are elected through regional lists (though the system is proportional) thus varying the incentives to cultivate personal votes in the same assembly.

We do have to adopt appropriate measures of legislative activity to account for the changed context but the hypothesis and approach is the same as with the EP. In some instances, this is straightforward. For example, the use of the question procedure is a relevant measure for the EP and the Bundestag (Bailer and Ohmura 2018; Font and Pérez Durán 2016; Martin 2011; Martin and Rozenberg 2014; Proksch and Slapin 2011; Raunio 1996; Sozzi 2016). But speechmaking is a relevant measure of legislative activity for Ireland (Bauman et al. 2015; Debus and Bäck 2014; Sieberer 2015; and more generally Bäck and Debus 2016). Thus, in the case of Ireland we use speech count as the principal measure of activity. In some ways, speech *per se* is similar to campaigning in terms of signaling e.g. to sub-groups of voters. Speech

⁷ We allow that Irish MEPs are also elected via STV to the EP but they constituted only 1.4% of all MEPs in the 8th Parliament and we control for this via the *OPEN LIST* measure.

making, then, may not *just* be a policy influencing measure but could also be about raising an TD's (MP's) profile, credit claiming and personal vote building. In which case this represents a relatively easy hurdle for hypothesis 2 to clear. Specifically, we use the number of spoken words in each parliamentary term as a proxy for our dependent variable, legislative effort. In practice, giving speeches in the Dáil is not overly regulated by parliamentary rules, especially when compared with other parliamentary assemblies (Proksch and Slapin 2012). Speakers are relatively unconstrained in expressing their personal opinions (Herzog and Benoit 2015) and a member may make a statement on any matter [Standing Order (SO) 45]. The standing orders do prohibit a TD from speaking twice on a given motion (SO49) but any member desiring to speak simply rises in his or her seat (SO47).⁸ All plenary speeches for the period 2007 to 2016 were scraped from the website of the Houses of the Oireachtas and analyzed with the R package *quanteda* (Benoit et al. 2018). The word count per speaker ranges from, for example, a low of 1,414 words spoken to a maximum of 787,659 for the 31st Dáil. We additionally, include a measure of voting attendance for the 2011–2016 Parliament, as this measure is directly comparable with one used in the earlier analysis for the EP.

In Germany, as in the European Parliament, the time allocated for speeches is strictly regulated (Proksch and Slapin 2012; Schreiner 2005).⁹ The number and length of speeches is thus not a good indicator for activity in the Bundestag. Therefore, we also conceptualize legislative activity primarily as the sum of motions, motions for resolution, motions for amendment, draft laws, major interpellations, and minor interpellations. (see for example Sieberer 2015; Bailer and Ohmura 2018; and literature noted above).¹⁰ As questions are almost

⁸ Question Time is more heavily regulated, given the limited time allocated to it (45 minutes twice a week).

⁹ For every 60 minutes of speaking time, the CDU/CSU and SPD each were allocated 19 minutes, the FDP eight and Die Linke and Bündnis 90/Die Grünen each seven minutes.

¹⁰ Information provided by the Bundeswahlleiter and the Dokumentations- und Informationssysteme für Parlamentarische Vorgänge (DIP). Note that opposition members used these tools far more frequently than government MPs.

only used by opposition parties, we exclude written, oral, and urgent questions from our index. Results do not change if we include these items. Table A 2 provides an overview of the variables that are taken as measures of legislative activity and compares them to those we used for the EP.

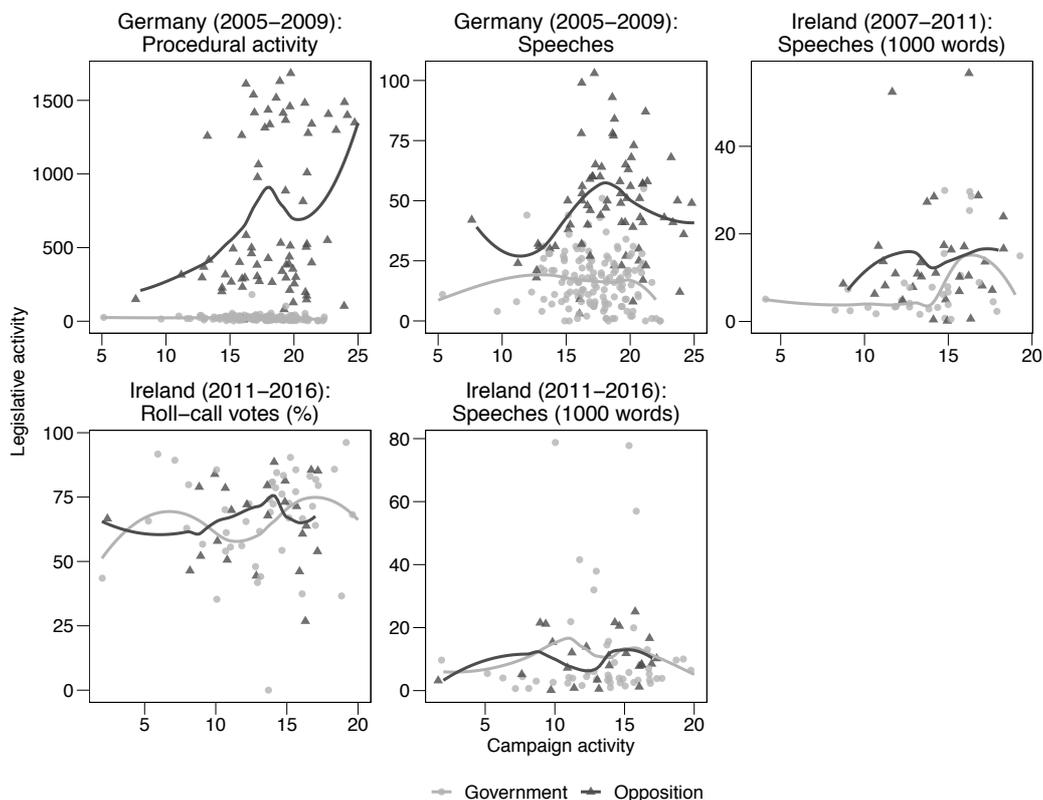
We also control for contextual factors in each case. We expect that prime ministers, opposition party leaders and government ministers will speak more words than other legislators. Thus, we include the variable *MINISTER* to capture these positions.¹¹ Furthermore, we control for whether a TD holds a *COMMITTEE CHAIR* because again the number of spoken words or formal activities may be higher due to this parliamentary position. For Germany we also control for whether the respondent was elected as the list or SMD candidate (*LIST CANDIDATE*). In all five cases we include *INCUMBENCY* (serving as an MP during the campaign) as a means of capturing any seniority and/or learning effects.

Following the previous model, we first present some descriptive data and then multivariate approaches. First, correlation between the different measurements of legislative activity are rather weak (Table A 2). For the German case, the number of speeches is positively correlated with the legislative activity index. The data from the 31st Dáil demonstrate, however, that the correlation between the number of words spoken and vote activity is actually negative. Politicians who speak more tend to take part in fewer roll call votes. These findings suggest that legislative effort may have multiple dimensions and may be conceptualized in a number of ways. In which case we should, and do, assess elements of legislative activity dimension by dimension. More to the point, using multiple measures of legislative activity means we are giving the hypothesis that campaign effort is a good signal of policy seeking every opportunity to find support in a range of legislative activity.

¹¹ We have only one minister and opposition leader in our German sample, and therefore do not include this variable in our main models. The results remain the same, however, if the *MINISTER* variable is included.

The scatterplots in Figure 5 clearly highlight that campaign effort does not tend to be systematically positively correlated with legislative effort, no matter whether we use the cumulative activity, the number of speeches, or the percentage of roll calls participated in. A (slightly) positive trend, at most, appears in the German case and for speeches in the Irish Dáil between 2007 and 2011. The positive relationship for Germany appears to be explained by a government/opposition dynamic. Members of the opposition (FDP, Die Linke and Bündnis 90/Die Grünen) submitted almost 708 motions, bills, questions, and interpellations over the four-year period while the average score for government members was only 22. Opposition members also tend to give more speeches than MPs from the government parties CDU/CSU and SPD. If there was a consistent relationship between campaign activity and legislative effort, we should already see these trends in scatterplots. The visual evidence, however, does not offer support for this hypothesis.

Figure 5: The relationship between campaign activity (based on survey responses) and legislative activity (measured as the count of monthly procedural activities, participation in roll-call votes, or the number of speeches/words).



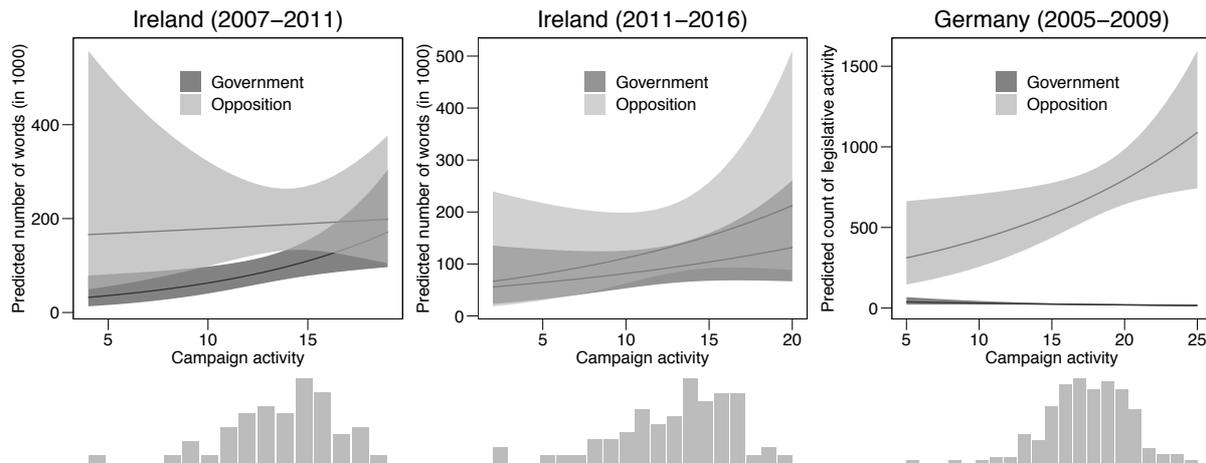
In Table 2, we present the results of the regression of *CAMPAIGN ACTIVITY* on the various measures of legislative activity for Germany and Ireland, including a measure that captures *GOVERNMENT/OPPOSITION* status (which is also interacted with *CAMPAIGN ACTIVITY*). As can be clearly seen from the results, *CAMPAIGN ACTIVITY* does not reach standard levels of significance for the Irish case (alone or interacted). However, we do observe a positive relationship in the Bundestag for opposition MPs. Figure 6 illustrates the extent of this *GOVERNMENT/OPPOSITION* contrast in Germany.

