

The best of both worlds? Evaluating the campaign behaviour of dual candidates

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Abstract

The conventional wisdom of electoral politics suggests that parliamentary candidates who run for office under candidate-centred mechanisms tend to conduct more intense and personalised campaigns than those who run under party-centred ones. But what about the campaigns put in place by candidates who simultaneously run under both systems? Using original data from the 2016 Welsh Candidate Study, this article shows that dual candidates' campaign behaviour is distinct from that of their constituency and regional list counterparts. Their campaign effort tends to be more intense as well as complex than that put in place by candidates who stand in one tier only. In addition, the findings show that dual candidates' campaign messages tend to be more personalised than those of regional list candidates, but less personalised than those of constituency candidates. These results indicate that the electoral campaigns put in place by dual candidates combine elements of campaigning under candidate-centred and party-centred electoral systems

Keywords

Campaigns; electoral institutions; dual candidacy; voter mobilisation; devolution

Introduction

Electoral institutions influence many aspects of political life. They have been shown to shape the composition as well as inner workings of political institutions through their effects on the representation of women and minorities, the effective number of political parties, government responsiveness, etc. (e.g., Farrell 2011; Hobolt and Klemmensen 2008; Paxton et al. 2010). Moreover, electoral institutions have been shown to influence the behaviour of parliamentary candidates, voters, and legislators (e.g., Karp and Banducci 2008; Sieberer 2010; Sudulich and Trumm 2017). In this article, I extend our understanding of electoral institutions and how they shape political processes by exploring how dual candidacy affects campaign behaviour.

Dual candidacy is a common feature of mixed member systems. It allows candidates to stand for office simultaneously in multiple electoral tiers by seeking a personal mandate in a single member district as well as a regional mandate through a party list. Although there is variation in the implementation of dual candidacy across the different countries that use mixed member systems, the practice is used by the vast majority of them.¹ Despite its prominence, however, dual candidacy is an understudied feature of mixed member systems. We still know very little about what kind of campaigns dual candidates tend to conduct in the run up to the polling day and, importantly, how these compare with the campaigns put in place by candidates who only stand in one electoral tier.

This study uses original data from the 2016 Welsh Candidate Study to address this lacuna. It explores the effect of candidacy type on candidates' campaign behaviour, focusing on their comparative campaign effort, campaign focus, and campaign complexity in the run up to the 2016 devolved election in Wales.² The analysis reveals some interesting behavioural patterns as dual candidates' campaign choices tend to be distinct from those of their constituency and regional list counterparts. Dual candidates conduct more intense and complex campaigns, and use more balanced messaging, than candidates who stand in one electoral tier only. These effects hold when controlling for other explanatory characteristics. Dual candidacy is in fact a substantively distinct mode of candidacy when it comes to campaign behaviour and there are some clear empirical implications, in addition to normative ones, associated with the decision to permit dual candidacy or not.

The article is organised as follows. In the next section, existing literature that is touched upon to guide my investigation is surveyed. I then outline my theoretical expectations, describe the

¹ Notable exceptions include Taiwan, Thailand, and Ukraine.

² The 2016 devolved election in Wales offers a useful case for studying the campaign effects of candidacy type. First, all three candidacy types – constituency, regional list, and dual – were meaningfully represented in the full population of candidates. There was a total of 457 candidates, with 208 standing as regional list candidates, 153 as constituency candidates, and 96 as dual candidates. Even the least popular category comprised of over 20% of all candidates. This allows for a meaningful analysis as no category of candidates is effectively a token category. Second, the election in question is one of the most recent parliamentary elections held in mixed member systems for which a candidate study has been conducted. This allows for an up-to-date analysis which findings reflect as current campaign dynamics as possible. Finally, while devolved elections in Britain still have low turnout levels, their 'second order' nature is significantly reduced by the strength of these administrations as they have primary legislative power over a range of policy areas and the strength of the sub-state identities in question (Jeffery and Hough 2009).

data and the operationalisation of the variables. This is followed by the presentation of results from the empirical analysis. Finally, the paper concludes with a discussion of the implications that emerge from the empirical evidence.

Literature review

Mixed member systems rose to prominence in the early 21st-century. Promising to deliver the best of both worlds, they were seen to balance proportionality and small group representation associated with proportional systems and geographic representation of a particular locale and catch-all parties associated with majoritarian systems (Moser and Scheiner 2012; Shugart and Wattenberg 2001). Mixed member systems became popular among academics (Bowler et al. 2005; Bowler and Farrell 2006), but also the electoral system of choice for many countries that opted for electoral reform. Although there has been a decline in the number of countries that have switched to a mixed member system in recent years, it remains an important family of electoral systems (Massicotte 2011). Today, around thirty countries use some version of a mixed member system (Batto and Cox 2016; Manow 2015), including such diverse cases like Germany, Hungary, Lithuania, Mexico, New Zealand, South Korea, and Venezuela.

The prominence of mixed member systems unsurprisingly led to a surge in academic interest in the electoral system. On the one hand, there is a theoretically-motivated body of literature. It has explored the virtues and drawbacks of mixed member systems, offered a classification of different mixed member systems, and compared them with other electoral system families (Baws and Thiem 2003; Massicotte and Blais 1999; Shugart and Wattenberg 2001). On the other hand, there is an empirically-motivated body of literature. Whereas some scholars have explored the systematic effects associated with mixed member systems – effective number of parties (Barker and McLeay 2000; Nishikawa and Herron 2004), legislative turnover (Manow 2007), electoral efficiency (Shugart 2001), party system fragmentation (Kostadinova 2002; Riera 2013) –, others have examined their behavioural effects on parliamentarians (Manow 2013; Olivella and Tavits 2014; Sieberer 2010), political parties (Gschwend and Zittel 2016; Manow 2015), and voters (Gschwend et al. 2003; Moser and Scheiner 2009; Plescia 2016). Despite this growing body of literature, dual candidacy and its effect on candidates' electoral campaigns, however, remains an understudied feature of mixed member systems.

It is common in mixed member systems to permit dual candidacy whereby candidates can run for office in two electoral tiers simultaneously. The ability to run as a dual candidate may, in turn, have implications for politicians' electoral campaigns and legislative activities. Whereas existing research into the latter is well-developed (e.g., Battle 2011; Bradbury and Mitchell 2007; Ferrara 2004; Ohmura 2014; Thames 2005), very few studies have focused on the pre-election period and explored how candidacy type influences candidates' campaign behaviour in mixed member systems. Those that do, explore the effects associated with the lowest level of candidacy and do not distinguish dual candidates from the rest (Chiru 2015) or undertake somewhat limited bivariate analyses without checking whether the effects of candidacy type remain salient when controlling for other explanatory characteristics (Rich 2013; Wüst et al.

2006).³ Very little is still known about how candidacy type, and dual candidacy in particular, shapes the level and nature of information that voters receive from candidates in the run up to the polling day in mixed member systems.

How does the intensity and complexity of the campaign effort put in place by dual candidates compare with that of their constituency and regional list counterparts? What kind of messages do different types of candidates put forward in their campaign? It is important to address both questions to understand whether and, if so, how permitting dual candidacy influences the way that voters experience electoral campaigns in mixed member systems.

Hypotheses

The conventional wisdom in election literature is that electoral institutions play a significant role in shaping the level of campaign effort candidates put in place and voters are subjected to in the run up to the polling day (e.g., Karp and Banducci 2007; Karp et al. 2008; Sudulich and Trumm 2017).⁴ Specifically, candidate-centred electoral mechanisms are believed to promote greater campaign effort than party-centred electoral mechanisms as the former put a stronger onus on individual candidates to engage with voters and promote their campaign in the run up to the polling day.⁵ The link between one's campaign effort and chances of getting elected is simply much more explicit and direct in systems where personal appeal and votes determine who gets elected. Candidates in such systems know they must maximise their personal profile and establish personal ties with constituents to enhance their chances of getting elected, while candidates in party-centred systems can rely to a greater degree on their party's campaign and votes to win a seat. In terms of the devolved elections in Wales, this would lead one to expect greater campaign effort on the part of constituency candidates than regional list candidates as the former run under SMD and the latter under closed list PR rules.

The situation regarding dual candidates, however, is not as straightforward. These candidates are running simultaneously as constituency candidates in single member districts and regional list candidates in multi member districts under closed list PR. Unlike their counterparts who run in a single electoral tier, dual candidates effectively have two constituencies and two sets of electorates to appeal to. They must promote their own reputation and profile in the single member constituency to enhance the likelihood of winning a constituency mandate, but they also have an incentive to promote their party image in the larger region to have better chances of obtaining a regional mandate via the party list. Even if dual candidates are ranked too low on their party list to have any realistic chance of getting elected through the party list route at the given election, they still have an incentive to put in some effort to promote their party. It is reasonable for candidates to believe that promoting their party image is seen favourably by their party, local and national, which in turn is likely to improve their chances of being given a higher ranking at a future election and their likelihood of getting elected. Given that dual

³ It is also worth noting that the studies by Chiru (2015) and Rich (2013) look exclusively at campaign focus and do not study the effect of candidacy type on candidates' campaign effort or complexity.

⁴ The study by Bowler and Farrell (2011) is an exception as it does not find electoral institutions to significantly influence candidates' campaign effort when focusing on the 2004 European Parliament election.

⁵ See, for example, Karp and Banducci 2007, Sudulich and Trumm 2017, or Wüst et al. 2006.

candidates must campaign on two electoral fronts, engaging with two sets of electorates, it is reasonable to expect that their campaign effort exceeds that of their constituency and regional list counterparts.

Hypothesis 1: Candidacy type affects campaign effort as follows: (a) constituency candidates undertake more intense campaigns than regional list candidates; and (b) dual candidates conduct most intense campaigns.

Another element of campaigning that is most likely influenced by candidacy type is the focus of candidates' campaign messages. Whereas all candidates seek to get out the vote and win votes, electoral systems are different in terms of whom voters ultimately cast their ballot for. The theoretical expectations here are intuitive; candidate-centred electoral mechanisms ought to encourage more candidate-focused campaigning, while party-centred electoral mechanisms should encourage more party-focused campaigning.⁶ The aim of any electoral campaign is to win votes. Therefore, it is rational for candidates to promote their party image when it is party votes that ultimately decide the electoral outcome (e.g., closed list PR) and their own profile when the importance of personal votes determines who gets elected (e.g., SMD). In terms of the devolved elections in Wales, this would lead one to expect more personalised campaigns from constituency candidates than regional list candidates.

Dual candidates, once again, must respond to two different incentives. On the one hand, their campaigns should be highly personalised as it is ultimately their own profile and the number of personal votes won in the single member constituency that determine whether they receive a constituency mandate or not. On the other hand, their campaigns should also focus heavily on their party image as it is the performance of their party that determines how many regional mandates are distributed among its candidates in the given multi member district. Therefore, dual candidates' campaign messages are likely to be more balanced in their focus than those of candidates who stand in one electoral tier only. Whereas constituency candidates have an incentive to prioritise their own image and regional list candidates have an incentive to raise the profile of their party, dual candidates have incentives to focus on both.

Hypothesis 2: Candidacy type affects campaign focus as follows: (a) constituency candidates conduct most personalised campaigns; and (b) dual candidates conduct less candidate-centred campaigns than constituency candidates but more candidate-centred campaigns than regional list candidates.