Table 2: Predicting legislative activity. All models are negative binomial regression models as the dependent variables are skewed count variables.

	M1: Dáil 30 (words)	M2: Dáil 31 (words)	M3: Bundestag 16 (procedural)
(Intercept)	4.67 (0.93)***	3.58 (0.73)***	5.52 (0.52)***
Campaign activity	0.01 (0.06)	0.06 (0.05)	0.06 (0.03)*
Government	-2.04 (1.04)	-0.14 (0.89)	-1.56 (0.63)*
Female	-0.19 (0.48)	0.38 (0.35)	-0.25 (0.17)
Age	0.52 (0.51)	0.70 (0.27)**	-0.03 (0.14)
Age squared	-0.71 (0.78)	1.91 (0.98)	0.79 (0.75)
Incumbent	-2.80 (0.80)***	-0.61 (1.01)	-0.16 (0.72)
Committee chair	-0.61 (0.30)*	-0.82 (0.37)*	0.09 (0.27)
Minister	0.29 (0.33)	0.16 (0.29)	
Campaign activity * Opposition	0.10 (0.07)	-0.02 (0.07)	-0.11 (0.03)**
Female * Incumbent	-0.10 (0.56)	0.08 (0.58)	0.09 (0.21)
List candidate			-0.04 (0.12)
AIC	703.26	851.87	2219.32
BIC	728.78	879.52	2259.71
Log Likelihood	-339.63	-413.93	-1097.66
Deviance	67.56	83.44	226.49
Num. obs.	62	74	214

*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 6: Predicting legislative effort based on negative binomial regressions with the main measure of legislative activity as the dependent variable.



Note: Plots are based on Model 1–3 of Table 3. The solid line shows the predicted values, the grey areas are 95 per cent confidence intervals. The histograms below the plot show the distribution of the rescaled campaign activity. The remaining variables are held at their mean (continuous variables) and mode (categorical variables).

In the Supplementary Material, we also report the results from the second measures of legislative effort (Figure A 2 and Table A 4). A higher level of campaign activity does not relate to a higher roll-call participation in the 31st Dáil (unfortunately, comprehensive roll-call data for the 30th Dáil are not available). In the German case, *CAMPAIGN ACTIVITY* reveals a positive, but statistically insignificant relationship between campaign activity and the number of legislative speeches, and only for opposition MPs. Of the control variables, *COMMITTEE CHAIR* is the only one that is systematically significant and it is negatively related to speech making in Ireland. None of the control variables reach significance for the Bundestag. Overall, across five cases, three different legislative settings and several different model specifications, campaign activity is only related positively and substantively to legislative effort for members of the opposition in the Bundestag.

Robustness 2: Changing Specifications and Measurements

We conducted several robustness checks to test whether our independent variable captures good and successful campaigning, and tested several alternative model specifications and chose different conceptualizations of the variables of interest. First, we test whether the candidates that participate in the surveys are a representative sample. To do so, we contrast the individual-level characteristics, party affiliation and positions within the parliament of respondents with those parliamentarians who did not participate in the survey. The distributions are very similar across all measurable indicators (Figures A 5–A 9).

Second, for the European Parliament we standardized *CAMPAIGN ACTIVITY* to national level means. The size of the negative effects decreases, but the coefficient does not change to the expected positive direction in any of the models (Table A 4).

Third, we also rerun all models with an ordinal index of campaign activity that considers the time a candidate reported to have spent on each activity. The regression coefficients are very similar, and the conclusions remain the same (Table A 5).

Fourth, in all models we measure campaign activity by counting the number of activities for each candidate. We also analyze each of the campaign activities individually to check whether the aggregation influences our results.¹² We run two sample t-tests with the legislative activity for each politician and a binary grouping factor that indicates whether a candidate used a specific campaign component. Positive (negative) values indicate that the group who made use of an instrument has a higher (lower) average value of legislative activity. We plot the results of the 82 t-tests in Figure A 3. The differences in means are very small across almost all activities. For over 80 per cent of the campaign items the t-test is statistically insignificant, often with very wide confidence intervals. In Figure A 4 we plot the 15 campaign

¹² We would like to thank one of the reviewers for this advice.

activities that resulted in a statistically significant difference in legislative behavior. For the European Parliaments only two items have a significant positive impact. For the Irish elections, we observe a trend of a lower degree of legislative activity for candidates that gave interviews to local or national TV stations or newspapers. In the German case, we observe a handful of activities that have a small negative mean difference. Given that we do not observe consistent trends in terms of individual activities, we consider our aggregated index as the most suitable measure to capture the multidimensionality of campaign effort. Overall, these extensive robustness checks show that our findings and overall conclusions do not seem to depend on the modelling choice, measures of legislative behavior, or specific campaign activities.

Conclusion

Taken as a whole, what implications do our findings have? There are two broad implications for this pattern of results. First, it is clear from results in the first hypothesis of the paper that campaigning effort does lead to electoral success: there is therefore a point to candidates working hard at election time. That said, our second finding is that campaigning hard to become a candidate is not a good indicator of someone working hard as a legislator. The hardest working candidate may well win the election but that candidate is not one who works hard within the legislature once s/he is elected. The candidate who campaigns hardest may also be one who is less (or, at least, no more) interested in policy making. It is probably too strong to call this pattern of results a paradox but these patterns are somewhat at odds with each other and especially so in light of the emphasis placed on campaigns as a signal within the literature on valence: campaign activity is not simply a noisy signal of legislative performance, it seems in fact to be a bad signal.

Based on our results of five legislative cycles and various measures of legislative behavior, campaign activity does not seem to be associated with policy-seeking behavior

within the legislature. At the very least, campaigning is a noisy proxy for candidate valence and voters should be wary of relying on campaigning as a reliable signal of candidate behavior once in office. These findings underscore how difficult it may be for voters to correctly identify higher valence candidates. Parenthetically, this means that the literature on valence, and especially the more formal literature, could usefully further develop the consequences of noise in signals of valence. The weak result is robust to different specifications and measures and is seen not just within the EP but within the national settings of Germany and Ireland, too. Only for opposition MPs in the German case, do we observe much of a relationship between campaign activity and legislative effort. Campaign effort is a good indicator of electoral success but it is not a good indicator of a candidate being policy-seeking.

It is, of course, possible to read too much into weak findings. Despite the interest within several literatures on the value of non-results (e.g. Findley et al. 2016; Franco et al. 2014; Miguel et al. 2014) there is always the suspicion that weak results could be made stronger by better modelling. But the findings we present hold up to a variety of different specifications, alternative conceptualizations of the key dependent and independent variables. It is therefore very unlikely that the finding is an artefact of measurement issues or model specification. Nor does it seem to be the case that the result can be explained by the survey samples. As the Supplementary Material shows, those who replied to the survey are not notably different from those who did not reply to the survey in terms of their legislative activity, party affiliations, and legislative posts. There is little (if any) difference between respondents and non-respondents across a range of measures in all the cases we examine. We believe we have done due diligence in terms of robustness checks and so are confident that our finding is indeed a robust one. Put another way, if there is anything to the argument that campaign effort is a signal of policy seeking candidates, we really should have found at least *some* signs of that in at least

some of the scatterplots, models, specifications and measures. One should not have to look this hard for the relationship if a strong one exists.

An additional implication of these findings is that they point up the usefulness of developing new measures of activity for both candidate effort and candidate qualities. Throughout we have used metrics that have been identified in the literature. Our results point up the value in considering different survey instruments to the familiar battery of questions relating to time spent on various activities. Such questions might include assessment of the value of one's own activities or those of other parties. This point also applies to measures of legislator activity. Just as with campaign activity, then, perhaps legislators who care about policy may not be the ones who speak more or who ask more questions or who pass more motions (measures that are standard within the field). Of course, if these measures of legislative action are simply about show and not substance, then it is even more surprising that campaigning has no relationship to showmanship. Observable procedural based activities (speeches/motions) may not indicate legislator quality. The results from Germany in particular may indicate that government MPs are engaging in different activities that are not recorded officially. For instance, perhaps we would benefit from having better scales for non-procedural based – or informal – activities, such as engagement with voters, media, or variation in MPs' use of technology (see Akirav 2016). The availability of digitalized political text, media reports and social media interactions could be used in future studies to develop alternative measures of campaign activity and legislative behavior that go beyond candidate surveys or formal activities. Future research could use textual data to compare whether the policies candidates emphasize during campaigns – for instance in press releases or information on their websites – correspond to subsequent measurable legislative activities in these policy areas. More broadly, our results suggest that there will be value in developing different measures covering

additional dimensions of both campaign and legislative activity. Though such a task is beyond the current paper, we hope to help promote such discussion.