Candidates may also differ in how they campaign. After all, single member districts in Wales are much smaller in terms of their geographical size and number of voters than multi member regions. The former also encourage candidates to undertake more personalised campaigning than the latter. It is highly likely that candidates choose campaign activities that allow them to maximise the effectiveness of their campaign effort. It is the more traditional campaign tools

⁶ Existing empirical evidence supports these expectations (e.g., Giebler and Wessels 2013; Sudulich and Trumm 2017; Wüst et al. 2006; Zittel and Gschwend 2008).

that reach people in their homes, e.g., canvassing and leafleting, that constituency candidates are likely to find particularly appealing. These campaign activities are very useful for making personal appeals to voters and conveying a sense of localness, whilst their resource-intensive nature is less demanding in smaller single member constituencies. At the same time, the more impersonal campaign activities like media advertisements or social media announcements are likely to be particularly attractive to regional list candidates as they reach a broader audience. These campaign activities are well-suited for targeting a large and disperse electorate, whilst their impersonal nature is less of a concern for candidates who do not rely on personal votes to get elected. Taken together, constituency candidates are more likely to rely on the personal campaign activities and regional list candidates on the impersonal ones, but the overall range of campaign tools used is likely to be similar for these types of candidates.

As for dual candidates, they have strong incentives to engage with door-to-door campaigning as well as the more far-reaching, but less personal, campaign activities. Whereas the former is more effective in promoting one's personal profile and lobbying for a personal vote in a small constituency, the latter enable candidates with greater ease to promote their party in the larger regional district. Given that dual candidates must engage with two sets of voters, and these are best reached via different communication channels, it is likely that they choose to utilise a wider range of campaign activities than candidates who stand in a single electoral tier.

Hypothesis 3: Candidacy type affects campaign complexity as follows: (a) constituency and regional list candidates undertake equally complex campaigns; and (b) dual candidates conduct most complex campaigns.

Data and methods

The theoretical expectations are evaluated using original data from the 2016 Welsh Candidate Study.⁷ It is a comprehensive post-election survey of candidates who stood for election to the National Assembly for Wales in 2016 and includes several questions about their campaign behaviour. The survey was implemented in dual mode – online and paper – and language – English and Welsh – to maximise the response rate and obtain a balanced set of responses. In addition, candidates were assured that their responses are treated confidentially to ensure they feel able to reveal their underlying preferences which are unfiltered by strategic calculations, and candidates could leave certain questions unanswered if they wished to do so. The sample includes 159 candidates (35% response rate). It is representative as the proportion of different types of candidates is similar in the sample and the full population of candidates as is also the case with the distribution of partisanship and electoral success.⁸

⁷ The 2016 Welsh Candidate Study provides a first opportunity to systematically compare the campaign choices of dual candidates with those of constituency and regional list candidates in Wales. Dual candidacy was banned at the 2007 and 2011 devolved elections, and no individual-level data allowing for such analysis is available on candidates' campaign behaviour at the 1999 and 2003 elections when the practice was permitted. The novelty of this data offers a unique opportunity for enhancing our understanding of campaign behaviour in mixed member systems. However, it does also highlight the need to replicate this analysis for future elections when the practice of dual candidacy has become a more established element of the electoral system in Wales.

⁸ Further information about the 2016 Welsh Candidate Study is provided in Appendix A.

The reliance on survey data and candidates' self-perceived campaign behaviour offers unique research opportunities, but it also calls for caution. Scholars have pointed out that survey data can be subject to response bias, a prime example being the frequent over-reporting of turnout (Ansolabehere and Hersh 2012). While it is impossible to validate candidates' self-perceived campaign behaviour, there is evidence to support the reliability of the survey data. It has been shown that the views expressed by successful candidates in the 2016 Welsh Candidate Study are in fact consistent with their subsequent parliamentary activity (Trumm 2018). In addition, the responses to the 2016 Welsh Candidate Study that can be validated – e.g., candidacy type, demographics, use of campaign website – show no response bias for those respondents whose survey responses can be compared with verified data. Assuring candidates that their answers are not released in a way that allows the identification of respondents meant that they had no one to please through their answers and were able to disclose their unfiltered views.

Dependent variables

In line with the theoretical approach, survey measures from the 2016 Welsh Candidate Study are identified to capture campaign effort, campaign focus, and campaign complexity. Starting with *campaign effort*, it is measured as the number of hours per week each candidate spent on her campaign during the last month of the campaign period, ranging from 0 to 105.⁹ This is preferred to campaign spending as official candidate spending data compiled by the Electoral Commission for the 2016 devolved election covers spending in single member constituencies only. The number of hours captures the campaign effort of all types of candidates, whilst still representing a reliable and widely used proxy for the intensity of one's campaign effort (e.g., Bowler and Farrell 2011; Sudulich and Trumm 2017; Wüst et al. 2006).

Campaign focus captures the actual content of a candidate's campaign. This measure is based on a survey question that directly addresses the primary aim of one's campaign, ranging from 0 'to attract as much attention as possible to me as a candidate' to 10 'to attract as much attention as possible to my party'. Higher values indicate more party-centred messaging. It is a widely established indicator used by the Comparative Candidate Survey project (2018) and studies of campaigning (e.g., Giebler and Wessels 2013; Zittel and Gschwend 2008), offering an insight into the kind of messages that candidates convey through their campaign effort.

Finally, *campaign complexity* taps into how candidates campaign. It is an index that describes how many campaign activities, from the following options, candidates used as part of their campaign: i) canvassing, ii) leafleting, iii) engaging with media, iv) debating in public, and v) social networking.¹⁰ These campaign activities capture a broad range of the different types of campaign activities that candidates utilise, including localised door-to-door campaigning that requires candidates to make direct contact with voters on their doorstep, the promotion of one's candidacy in public, and campaign advertisement using both traditional and new forms of media.¹¹ As a result, campaign complexity provides a good overview of how broad range

⁹ Responses over 105 hours are treated as measurement error and excluded from the analysis.