References

- Adams, J. and Merrill, S., 2008. "Candidate and Party Strategies in Two-stage Elections Beginning with a Primary." *American Journal of Political Science*, 52 (2): 344–359.
- Adams, J. and Merrill, S., 2013. "Policy-seeking Candidates Who Value the Valence Attributes of the Winner." *Public Choice*, 155 (1-2): 139–161.
- Adams, J., Merrill, S., Simas, E.N. and Stone, W.J., 2011. "When Candidates Value Good Character: A Spatial Model with Applications to Congressional Elections." *The Journal of Politics*, 73 (1): 17–30.
- Akirav, O., 2016. "What Do Representatives Produce? Work Profiles of Representatives." *Party Politics*, 22 (3): 289–299.
- Aragones, E. and Palfrey, T.R., 2004. "The Effect of Candidate Quality on Electoral Equilibrium: An Experimental Study." *American Political Science Review*, 98 (1): 77–90.
- Attina, F., 1990. "The Voting Behaviour of the European Parliament Members and the Problem of the Europarties." *European Journal of Political Research*, 18 (5): 557–579.
- Bäck, H. and Debus, M., 2016. *Political Parties, Parliaments and Legislative Speechmaking*. New York: Palgrave Macmillian.
- Bailer, S. and Ohmura, T., 2018. "Exploring, Maintaining, and Disengaging: The Three Phases of a Legislator's Life." *Legislative Studies Quarterly*, 43 (3): 493–520.
- Baumann, M., Debus, M. and Müller, J., 2015. "Convictions and Signals in Parliamentary Speeches: Dáil Éireann Debates on Abortion in 2001 and 2013." *Irish Political Studies*, 30 (2): 199–219.
- Benoit, K., Watanabe, K., Wang, H., Nulty, P., Obeng, A., Müller, S., and Matsuo A., 2018. "quanteda: An R Package for the Quantitative Analysis of Textual Data." *Journal of Open Source Software*, 3 (30): 774.
- Besley, T., 2005. "Political Selection." *The Journal of Economic Perspectives*, 19 (3): 43–60.
- Bowler, S., 2000. Parties in Legislatures: Two Competing Explanations. In *Parties Without Partisans: Political Chance in Advanced Industrial Democracies* (ed. by R.J. Dalton and M.P. Wattenberg). Oxford: Oxford University Press: 157–179.

- Box-Steffensmeier, J. M., De Boef, S., and Lin, T. M., 2004. "The Dynamics of the Partisan Gender Gap." *American Political Science Review*, 98 (3): 515–528.
- Bruhn, K., 2010. "Too Much Democracy? Primaries and Candidate Success in the 2006 Mexican National Elections." *Latin American Politics and Society*, 52 (4): 25–52.
- Buttice, M.K. and Stone, W.J., 2012. "Candidates Matter: Policy and Quality Differences in Congressional Elections." *The Journal of Politics*, 74(3): 870–887.
- Carson, J.L., Engstrom, E.J. and Roberts, J.M., 2007. "Candidate Quality, the Personal Vote, and the Incumbency Advantage in Congress." *American Political Science Review*, 101 (2): 289–301.
- Carter, J. and Patty, J.W., 2015. "Valence and Campaigns." *American Journal of Political Science*, 59 (4): 825–840.
- CCS, 2016. *Comparative Candidates Survey Module I – 2005–2013 [Dataset – cumulative file]*. Distributed by FORS, Lausanne.
- CCS, 2018. *Comparative Candidates Survey Module I – 2013–2018 [Dataset – cumulative file]*. Distributed by FORS, Lausanne.
- Centre Virtuel de la Connaissance sur l'Europe, 2014a. *The Electoral Systems in the Member States of the European Union Applicable to the European Elections of June 2004*. http://www.cvce.eu/obj/european_electoral_systems_elections_june_2004-en-4f98160f-6c20-4692-b493-84dc0e1aafec.html (accessed August 7, 2019).
- Centre Virtuel de la Connaissance sur l'Europe, 2014b. *The Electoral Systems in the Member States of the European Union Applicable to the European Elections of June 2009*. http://www.cvce.eu/obj/european_electoral_systems_june_2009_elections-en-26a3fc1b-ef54-429c-9f51-bff7f81e323a.html (accessed August 7, 2019).
- Clifford, S., 2014. "Linking Issue Stances and Trait Inferences: A Theory of Moral Exemplification." *The Journal of Politics*, 76 (3): 698–710.
- Corbett, R., Jacobs, F. and Shackleton, M., 2000. *The European Parliament* (Vol. 5). London: John Harper.
- Debus, M. and Bäck, H., 2014. "The Influence of Type of Mandate and Constituency Characteristics on the Substantive Positions in Parliamentary Speeches: An Investigation on the Basis of Parliamentary Debates in the German Bundestag from 1998 to 2002." *Swiss Political Science Review*, 20 (2): 330–353.
- Döring, H., 2001. "Parliamentary Agenda Control and Legislative Outcomes in Western Europe." *Legislative Studies Quarterly*, 26 (1): 145–165.

- Eggers, A.C., Fowler, A., Hainmueller, J., Hall, A.B. and Snyder, J.M., 2015. “On the Validity of the Regression Discontinuity Design for Estimating Electoral Effects: New Evidence from Over 40,000 Close Races.” *American Journal of Political Science*, 59 (1): 259–274.
- Franchino, F. and Zucchini, F., 2015. “Voting in a Multi-dimensional Space: A Conjoint Analysis Employing Valence and Ideology Attributes of Candidates.” *Political Science Research and Methods*, 3 (2): 221–241.
- Farrell, D., Hix, S. and Scully, R., 2011. *EPRG MEP Survey Dataset: 2011 Release*. <https://mepsurvey.eu/data-objects/data/> (accessed August 7, 2019).
- Findley, M.G., Jensen, N.M., Malesky, E.J. and Pepinsky, T.B., 2016. “Can Results-Free Review Reduce Publication Bias? The Results and Implications of a Pilot Study.” *Comparative Political Studies*, 49 (13): 1667–1703.
- Fisher, J. and Denver, D., 2008. “From Foot-slogging to Call Centres and Direct Mail: A Framework for Analysing the Development of District-level Campaigning.” *European Journal of Political Research*, 47 (6): 794–826.
- Font, N. and Pérez Durán, I., 2016. “The European Parliament Oversight of EU Agencies Through Written Questions.” *Journal of European Public Policy*, 23 (9): 1349–1366.
- Franco, A., Malhotra, N. and Simonovits, G., 2014. “Publication Bias in the Social Sciences: Unlocking the File Drawer.” *Science*, 345 (6203): 1502–1505.
- Fridkin, K.L. and Kenney, P.J., 2011. “The Role of Candidate Traits in Campaigns.” *The Journal of Politics*, 73 (1): 61–73.
- Giebler, H. and Weßels, B., 2017. If you don’t Know me by Now: Explaining Local Candidate Recognition. *German Politics*, 26 (1): 149–169.
- Green, D. and Krasno, J., 1988. “Salvation for the Spendthrift Incumbent: Reestimating the Effects of Campaign Spending in House Elections.” *American Journal of Political Science*, 32 (4): 884–907.
- Green, J., 2007. “When Voters and Parties Agree: Valence Issues and Party Competition.” *Political Studies*, 55 (3): 629–655.
- Groseclose, T., 2001. “A Model of Candidate Location When One Candidate Has a Valence Advantage.” *American Journal of Political Science*, 45(4): 862–886.
- Gschwend, T., Schmitt, H., Wüst, A. and Zittel, T., 2009. *German Candidate Survey for the National Parliament Election 2005 (German Candidate Study 2005)*. GESIS Data Archive, Cologne. ZA4923 Data file Version 1.0.0. doi:10.4232/1.4923.
- Hayes, D., 2005. “Candidate Qualities through a Partisan Lens: A Theory of Trait Ownership.” *American Journal of Political Science*, 49 (4): 908–923.

- Hayes, D., 2010. "Trait Voting in US Senate Elections." *American Politics Research* 38 (6): 1102–1129.
- Helboe Pedersen, H., 2012. "What Do Parties Want? Policy Versus Office." *West European Politics*, 35 (4): 896–910.
- Herzog, A. and Benoit, K., 2015. "The Most Unkindest Cuts: Speaker Selection and Expressed Government Dissent During Economic Crisis." *The Journal of Politics*, 77 (4): 1157–1175.
- Hix, S., Noury, A.G. and Roland, G., 2007. *Democratic politics in the European Parliament*. Cambridge: Cambridge University Press.
- Hix, S. and Høyland, B., 2013. "Empowerment of the European Parliament." *Annual Review of Political Science*, 16: 171–189.
- Høyland, B., 2006. "Allocation of Codecision Reports in the Fifth European Parliament." *European Union Politics*, 7(1): 30–50.
- Jensen, C.B., Proksch, S.O. and Slapin, J.B., 2013. "Parliamentary Questions, Oversight, and National Opposition Status in the European Parliament." *Legislative Studies Quarterly*, 38(2): 259–282.
- Judge, D. and Earnshaw, D., 2003. *The European Parliament*. Houndmills: Palgrave.
- Kaeding, M., 2005. "The World of Committee Reports: Rapporteurship Assignment in the European Parliament." *The Journal of Legislative Studies*, 11 (1): 82–104.
- Karlsen R, Enjolras B., 2016. "Styles of Social Media Campaigning and Influence in a Hybrid Political Communication System: Linking Candidate Survey Data with Twitter Data." *The International Journal of Press/Politics*, 21 (3): 338–357.
- Kreppel, A., 2002. *The European Parliament and Supranational Party System: A Study in Institutional Development*. Cambridge: Cambridge University Press.
- Martin, S., 2011. "Parliamentary Questions, the Behaviour of Legislators, and the Function of Legislatures: An Introduction." *The Journal of Legislative Studies*, 17 (3): 259–270.
- Martin, D., 2016. Polarization of Candidate Quality Perceptions: Evidence of Ideological Bias in Voters' Evaluations of Candidates' Competence. Western Political Science Association meetings San Diego CA March 25 2016. <https://wpsa.research.pdx.edu/papers/docs/Martin%20WPSA%202016%20paper.pdf> (accessed August 7, 2019).
- Martin, S. and Rozenberg, O., 2014. *The Roles and Function of Parliamentary Questions*. Abington: Routledge.
- McElroy, G., 2006. "Committee Representation in the European Parliament." *European Union Politics*, 7 (1): 5–29.