¹⁰ The use of an index, based on whether candidates employed various campaign activities, to capture campaign complexity has been utilised in cross-national studies of campaign behaviour (Sudulich and Trumm 2017).

¹¹ Non-response was low for all campaign activities that form the campaign complexity index.

of communication channels candidates used to reach voters. It ranges from 0 to 5, with higher values indicating a more complex campaign.

Key explanatory variables and controls

The key explanatory variable in this study, *candidacy type*, is a categorisation of candidates by the nature of their candidacy. It differentiates between 1 ‘dual candidates’, 2 ‘constituency candidates’, and 3 ‘regional list candidates’. The categorisation of candidates is derived from the official Statement of Persons Nominated notices.¹²

The analyses also control for the effects associated with other individual-level characteristics that have been shown to be relevant for explaining campaign behaviour.¹³ First, I account for candidates’ self-perceived electoral prospect.¹⁴ It is likely that the more confident a candidate is of her electoral chances, the stronger her incentives are to conduct a high intensity as well as personalised campaign. At the same time, candidates who do not expect to get elected have much weaker incentives to put in extra campaign effort and should opt for more party-centred campaigns to further their own position within their party and improve the electoral chances of their co-partisans. *Likelihood of success* describes candidates’ self-perceived likelihood of getting elected before their campaign had started, ranging from 1 ‘unlikely’ to 3 ‘likely’.¹⁵

Second, candidates’ political experience is accounted for.¹⁶ *Past AM* captures whether a candidate had served in the National Assembly for Wales at any point before the 2016 devolved election (coded 1) or not (coded 0).¹⁷ Candidates with more prominent political backgrounds should be inclined to invest more time and resource into their campaign and, given their relatively high-profile status, should have somewhat easier access to the various

¹² The 2016 Welsh Candidate Study data show that some, albeit very few, candidates who officially ran in both electoral tiers claimed to have campaigned in one of the electoral tiers only. I ran models where these candidates are coded as constituency or regional list candidates as a further robustness check (see Appendix B).

¹³ There is already an extensive body of literature on candidates’ campaign behaviour. It includes cross-national studies (e.g., Bowler and Farrell 2011; Giebler and Wessels 2013; Giebler and Wüst 2011; Sudulich and Trumm 2017), single country studies focusing on mixed member systems (e.g., Gschwend and Zittel 2015; Zittel 2009; Zittel and Gschwend 2008), and single country studies focusing on other electoral systems (e.g., De Winter and Baudewyns 2015; Fisher and Denver 2008).

¹⁴ Expected electoral success has been shown to positively influence campaign personalisation (e.g., De Winter and Baudewyns 2015; Sudulich and Trumm 2017; Zittel and Gschwend 2008), campaign intensity (e.g., Giebler and Wüst 2011; Sudulich and Trumm 2017), and campaign complexity (Sudulich and Trumm 2017).

¹⁵ It is important to note that, given the data derive from a post-election survey, candidates were aware whether they had got elected or not when describing their electoral prospects before their campaign had started. Whereas it is not possible to validate responses to the survey question on electoral prospects, the presence of respondents who got elected despite having believed they had no chance of getting elected and respondents who did not get elected despite having believed they were likely to get elected offers some indication that respondents’ views on their electoral prospects are not determined by their electoral success (or lack thereof). In addition, please note that estimates from models that exclude the likelihood of success variable are robust to those presented here and available upon request.

¹⁶ Existing evidence regarding the relevance of political experience in shaping campaign behaviour is somewhat mixed. Whereas the study by Giebler and Wüst (2011) finds political experience to positively shape candidates’ campaign effort and the study by Sudulich and Trumm (2017) finds it to have a positive effect on both campaign effort and complexity, others have not found significant effects associated with political experience (Bowler and Farrell 2011; Giebler and Wessels 2013; Zittel and Gschwend 2008).

¹⁷ Estimates from models where Past AM is operationalised as incumbents (coded 1) versus challengers (coded 0) are robust to those presented here and available upon request.

means that can be used to contact voters. In addition, it is shown that political profile is an electoral asset for candidates (e.g., Redmond and Regan 2015; Smith 2013; Sudulich et al. 2011). It is reasonable to expect that candidates want to make the most of this advantage in their electoral campaign which, in turn, leads to a more personalised campaign.

Third, candidate's campaign behaviour may be influenced by her relationship with her party. Namely, the further away a candidate's own views and policy positions are from those of her party, the more imperative it is for her to conduct a personalised campaign and to put in extra campaign effort to get her own views across to the electorate. It is simply more important for these candidates to convey their distinctive messages to potential voters. *Ideological distance* is measured as the absolute difference between the left-right position of the candidate and that of her party, as perceived by the candidate.¹⁸ It ranges from 0 'no difference' to 10 'complete disagreement'.

Finally, I control for *gender*, with female candidates coded as 1 and male candidates coded as 2, and *party* fixed effects. In terms of the latter, distinct codes are given to parties that gained representation following the 2016 devolved election, while all other parties are grouped under a separate 'other' category.

Empirical strategy

Given the different data structure of the dependent variables, different estimation techniques are used to explain variation in the various aspects of campaign behaviour. The ordinary least squares method is used to study variation in candidates' campaign effort and campaign focus, whereas ordered probit is used to analyse variation in their campaign complexity.

Findings

I start examining whether candidacy type influences one's campaign behaviour by comparing the mean values of dependent variables for the different types of candidates. Table 1 presents their mean campaign effort, campaign focus, as well as campaign complexity. It also displays the findings of the corresponding difference of means tests.

This initial comparison reveals some interesting variation in candidates' campaign behaviour. It is dual candidates who stand out in terms of campaign effort and complexity. They spend, on average, over 15 hours more per week campaigning than constituency candidates (48.6 vs 33.1) and almost 30 hours more than regional list candidates (48.6 vs 18.8). Their campaigns also tend to use a broader range of campaign activities than those of constituency candidates (4.4 vs 3.7) and regional list candidates (4.4 vs 2.8). Both sets of differences are statistically significant at $p < 0.05$ level. Looking at campaign focus, however, a slightly different picture emerges as dual candidates seem to conduct more balanced campaigns than their constituency and regional list counterparts. On average, their campaigns are more party-centred than those of constituency candidates (6.8 vs 5.0), but more candidate-centred than those of regional list

¹⁸ It is standard practice in campaigning literature to capture ideological distance through differences in left-right positions (e.g., Bowler and Farrell 2011; Giebler and Wessels 2013; Zittel 2009).

candidates (6.8 vs 8.1). These differences are also statistically significant at $p < 0.05$ level. These patterns are in line with the theoretical expectations and offer a first-cut indication that candidacy type matters when it comes to explaining candidates' campaign behaviour.

[TABLE 1 HERE]

Candidacy type influences candidates' campaign effort and focus

I now move on to the multivariate analyses. First, I look at whether candidacy type continues to influence candidates' campaign effort and focus when additional exploratory variables are accounted for. Findings from these models are presented in Table 2.

The findings provide consistent support for the theoretical expectations. It is dual candidates who tend to produce campaigns of highest intensity. The negative and significant coefficients of -15.81 and -23.93 for constituency and regional list candidates, respectively, indicate that both types of candidates put in less hours of campaigning per week in the immediate run up to the polling day than dual candidates. Holding everything else constant, the predicted value for campaign effort rises from 22.3 hours per week for regional list candidates to 30.4 hours per week for constituency candidates, and to 46.2 hours per week for dual candidates. It is, as expected, dual candidates who tend to conduct campaigns of greatest intensity when looking at time spent on campaigning.

In terms of the other explanatory characteristics, a few also contribute to explaining variation in campaign effort. The positive coefficient of 8.56 for the likelihood of success indicates that candidates who are more confident in their electoral chances prior to campaigning tend to put in greater campaign effort than those who do not expect to succeed, whereas the negative coefficient of -8.05 for gender shows that men tend to commit fewer hours to their campaigns than women. Finally, there are some interesting observations when looking at party effects. I do not find significant differences in the campaign effort of Welsh Labour candidates on the one hand and that of Plaid Cymru or Welsh Liberal Democrats candidates on the other hand, but the campaign effort put in place by Welsh Labour candidates is more intense than that of candidates who belong to the other parties.

Moving on to campaign focus, candidacy type also seems to play a part in understanding how party- and candidate-centred candidates' campaign messaging is. The negative coefficient of -1.33 for constituency candidates indicates that constituency candidates tend to undertake less party-centred campaigns than dual candidates. At the same time, the positive coefficient of 1.53 for regional list candidates means that they conduct more party-centred campaigns than dual candidates. The nature of campaign messages put forward by dual candidates appears to effectively be a mix of those put forward by candidates who are standing in one electoral tier only. Holding everything else constant, the predicted value for campaign focus rises from 5.2 for constituency candidates to 6.5 for dual candidates, and to 8.0 for regional list candidates. Dual candidates opt for a 'middle of the road' strategy. Their campaigns are not as candidate-centred as those of constituency candidates, but also not as party-centred as those of regional

list candidates. This pattern is in line with the theoretical expectations set out earlier. In terms of the other explanatory variables, the only significant effect observed is that candidates from parties that did not win representation in the National Assembly for Wales following the 2016 election conducted more party-centred campaigns than Welsh Labour candidates.

Taken together, candidacy type clearly plays an important role in explaining some of the key strategic decisions that candidates need to make about their campaign effort; its intensity and focus. Interestingly, the choices of dual candidates do not conform to those associated with constituency candidates or regional list candidates. Their campaign behaviour is characterised by higher intensity campaign effort and more balanced campaign focus. What it means is that the public discourse on dual candidacy, which has so far centred around normative arguments on the morality of permitting candidates to run in multiple electoral tiers simultaneously¹⁹, should feature more prominently the practical consequences of such a choice. Permitting dual candidacy has a positive effect on the overall campaign effort that candidates put in place in the run up to the polling day, if the total number of candidates is not reduced as a result²⁰, and encourage campaigns that use balanced messages which are not as party-focused as those of regional list candidates nor as candidate-focused as those of constituency candidates.

[TABLE 2 HERE]

Candidate type affects how candidates campaign

Next, I examine whether candidacy type influences how candidates choose to campaign. It is plausible that candidates not only vary their overall campaign effort and campaign focus, but also differ in the range of campaign activities they utilise as part of their campaign. Table 3 presents findings from the model that explains candidates' campaign complexity. Note first that candidacy type is clearly relevant to explaining how broad range of communication tools candidates use to reach voters. The negative and significant coefficients of -0.76 and -1.34 for constituency candidates and regional list candidates, respectively, indicate that both types of candidates use a narrower range of campaign activities as part of their campaign effort than dual candidates. The predicted probability of running a high complexity campaign, i.e., using all five campaign activities that form the index, declines from 64.3% for dual candidates to 37.3% for constituency candidates, and to as low as 19.9% for regional list candidates. At the same time, the predicted probability of not using any of the five campaign activities increases from 0.7% for dual candidates to 4% for constituency candidates, and to 11.1% for regional list candidates. The range of campaign activities used by different candidates to reach voters varies considerably. It is dual candidates who tend to use the widest range of communication tools as part of their campaign effort.

¹⁹ It is argued by some that dual candidacy devalues the integrity of the electoral system as it allows for losers to become winners by making it possible for defeated constituency candidates to get elected via regional party lists (Hain 2014), while others claim that this stance represents a fundamental misunderstanding of mixed member systems as its two tiers lead to two inherently different types of mandates (Scully 2014).