- McElroy, G. 2007. "Legislative Politics as Normal? Voting Behaviour and Beyond in the European Parliament." *European Union Politics*, 8 (3): 433–448.
- McElroy, G. and Benoit, K., 2007. "Party Groups and Policy Positions in the European Parliament." *Party Politics*, 13 (1): 5–28.
- McElroy, G. and Benoit, K., 2012. "Policy Positioning in the European Parliament." *European Union Politics*, 13 (1): 150–167.
- McElroy, G. and Marsh, M. 2010. "Candidate Gender and Voter Choice: Analysis from a Multi-Member Preferential Voting System." *Political Research Quarterly*, 63 (4): 822–833.
- McElroy, G. and Marsh, M. 2011. *Irish Candidate Survey, 2007 & 2011*. <http://www.comparativecandidates.org/> (accessed August 7, 2019).
- Meserve, S.A., Pemstein, D. and Bernhard, W.T., 2009. "Political Ambition and Legislative Behavior in the European Parliament." *The Journal of Politics*, 71(3): 1015–1032.
- Miguel, E., Camerer, C., Casey, K., Cohen, J., Esterling, K.M., Gerber, A., Glennerster, R., Green, D.P., Humphreys, M., Imbens, G. and Laitin, D., 2014. "Promoting Transparency in Social Science Research." *Science*, 343 (6166): 30–31.
- Mondak, J.J., 1995. "Competence, Integrity, and the Electoral Success of Congressional Incumbents." *The Journal of Politics*, 57 (4): 1043–1069.
- Moravcsik, A., 2008. "The Myth of Europe's 'Democratic Deficit'." *Intereconomics*, 43 (6): 331–340.
- Müller, W.C. and Strøm, K. (eds.), 1999. *Policy, Office, or Votes? How Political Parties in Western Europe Make Hard Decisions*. Cambridge: Cambridge University Press.
- Nyhuis, D., 2016. "Electoral effects of Candidate Valence." *Electoral Studies*, 42: 33–41.
- Nyhuis, D., 2018. Separating Candidate Valence and Proximity Voting: Determinants of Competitors' Non-Policy Appeal. *Political Science Research and Methods*, 6 (1): 135–151.
- Papp, Z., 2018. Do Personalised Campaigns Hint at Legislator Activities? The (Lacking) Relationship Between Campaigns and Legislator Behaviour in Hungary. *Parliamentary Affairs*, 71 (4): 908–929.
- Pattie, C.J., Johnston, R.J. and Fieldhouse, E.A., 1995. "Winning the Local Vote: The Effectiveness of Constituency Campaign Spending in Great Britain, 1983–1992." *American Political Science Review*, 89 (4): 969–983.

- Poutvaara, P. and Takalo, T., 2003. Candidate Quality. Cesifo Working Paper No. 1106, Category 2: Public Choice. https://www.cesifo-group.de/DocDL/cesifo1_wp1106.pdf (accessed August 7, 2019).
- Proksch, S.O., and Slapin, J.B., 2011. "Parliamentary Questions and Oversight in the European Union." *European Journal of Political Research*, 50 (1): 53–79.
- Proksch, S.O., and Slapin, J. 2012. "Institutional Foundations of Legislative Speech." *American Journal of Political Science*, 56 (3): 520–537.
- Proksch, S.O., and Slapin, J.B. 2015. *The Politics of Parliamentary Debate: Parties, Rebels and Representation*. Cambridge: Cambridge University Press.
- Raunio, T., 1996. "Parliamentary Questions in the European Parliament: Representation, Information and Control." *The Journal of Legislative Studies*, 2 (4): 356–382.
- Salmond, R., 2006. "Proportional Representation and Female Parliamentarians." *Legislative Studies Quarterly*, 31 (2): 175–204.
- Schreiner, H.J., 2005. "Die Berliner Stunde – Funktionsweise und Erfahrungen: Zur Redeordnung des Deutschen Bundestages." *Zeitschrift für Parlamentsfragen*, 36 (3): 573–588.
- Schumacher, G. and Elmelund-Præstekær, C., 2018. "Party Performance Explains Disagreement between Politicians and their Parties." *West European Politics*, 41 (2): 329–349
- Serra, G., 2011. "Why Primaries? The Party's Tradeoff Between Policy and Valence." *Journal of Theoretical Politics*, 23 (1): 21–51.
- Sieberer, U., 2015. "Using MP Statements to Explain Voting Behaviour in the German Bundestag: An Individual Level Test of the Competing Principals Theory." *Party Politics*, 21 (2): 284–294.
- Slapin, J.B., Kirkland, J.H., Lazzaro, J.A., Leslie, P.A. and O'Grady, T., 2018. "Ideology, Grandstanding, and Strategic Party Disloyalty in the British Parliament." *American Political Science Review*, 112 (1): 15–30.
- Sozzi, F., 2016. "Electoral Foundations of Parliamentary Questions: Evidence From the European Parliament." *The Journal of Legislative Studies*, 22 (3): 349–367.
- Spence, M., 1978. "Job Market Signaling." *The Quarterly Journal of Economics*, 87 (3): 355–374.
- Stone, W.J. and Simas, E.N., 2010. "Candidate Valence and Ideological Positions in US House Elections." *American Journal of Political Science*, 54 (2): 371–388.

- Sudulich, L., and Trumm, S., 2019. "A Comparative Study of the Effects of Electoral Institutions on Campaigns." *British Journal of Political Science*, 49 (1): 381–399.
- Sudulich, L., Wall, M. and Farrell, D.M., 2013. "Why Bother Campaigning? Campaign Effectiveness in the 2009 European Parliament Elections." *Electoral Studies*, 32 (4): 768–778.
- Swers, M., 2002. *The Difference Women Make: The Policy Impact of Women in Congress*. Chicago: University of Chicago Press.
- Vergeer, M., Hermans, L. and Sams, S., 2013. "Online Social Networks and Micro-Blogging in Political Campaigning: The Exploration of a New Campaign Tool and a New Campaign Style." *Party Politics*, 19 (3): 477–501.
- Volden, C., Wiseman, A. E., and Wittmer, D. E., 2013. "When Are Women More Effective Lawmakers Than Men?" *American Journal of Political Science*, 57 (2): 326–341.
- Volden, C. and Wiseman, A.E., 2014. *Legislative Effectiveness in the United States Congress: The Lawmakers*. Cambridge: Cambridge University Press.
- Wängnerud, L., 2009. "Women in Parliaments: Descriptive and Substantive Representation." *Annual Review of Political Science*, 12: 51–69.
- Whittaker, R., 2014. "Tenure, Turnover and Careers in the European Parliament: MEPs as Policy-Seekers." *Journal of European Public Policy*, 21 (10): 1509–1027.
- Wilson, S.L., Ringe, N. and van Thomme, J., 2016. "Policy Leadership and Re-election in the European Parliament." *Journal of European Public Policy*, 23 (8): 1158–1179.
- Yordanova, N., 2009. "The Rationale Behind Committee Assignment in the European Parliament: Distributive, Informational and Partisan Perspectives." *European Union Politics*, 10 (2): 253–280.
- Yoshinaka, A., McElroy, G., and Bowler, S., 2010. "The Appointment of Rapporteurs in the European Parliament." *Legislative Studies Quarterly*, 35 (4): 457–486.
- Zittel, T., and Gschwend, T., 2008. "Individualised Constituency Campaigns in Mixed-Member Electoral Systems: Candidates in the 2005 German Elections." *West European Politics*, 31 (5): 978–1003.
- Zittel, T., 2015. "Constituency Candidates in Comparative Perspective: How Personalized are Constituency Campaigns, Why, and Does it Matter?" *Electoral Studies*, 39: 286–294.

Campaigns and the Selection of Policy-seeking Representatives

Online Supplementary Material

A Validating the Aggregated Campaign Activity Measure

As pointed out in the paper, we use an aggregated index of self-reported campaign activities as our main independent variable. In the paper, we show that a higher campaign activity results in a higher probability of winning a seat. This finding holds for incumbents and non-incumbents, although the effect is stronger for non-incumbents (who often are not well known and might benefit particularly from campaigning on many channels and with many activities. Table A 1 shows the coefficients of the multilevel logistic models. Model 1 (used in the paper) codes each campaign activity in a binary way (1/0) and sums these dichotomous campaign activities; Model 2 uses an ordinal index of campaign activity (which results in a higher number of maximum possible campaign activities). The value of the ordinal value for each activity is based on the self-reported time a respondent allocated for each activity. Throughout the paper, we prefer the first conceptualization, as the binary classification of activities is more robust against over-reporting.

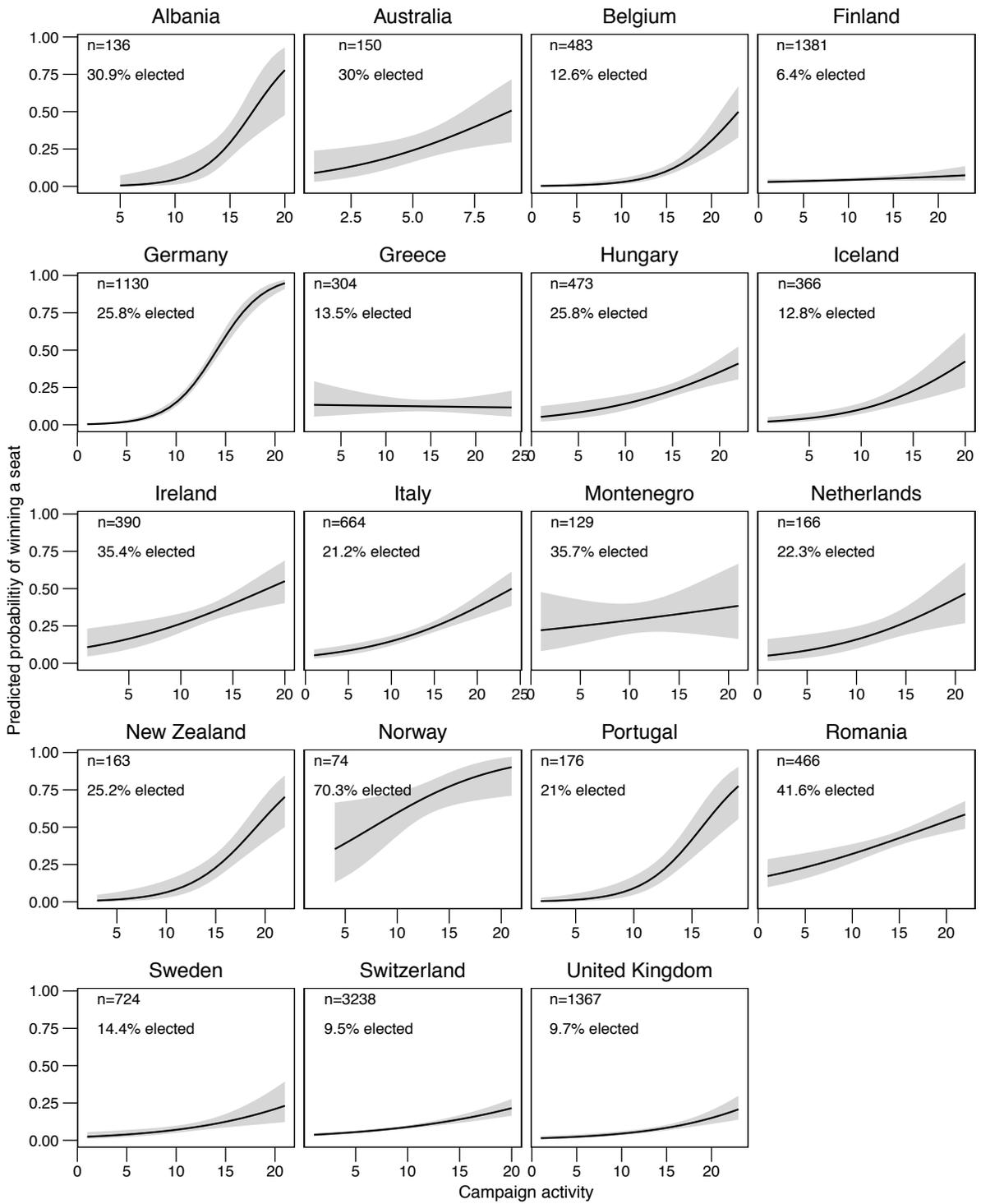
Figure A 1 plots predicted values of a logistic regression with the binary measure of winning a seat as the dependent variable. In order to include as many countries as possible in this model, here we do not control for incumbency (but we do so in the models reported in the paper). Generally, we observe a positive relationship in almost all countries. A higher campaign activity increases the probability of winning a seat, which strengthens our confidence in the campaign activity measure.