²⁰ Evidence from past devolved election in Wales does not indicate that permitting dual candidacy depresses the total number of candidates. Whereas the total number of candidates has fluctuated across the elections, it has not been systematically lower when dual candidacy has been permitted. For example, the total number of candidates was marginally lower in 2016 than it had been in 2007, but at the same time slightly higher than it was in 2011.

Campaign complexity, however, is not just a function of candidacy type. Gender also plays a role, with the negative coefficient of -0.49 indicating that men tend to use a narrower range of campaign activities than women. Finally, some party effects are evident. I find no significant differences in the campaign complexity of Welsh Labour candidates on the one hand and that of Plaid Cymru or Welsh Conservatives candidates on the other hand, but candidates from the other parties utilise a narrower range of campaign activities than Welsh Labour candidates.

[TABLE 3 HERE]

It is possible that differences in campaign complexity across the different types of candidates are not equally driven by the five campaign activities that form the index. Table 4 shows the percentage of candidates, by candidacy type, who used each campaign activity accounted for in this study during their electoral campaign.

Dual candidates, as expected, stand out in their use of different campaign activities. They are most likely to use four of the five campaign activities. The exception here is leafleting, which was used by a marginally higher percentage of constituency candidates than dual candidates (78.9% vs 78.1%). There is, however, significant variation in the relevance of candidacy type across the different campaign activities. It appears that the likelihood of using campaign tools that reach voters at home, i.e., canvassing and leafleting, does not vary by candidacy type. At the same time, candidacy type clearly influences the use of campaign activities that are more impersonal. Dual candidates are significantly more likely to engage with media activities than constituency and regional list candidates (97% vs 73.5% vs 55.4%), debate in public (97% vs 63.5% vs 36.9%), and campaign on social networking sites (91.2% vs 76.9% vs 57.6%). Dual candidates' tendency to conduct more complex campaigns than constituency and regional list candidates appears to be driven by their greater likelihood of employing the more impersonal campaign activities that do not reach voters at their doorstep.

[TABLE 4 HERE]

Conclusions

Electoral institutions influence many aspects of our political life. They can have an impact on the kind of political institutions we end up with, the nature of the party system, the promotion of political engagement, how well women and minorities are represented, etc. We also know that electoral institutions influence the behaviour of parliamentary candidates as SMD-only candidates tend to conduct more intense and personalised campaigns than PR-only candidates (Sudulich and Trumm 2017). But what about those candidates who simultaneously run under both systems? Despite the growing popularity of dual candidacy and mixed member systems, we still know very little about how the campaign behaviour of dual candidates compares with that of their constituency and regional list counterparts.

This study explores the effects of candidacy type on the campaign behaviour of parliamentary candidates. Using original survey data from the 2016 Welsh Candidate Study, it compares the

campaign behaviour – i.e., campaign effort, focus, and complexity – of dual candidates with that of constituency and regional list candidates. The findings show that candidacy type plays an important role in explaining candidates' individual-level campaign behaviour. They reveal that dual candidates tend to conduct campaigns that are more intense as well as complex than the campaigns put in place by those who stand in one tier only. Furthermore, dual candidates tend to opt for a different campaign focus than both constituency and regional list candidates. Their campaign messages are not as party-centred as those of regional list candidates but also not as candidate-centred as those of constituency candidates. The electoral campaigns of dual candidates combine elements of campaigning under both candidate-centred and party-centred electoral systems.

There are three broader points arising from this study and its findings. First, the fact that the campaign choices of dual candidates differ from those of their constituency and regional list counterparts implies that dual candidacy is a substantively distinct candidacy type. It is not just unique in name, whereby dual candidates' actual patterns of behaviour conform to those associated with constituency candidates or regional list candidates, but empirically different as well. Whereas studies of legislative behaviour and representation have often found little difference between the parliamentary behaviour of MPs who had run as dual candidates and those who had run as constituency candidates (e.g., Gschwend et al. 2009; Lundberg 2006; Patzelt 1999), evidence is clearer when focusing on the campaign behaviour of different types of candidates. Dual candidates tend to campaign in a substantively different manner than their constituency and regional list counterparts. Candidacy type in mixed member systems should be conceptually thought of and empirically captured in broader terms than the basic SMD-PR dichotomy as dual candidacy is a distinct mode of candidacy in terms of campaign behaviour.

Second, the findings indicate that the decision to allow or not to allow dual candidacy should not just be thought of as a normative one. Although the normative arguments remain relevant when discussing the virtues and vices of dual candidacy, so are the empirical implications of the decision. Dual candidates tend to conduct campaigns that are significantly more intense as well as complex than the campaigns of those who stand in one tier only. What this effectively means is that voters are likely to receive more electorally relevant information in the run up to the polling day and do so through a more diverse range of communication channels when dual candidacy is allowed. Given that it is widely accepted that more intense campaigns lead to more informed voters (e.g., Nai 2015; Partin 2001; Westlye 1991) and higher turnout (e.g., Geys 2006; Lassen 2005; Trumm and Sudulich 2018), both of which are seen to contribute to the health of a democracy, the empirical evidence presented here suggests that dual candidacy should be allowed in mixed member systems. It has positive impact on how voters experience electoral campaigns in the run up to the polling day.

Finally, the findings uncovered here adhere to the 'best of both worlds' thesis associated with mixed member systems (Shugart and Wattenberg 2001). Mixed member systems are seen to combine the local accountability and constituency focus associated with majoritarian systems with small group representation and proportionality associated with proportional systems. In doing so, they contain aspects of candidate-centred and party-centred electoral systems. Dual

candidacy, which brings together the two electoral tiers in a crude manner, does the same. It combines elements of campaigning under both candidate-centred and party-centred electoral systems. The campaign effort and campaign complexity of dual candidates tends to be higher than that of candidates who stand in one tier only, whereas their campaign focus is an almost perfect harmony of the campaign messages of constituency and regional list candidates. The underlying premise of mixed member systems is not limited to its systematic effects. It is also evident when looking at the campaign behaviour of dual candidates.