Table A 1: Predicting winning a seat in an election based on Waves I and II of the Comparative Candidates Survey

	M1: Additive binary index	M2: Additive ordinal index
(Intercept)	-3.96*** (0.19)	-3.32*** (0.16)
Campaign activity	0.17*** (0.01)	0.07*** (0.00)
Incumbent	3.75*** (0.21)	3.80*** (0.15)
Female	-0.01 (0.06)	-0.08 (0.06)
Campaign activity * Incumbent	-0.09*** (0.01)	-0.06*** (0.01)
AIC	8124.21	8159.61
BIC	8168.55	8203.96
Log Likelihood	-4056.10	-4073.81
N	11980	11980
N (Surveys)	29	29
Var (Study ID)	0.62	0.55

*** p < 0.001, ** p < 0.01, * p < 0.05

Figure A 1: Predicting the probability of winning a seat. Separate regression models for each country.



Note: To include as many countries as possible, we needed to reduce the choice of control variables. In these models, we only control for the gender of a respondent to include also countries for which we do not have information on whether a respondent won a seat or was an incumbent. The grey shaded areas show 95 per cent confidence intervals.

B The Measurements of Campaign Activity and Legislative Activity

Table A2 shows the main and alternative measurements of legislative activity for each of the five legislative cycles.

Table A 2: Overview of measurement for legislative activity

	6th EP (2004–2009)	7th EP (2009–2014)	30th Dáil (2007–2011)	31st Dáil (2011–2016)	16th Bundestag (2005–2009)
Main measurement	Legislative activity as sum of: 1. Number of reports 2. Number of oral questions 3. Number of questions for question time 4. Number or opinions 5. Number of motions	Legislative activity as sum of: 1. Number of reports 2. Number of oral questions 3. Number of questions for question time 4. Number or opinions 5. Number of motions	Legislative activity as number of spoken words	Legislative activity as number of spoken words	Legislative activity as sum of: 1. Motions 2. Motions for resolution 3. Motions for amendment 4. Draft laws 5. Major interpellations 6. Minor interpellations
Alternative measurement	Legislative activity as vote activity (participation as percentage of total roll call votes)	Legislative activity as vote activity (participation as percentage of total roll call votes)	–	Legislative activity as vote activity (participation as percentage of total roll call votes)	Legislative activity as number of speeches
Pearson's correlation coefficient between measures	0.138	0.109	NA	–0.36	0.561

Table A 3: Overview of campaign activities that are part of each of the candidate surveys used for the additive campaign index

Campaign type	EP6 (2004–2009)	EP7 (2009–2014)	30th Dáil (2007–2011)	31st Dáil (2011–2016)	16th Bundestag (2005–2009)
Maximum score	16	18	26	21	28
Classic campaigning	<ol style="list-style-type: none"> 1. Telephone 2. Door to door 3. Party meetings 4. Mailing list 5. Public meetings 6. Press conferences 7. Media relations 8. Fundraising 	<ol style="list-style-type: none"> 1. Telephone 2. Door to door 3. Party meetings 4. Mailing lists 5. Public meetings 6. Press conferences 7. Media relations 8. Fundraising 	<ol style="list-style-type: none"> 1. Telephone 2. Direct mail 3. Public debates 4. Meet party members 5. Meet party officials 6. Attend national events 7. Addend local events 8. Fundraising 9. Appointments with businesses 10. Appointments with clubs 11. Organise rallies 12. Local newspaper interviews 13. National newspaper interviews 14. Local radio/TV interviews 15. National radio/TV interviews 	<ol style="list-style-type: none"> 1. Telephone 2. Public debates 3. Meet party officials 4. Appointments with clubs and associations 5. Town hall meetings 6. Local newspaper interviews 7. National newspaper interview 8. Local radio/TV interviews 9. National radio/TV interviews 	<ol style="list-style-type: none"> 1. Telephone 2. Door to door 3. Mailing lists 4. Public debates 5. Meet party members 6. Meet party officials 7. Attend local events 8. Attend national events 9. Fundraising 10. Appointments with businesses 11. Appointments with clubs 12. Organising and visiting election campaigning events 13. Local newspaper interviews 14. National newspaper interviews 15. Local radio/TV interviews 16. National radio/TV interviews
Online campaigning	<ol style="list-style-type: none"> 9. Website 10. E-mail list 11. Blog 	<ol style="list-style-type: none"> 9. Website 10. E-mail list 11. Blog 12. Social media 	<ol style="list-style-type: none"> 16. Website 17. E-mail list 18. Campaign video 19. Online chats 20. Blog 	<ol style="list-style-type: none"> 10. Website 11. E-mail list 12. Campaign video 13. Online chats 14. Blog 15. Twitter 	<ol style="list-style-type: none"> 17. Website 18. E-mail list 19. Campaign video 20. Online chats 21. Blog 22. Internet discussions
Promotional material	<ol style="list-style-type: none"> 12. Posters 13. Stickers 14. Radio ads 15. TV ads 16. Newspaper ads 	<ol style="list-style-type: none"> 13. Posters 14. Stickers 15. Radio ads 16. TV ads 17. Newspaper ads 18. SMS ads 	<ol style="list-style-type: none"> 21. Posters 22. Billboards 23. Ads in media 24. Office hours 25. Social gatherings 26. Flyers 	<ol style="list-style-type: none"> 16. Posters 17. Billboards 18. Ads in media 19. Office hours 20. Social gatherings 21. Flyers 	<ol style="list-style-type: none"> 23. Posters 24. Ads in media 25. Office hours 26. Social gatherings 27. Flyers 28. Spots in radio/TV/. cinema

C Additional Regression Models

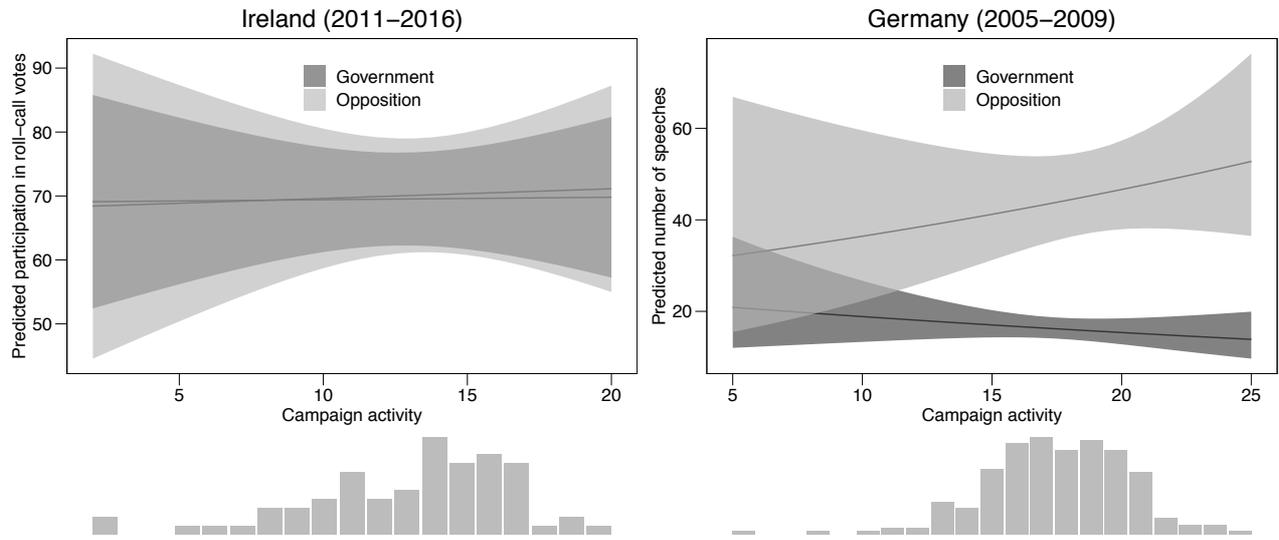
Table A 3 reports the regression coefficients if we use the alternative measure of legislative effort for the 31st Dáil (participation in roll-call votes) and the 16th Bundestag (number of speeches). Roll-call participation does not seem to be related to campaign effort at all (both for government and opposition TDs), whereas we observe a very slight increase in the predicted number of speeches for opposition MEPs with a higher campaign activity. This robustness check does not change our substantive conclusion.

Table A 4: Predicting formal legislative activity. Model 1 uses a linear regression model to predict roll-call participation in the 31st Dáil. Model 2 is a negative binomial regression with the count of speeches as the dependent variable.

	M1: Dáil 31 (vote)	M2: Bundestag 16 (speeches)
(Intercept)	72.28 (13.53)***	3.22 (0.50)***
Campaign activity	0.15 (0.99)	0.02 (0.03)
Government	0.92 (16.36)	-0.21 (0.61)
Female	2.38 (6.39)	0.16 (0.16)
Age	-16.81 (5.14)**	0.13 (0.13)
Age squared	1.27 (19.04)	-0.95 (0.72)
Incumbent	-20.20 (20.07)	0.51 (0.69)
Committee chair	6.28 (6.81)	-0.16 (0.27)
Minister	-3.27 (5.50)	
Campaign activity * Opposition	-0.11 (1.23)	-0.05 (0.03)
Female * Incumbent	10.17 (10.73)	-0.09 (0.20)
List candidate		0.06 (0.12)
R ²	0.20	
Adj. R ²	0.07	
Num. obs.	71	214
RMSE	17.08	
AIC		1755.26
BIC		1795.65
Log Likelihood		-865.63
Deviance		248.71

***p < 0.001, **p < 0.01, *p < 0.05

Figure A 2: Predicting legislative effort using the alternative measure of legislative activity as the dependent variable.



Note: Plots are based on Model 1–2 of Table A 3. The solid line shows the predicted values, the grey areas are 95 per cent confidence intervals. The histograms below the plot show the distribution of the rescaled campaign activity. The remaining variables are held at their mean (continuous variables) and mode (categorical variables).

Table A 4 reruns Model 1 of Table 1 from the main paper, but standardises the campaign activities by subtracting the country mean for each candidate. The coefficient of *CAMPAIGN ACTIVITY* and the interaction between *CAMPAIGN ACTIVITY* and the legislative cycle remain unchanged. Table A 5 uses ordinal measures for each campaigning item (that take into account the amount of time a candidate spent on each campaign activity).

Table A 5: Predicting the count of monthly legislative activities for the 6th and 7th European Parliaments. Model 1 replicates Model 1 from Table 1, Model 2 subtracts the country means of campaign activity (for each electoral cycle) from the campaign activity.

	M1: Procedural	M2: Procedural (country means)
(Intercept)	1.97 (0.50)***	1.85 (0.45)***
Campaign activity (stand.)	-0.21 (0.31)	-0.27 (0.32)
EP 7 (2009-2014)	0.59 (0.31)	0.61 (0.16)***
Female	-0.08 (0.12)	-0.11 (0.09)
Age	-3.46 (0.93)***	-3.48 (0.92)***
Age squared	-2.05 (0.90)*	-1.99 (0.90)*
Open List	-0.79 (0.33)*	-0.79 (0.33)*
Committee chair	-0.27 (0.12)*	-0.26 (0.12)*
Incumbent	0.14 (0.11)	0.12 (0.09)
Party office	-0.03 (0.12)	-0.03 (0.12)
Party: ECR	0.05 (0.32)	0.07 (0.32)
Party: EFD	-0.04 (0.26)	-0.04 (0.26)
Party: EPP	-0.23 (0.13)	-0.23 (0.13)
Party: EUL-NGL	0.39 (0.21)	0.37 (0.20)
Party: Greens-EFA	0.04 (0.19)	0.04 (0.18)
Party: IND/DEM	-0.23 (0.35)	-0.23 (0.35)
Party: Other	0.48 (0.22)*	0.48 (0.22)*
Party: SD	-0.27 (0.13)*	-0.28 (0.13)*
Party: UEN	0.69 (0.28)*	0.68 (0.28)*
Campaign activity (stand.) * EP 7 (2009-2014)	0.05 (0.42)	0.09 (0.43)
Female x Incumbent	-0.07 (0.18)	
AIC	1720.96	1718.77
BIC	1913.50	1907.30
Log Likelihood	-812.48	-812.38
Deviance	315.69	315.48
Num. obs.	408	408

*** p < 0.001, ** p < 0.01, * p < 0.05

Table A 6: Predicting legislative activity using the ordinal measure of campaign activity. The models reproduce the regressions used to create the plots showing predicted values in the main part of the paper, but uses the ordinal campaign activity index instead, which takes into account the number of hours a candidate reported to have spent on each campaign activity.

	M1: EP6	M2: EP7	M3: Dáil 30	M4: Dáil 31	M5: Bundestag 16
(Intercept)	5.47 (0.32) ^{***}	5.77 (0.47) ^{**}	4.33 (0.65) ^{***}	3.43 (0.48) ^{***}	3.45 (0.22) ^{**}
Campaign activity (ordinal)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.02)	0.04 (0.03)	-0.01 (0.00)
Age	-3.92 (0.91) ^{**}	-2.80 (0.97) ^{**}	-0.89 (0.83)	1.55 (0.98)	0.75 (0.78)
Age squared	0.24 (0.89)	-1.86 (0.88)	-2.92 (0.95) ^{**}	-0.31 (1.01)	-0.45 (0.74)
Open List	-0.07 (0.17)	0.04 (0.18)	-0.02 (0.51)	0.50 (0.35)	-0.31 (0.17)
Committee chair	0.28 (0.18)	0.03 (0.16)	0.63 (0.55)	0.56 (0.26)	0.00 (0.14)
Incumbent	-0.25 (0.36)	0.01 (0.54)			
Female	-0.01 (0.18)	-0.29 (0.18)	-0.97 (0.33) ^{**}	-0.64 (0.37)	0.22 (0.27)
Party office	0.12 (0.16)				
Party: EPP	-0.24 (0.18)	-0.06 (0.20)			
Party: EUL-NGL	0.40 (0.30)	0.07 (0.35)			
Party: Greens-EFA	0.48 (0.28)	-0.19 (0.28)			
Party: IND/DEM	-0.45 (0.34)				
Party: Other	0.64 (0.35)	0.84 (0.44)			
Party: SD	-0.25 (0.19)	-0.57 (0.20) ^{**}			
Party: UEN	0.81 (0.33)				
Female * Incumbent	-0.07 (0.25)	-0.09 (0.26)	-0.26 (0.60)	0.05 (0.58)	0.17 (0.21)
Party: ECR		0.53 (0.42)			
Party: EFD		-0.03 (0.33)			
Government			0.68 (0.62)	0.12 (0.79)	3.26 (0.23) ^{**}
Minister			0.11 (0.35)	0.26 (0.29)	
Campaign activity * Government			-0.00 (0.02)	0.01 (0.04)	0.01 (0.01)
List candidate					-0.05 (0.12)
AIC	2402.58	2296.22	708.60	851.30	2225.16
BIC	2540.39	2433.69	734.13	878.95	2265.55
Log Likelihood	-1160.29	-1106.11	-342.30	-413.65	-1100.58
Deviance	231.74	213.69	67.31	83.40	226.80
Num. obs.	213	195	62	74	214

^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05

D The Impact of Individual Campaign Activities on Legislative Effort

As described in the paper, we also analyze whether certain campaign activities, that are part of this index, have an influence legislative activity and proceed in the following way. First, we rescale the legislative effort variable from 0 to 1 for each of our five cycles using the main measure of legislative activity for each cycle.¹³ In a second step, we select all individual campaign activities that show variation in the use by candidates (i.e. that were not used by more than 90 per cent of all elected candidates). More precisely, some of the activities (for instance street campaigning for the German election) were part of all successful candidates' campaigns. Since these items do not show much variation, we excluded those campaigns. This reduces the sample of unique activities from 113 to 82 activities. Third, for each of these 82 activities, we run a two-sample t-test whether the use/non-use of the activity is the grouping variable. Figure A 2 plots the mean difference between both groups and the corresponding 95 per cent confidence intervals for each activity. We see that most of the activities statistically insignificant and/or have a very small difference. In Figure A 3 we only focus on the statistically significant activities. As described in the paper, the results are very conclusive, and it is – for instance – rather pointless to assume that (in the case of the European Parliament elections) that the use of stickers correlates with legislative effort. Therefore, we prefer our additive index to capture the multidimensionality of election campaigns.

¹³ European Parliament 6 and 7: count of monthly legislative activities; Dáil 30 and 31: number of words; Bundestag 16: count of legislative activities.

Figure A 3: T-tests based on legislative effort (rescaled from 0 to 1 for each cycle) and the use of individual campaign activities. Points show the estimated mean difference for respondents who used or did not use the respective campaign activity. A positive value indicates that the group of candidates who used the campaign have a higher average legislative activity than the group of candidates who did not make use of the activity.