In summary, these findings broaden our understanding of how electoral institutions influence the campaign behaviour of parliamentary candidates in mixed member systems. It is widely accepted that electoral campaigns are shaped by country-specific factors as well as party- and candidate-specific characteristics. The empirical evidence offered here adds dual candidacy, and candidacy type more broadly, to this list. At the same time, it leaves room and highlights the need for expanding this research agenda. Future research into campaign patterns in mixed member systems should look at whether the effects of dual candidacy on campaign behaviour remain salient in the upcoming elections in Wales, compare the effects of candidacy type on candidates' campaign behaviour in different mixed member systems, and evaluate the effects of candidacy type on additional aspects of candidates' campaign behaviour.

Appendix A. 2016 Welsh Candidate Study

The 2016 Welsh Candidate Study includes 158 candidates for whom it is known whether they got elected or not, their candidacy type, and their partisanship. Duncan index of dissimilarity is used to show that the survey sample is representative of the full population of candidates. It ranges from 0 to 1, with higher values indicating greater discrepancy between the sample and the full population (Duncan and Duncan 1955).

Table A1 shows the comparison between the sample and the full population. The comparison of candidacy type yields a value of 0.01, the comparison of partisanship a value of 0.07, and the comparison of electoral performance a value of 0.01. The survey sample is representative of the full population of candidates on all these key characteristics.

Table A1. 2016 Welsh Candidate Study sample

	Candidates (%)	Sample (%)
Partisanship		
Abolish the Welsh Assembly Party	4.4	5.1
Plaid Cymru	14.0	13.3
UKIP Wales	9.2	10.8
Wales Green Party	8.8	9.5
Welsh Communist Party	4.4	4.4
Welsh Conservative Party	16.4	18.4
Welsh Labour	12.5	12.0
Welsh Liberal Democrats	10.7	12.7
Welsh Trade Unionist and Socialist Coalition	4.4	3.2
Other	15.3	10.6
	Duncan index = 0.07	
Candidacy type		
Dual	21.0	21.5
Constituency	33.5	33.5
Regional list	45.5	44.9
	Duncan index = 0.01	
Electoral performance		
Successful	13.1	12.0
Unsuccessful	86.9	88.0
	Duncan index = 0.01	

Appendix B. Robustness check

Table B1 presents findings from models where candidates who officially stood for election in both electoral tiers but claimed they campaigned in one electoral tier only are coded, based on which tier it was, as constituency or regional list candidates. Estimates from these models are robust to those presented in Tables 2 and 3.

Table B1. Alternative coding for candidacy type

	Campaign effort	Campaign focus	Campaign complexity
Candidacy type [^]			
Constituency	-17.86** (7.84)	-1.40** (0.62)	-0.76** (0.26)
Regional list	-25.88** (8.19)	1.41** (0.54)	-1.38** (0.30)
Past AM	3.35 (8.79)	-0.51 (0.86)	-0.09 (0.43)
Likelihood of success	8.20** (3.62)	-0.27 (0.47)	-0.09 (0.24)
Ideological distance	1.76 (2.46)	0.29 (0.20)	0.03 (0.10)
Gender	-8.55** (4.28)	0.06 (0.44)	-0.53** (0.21)
Party ^{^^}			
Plaid Cymru	0.28 (9.43)	0.59 (0.85)	-0.38 (0.37)
Welsh Conservatives	-12.96* (7.65)	-0.36 (0.86)	-0.42 (0.39)
UKIP Wales	-23.34** (8.75)	1.34 (0.99)	-0.86* (0.44)
Welsh Liberal Democrats	-15.16 (9.90)	0.50 (0.98)	-1.37** (0.51)
Others	-20.40** (7.80)	1.62 (0.90)	-0.98** (0.39)
Constant	62.66** (14.78)	5.94** (1.42)	
/cut1			-4.40 (0.78)
/cut2			-4.10 (0.77)
/cut3			-3.32 (0.75)
/cut4			-2.91 (0.74)
/cut5			-2.11 (0.74)
Observations	143	147	133
R ² / Log pseudolikelihood	0.36	0.35	-185