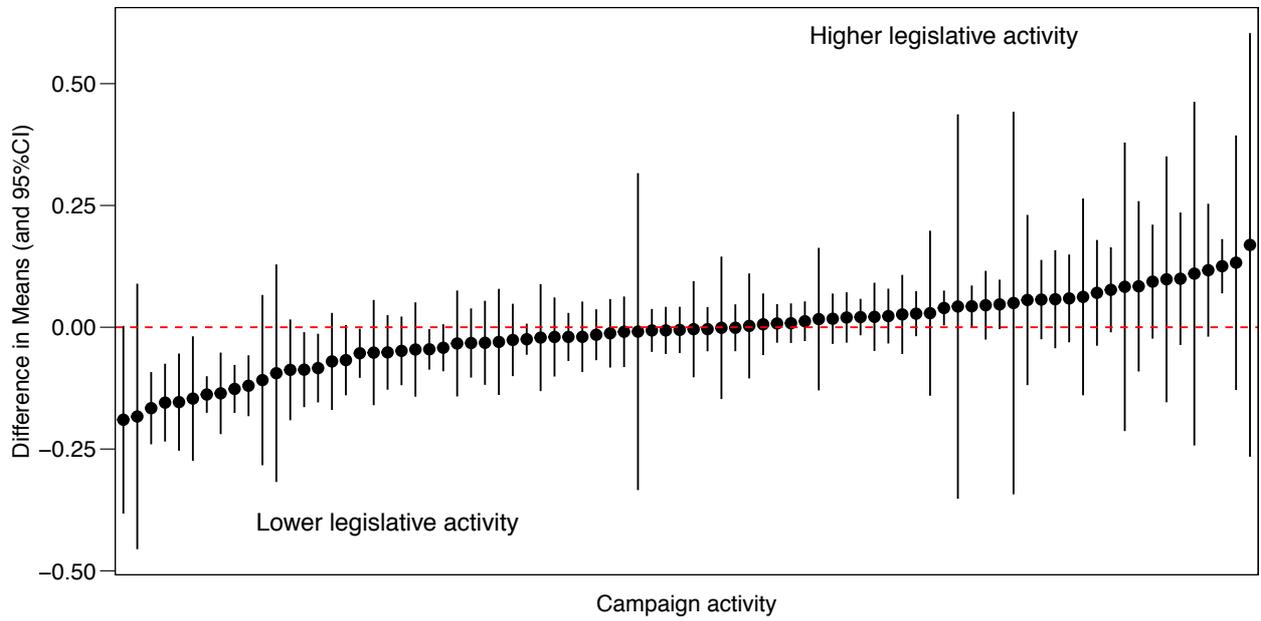
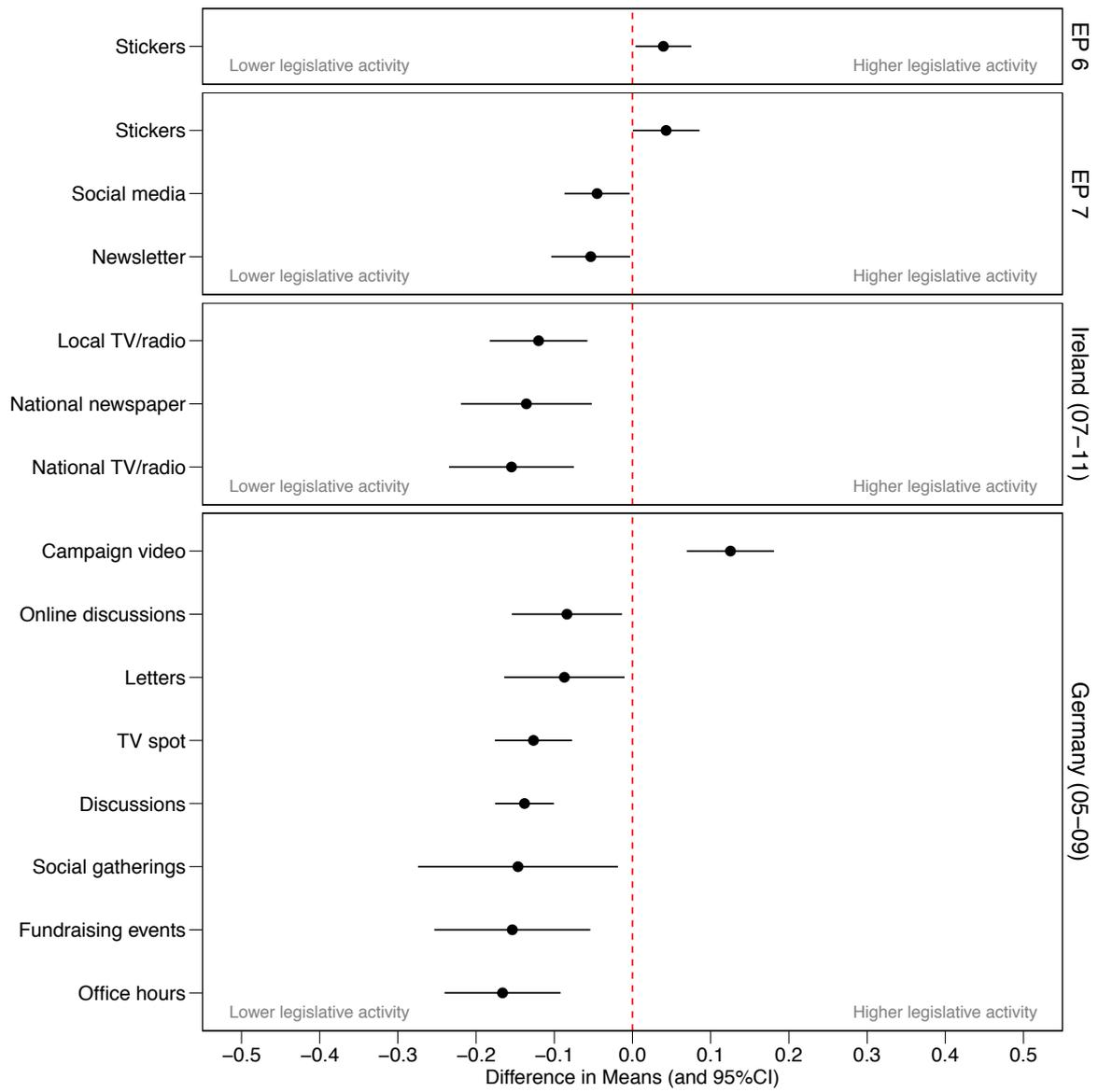


Figure A 4: The subset of statistically significant t-tests from Figure A 2



E Comparing Respondents and Non-Respondents

Figure A 5: European Parliament 6 (2004–2009)

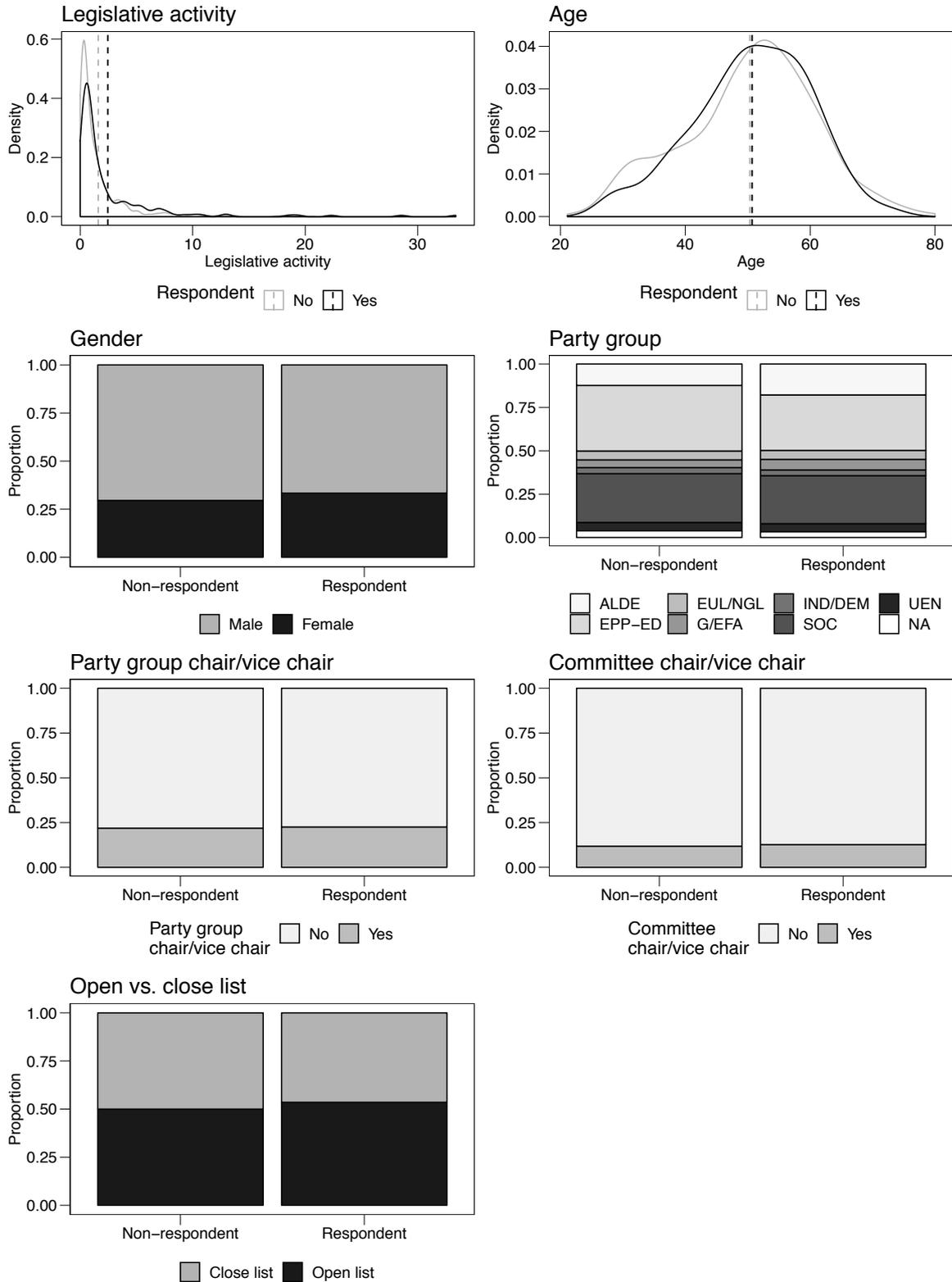


Figure A 6: European Parliament 7 (2009–2014)

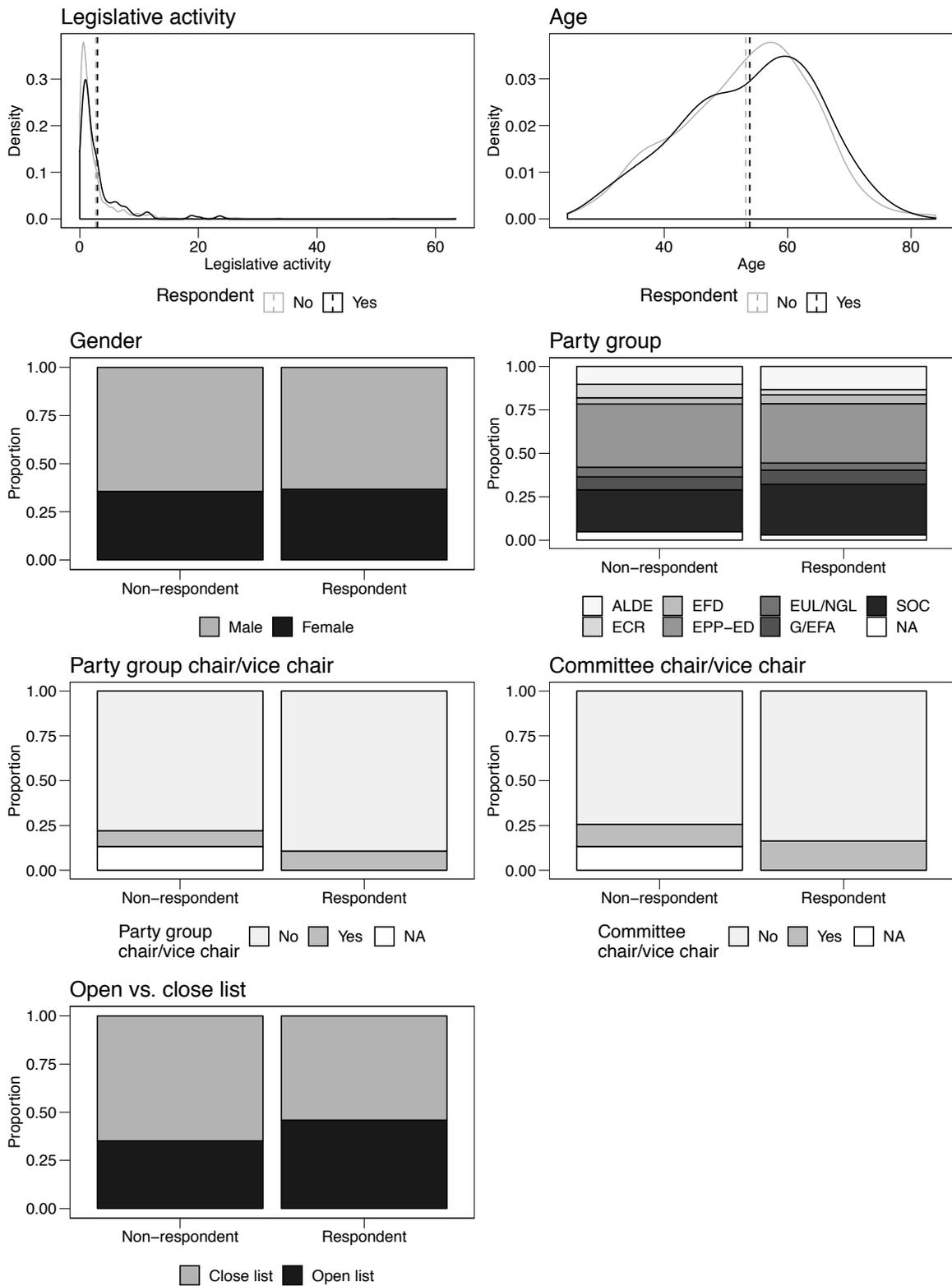


Figure A 7: Dáil 30 (2007–2011)

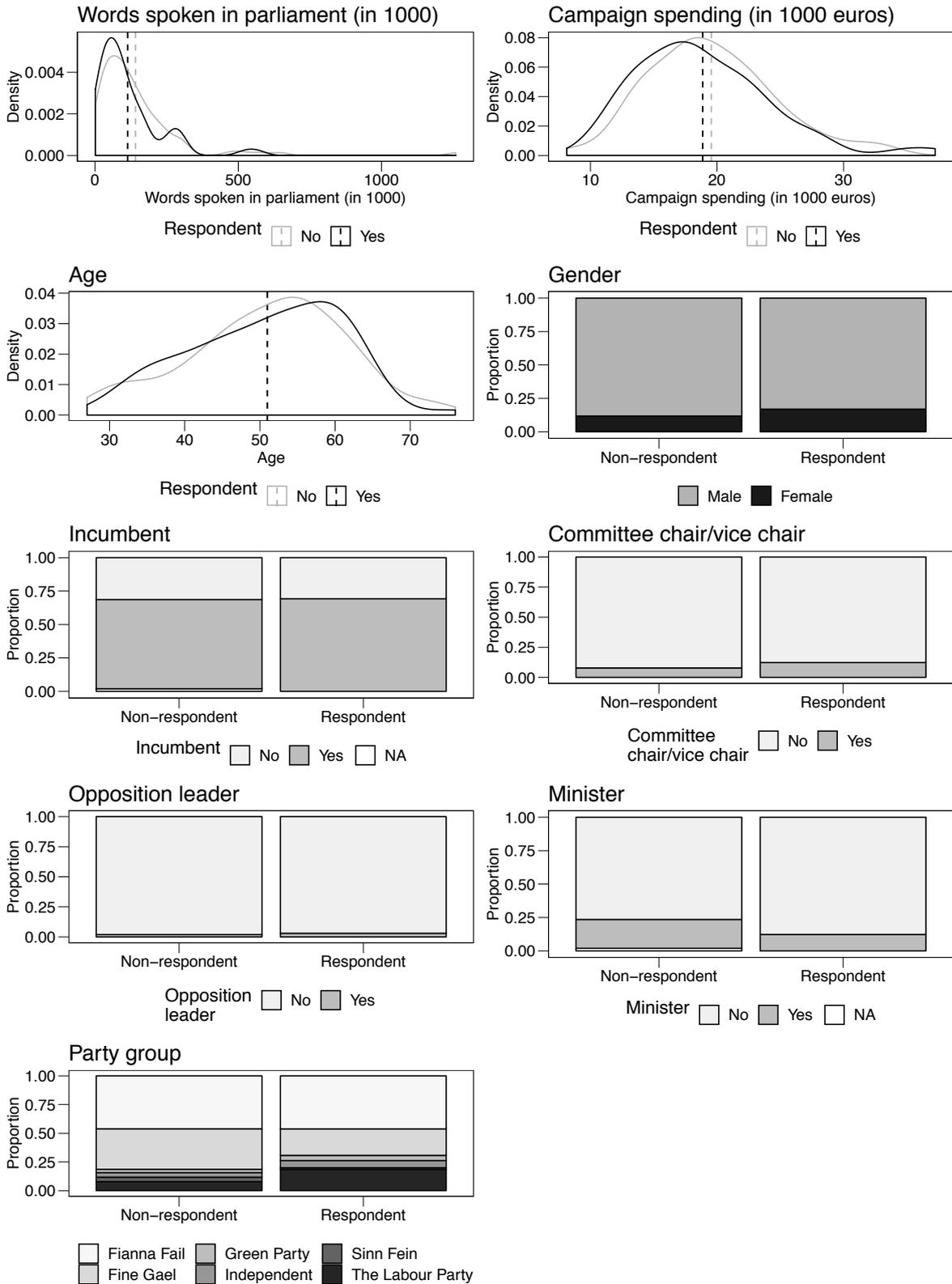


Figure A 8: Dáil 31 (2011–2016)

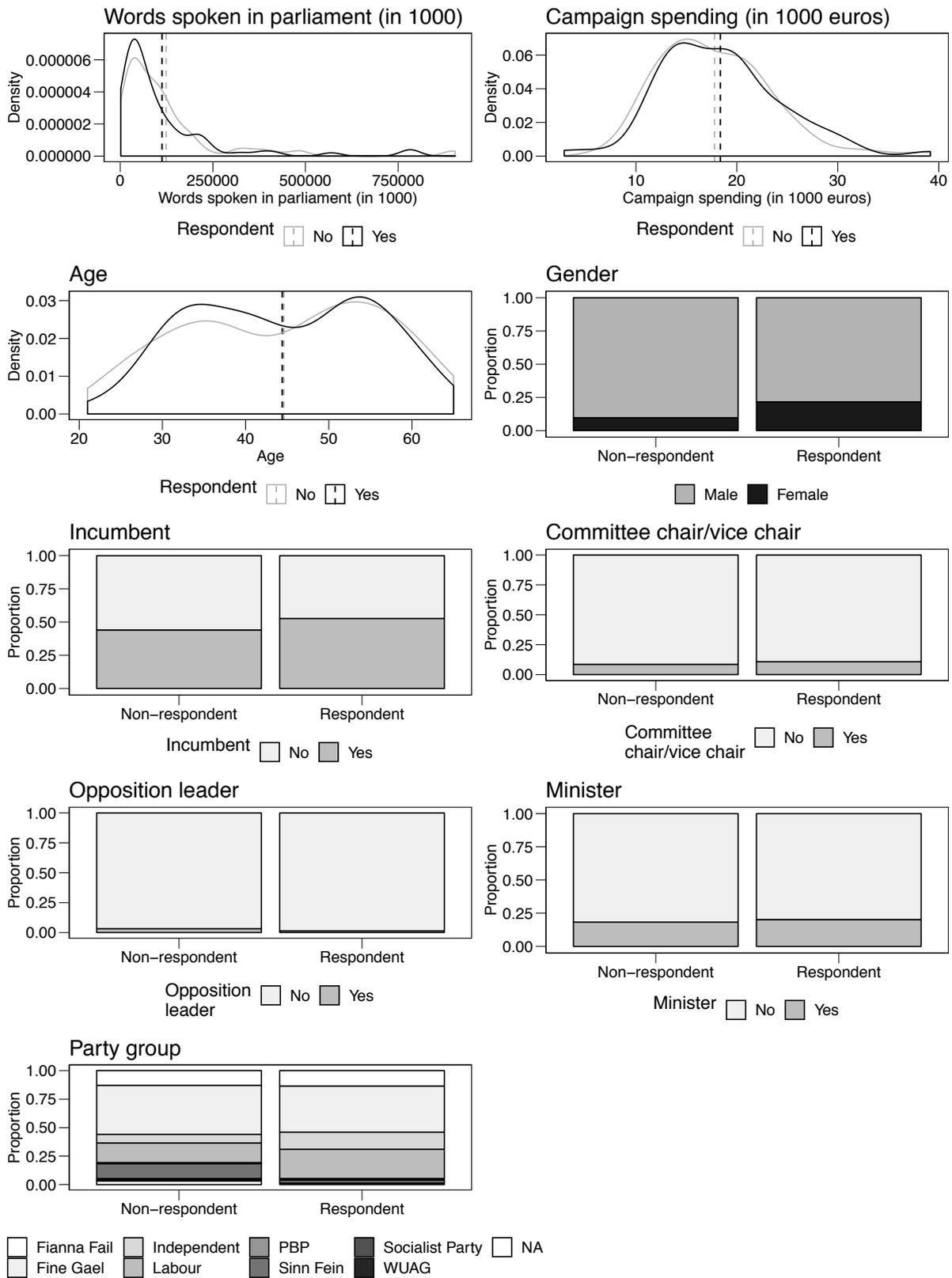


Figure A 9: Bundestag 16 (2005–2009)