Note: robust standard errors in parentheses. *p<0.1, **p<0.05

[^] Reference category is dual

^{^^} Reference category is Welsh Labour

Bibliography

- Ansolabehere, S. and Hersh, E. 2012. Validation: What Big Data Reveal about Survey Misreporting and the Real Electorate. *Political Analysis* 20/4: 437-459.
- Barker, F. and McLeay, E. 2000. How Much Change? An Analysis of the Initial Impact of Proportional Representation on the New Zealand Parliamentary Party System. *Party Politics* 6/2: 131-154.
- Battle, M. 2011. Second-Class Representatives or Work Horses? Committee Assignments and Electoral Incentives in the Scottish Parliament. *Parliamentary Affairs* 64/3: 494-512.
- Batto, N.F. and Cox, G.W. 2016. Introduction: Legislature- Centric and Executive- Centric Theories of Party Systems and Faction Systems. In N.F.Batto, C.Huang, A.C.Tan, G.W.Cox (eds.) *Mixed-Member Electoral Systems in Constitutional Context: Taiwan, Japan, and Beyond*. Ann Arbor: University of Michigan Press, pp. 1-22.
- Baws, K. and Thiem, M.F. 2003. A Comparative Theory of Electoral Incentives: Representing the Unorganized Under PR, Plurality and Mixed-Member Electoral Systems. *Journal of Theoretical Politics* 15/1: 5-32.
- Bowler, S., Farrell, D.M. and Pettitt, R.T. 2005. Expert Opinion on Electoral Systems: So Which Electoral System is “Best”? *Journal of Elections, Public Opinion and Parties* 15/1: 3-19.
- Bowler, S. and Farrell, D.M. 2006. We Know Which One We Prefer but We Don’t Really Know Why: The Curious Case of Mixed Member Electoral Systems. *The British Journal of Politics and International Relations* 8/3: 445-460.
- Bowler, S. and Farrell, D.M. 2011. Electoral Institutions and Campaigning in Comparative Perspective: Electioneering in European Parliament Elections. *European Journal of Political Research* 50/5: 668-688.
- Bradbury, J. and Mitchell, J. 2007. The Constituency Work of Members of the Scottish Parliament and National Assembly for Wales: Approaches, Relationships and Rules. *Regional & Federal Studies* 17/1: 117-145.
- Chiru, M. 2015. Multiple Candidacies and the Role of the Lowest Electoral Tier for Individualized Campaigning. *East European Politics and Societies and Cultures* 29/4: 892-914.
- Comparative Candidate Survey. 2018. Data Collection Documents. Available: comparativecandidates.org/documents.
- De Winter, L. and Baudewyns, P. 2015. Candidate Centred Campaigning in a Party Centred Context: The Case of Belgium. *Electoral Studies* 39: 295-305.
- Duncan, O.D. and Duncan, B. 1955. A Methodological Analysis of Segregation Indexes. *American Sociological Review* 20/2: 210-217.
- Farrell, D.M. 2011. *Electoral Systems: A Comparative Introduction*. Basingstoke: Palgrave Macmillan.
- Ferrara, F. 2004. Frogs, Mice and Mixed Electoral Institutions: Party Discipline in Italy’s XIV Chamber of Deputies. *The Journal of Legislative Studies* 10/4: 10-31.
- 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.

- Geys, B. 2006. Explaining Voter Turnout: A Review of Aggregate-Level Research. *Electoral Studies* 25/4: 637-663.
- Giebler, H. and Wessels, B. 2013. Campaign Foci in European Parliamentary Elections: Determinants and Consequences. *Journal of Political Marketing* 12/1: 53-76.
- Giebler, H. and Wüst, A.M. 2011. Campaigning on an Upper Level? Individual Campaigning in the 2009 European Parliament Elections in its Determinants. *Electoral Studies* 30/1: 53-66.
- Gschwend, T., Johnston, R. and Pattie, C. 2003. Split-Ticket Patterns in Mixed-Member Proportional Election Systems: Estimates and Analyses of Their Spatial Variation at the German Federal Election, 1998. *British Journal of Political Science* 33/1: 109-127.
- Gschwend, T., Shugart, M.S. and Zittel, T. 2009. Assigning Committee Seats in Mixed-Member Systems: How Important is 'Localness' Compared to the Mode of Election. Available: nbn-resolving.de/urn:nbn:de:0168-ssoar-257679.
- Gschwend, T. and Zittel, T. 2015. Do Constituency Candidates Matter in German Federal Elections? The Personal Vote as an Interactive Process. *Electoral Studies* 39: 338-349.
- Gschwend, T. and Zittel, T. 2016. Who Brings Home the Pork? Parties and the Role of Localness in Committee Assignments in Mixed-Member Proportional Systems. *Party Politics* OnlineFirst.
- Hain, P. 2014. UK Government Plans to Allow Assembly Candidates to Fight Seats and Stand on Regional Lists Show 'Utter Contempt' for Voters. Available: walesonline.co.uk/news/news-opinion/uk-government-plans-allow-assembly-7055637.
- Hobolt, S. and Klemmensen, R. 2008. Government Responsiveness and Political Competition in Comparative Perspective. *Comparative Political Studies* 41/3: 309-337.
- Jeffery, C. and Hough, D. 2009. Understanding Post-Devolution Elections in Scotland and Wales in Comparative Perspective. *Party Politics* 15/2: 219-240.
- Karp, J. and Banducci, S. 2007. Party Mobilization and Political Participation in New and Old Democracies. *Party Politics* 13/2: 217-234.
- Karp, J., Banducci, S. and Bowler, S. 2008. Getting Out the Vote: Party Mobilization in a Comparative Perspective. *British Journal of Political Science* 38/1: 91-112.
- Kostadinova, T. 2002. Do Mixed Electoral Systems Matter? A Cross-National Analysis of Their Effects in Eastern Europe. *Electoral Studies* 21/1: 23-34.
- Lassen, D.D. 2005. The Effect of Information on Voter Turnout: Evidence from a Natural Experiment. *American Journal of Political Science* 49/1: 103-118.
- Lundberg, T.C. 2006. Competition between Members of the Scottish Parliament and the Welsh Assembly: Problem or Virtue? *The Political Quarterly* 77/1: 107-116.
- Manow, P. 2007. Electoral Rules and Legislative Turnover: Evidence from Germany's Mixed Electoral System. *West European Politics* 30/1: 195-207.
- Manow, P. 2013. Mixed Rules, Different Roles? An Analysis of the Typical Pathways into the Bundestag and of MPs' Parliamentary Behaviour. *The Journal of Legislative Studies* 19/3: 287-308.
- Manow, P. 2015. *Mixed Rules, Mixed Strategies: Candidates and Parties in Germany's Electoral System*. Colchester: ECPR Press.

- Massicotte, L. 2011. Mixed Systems. In J.M.Colomer (ed.) *Personal Representation. The Neglected Dimension of Electoral Systems*. Colchester: ECPR Press, pp. 99-117.
- Massicotte, L. and Blais, A. Mixed Electoral Systems: A Conceptual and Empirical Survey. *Electoral Studies* 18/3: 341-366.
- Moser, R.G. and Scheiner, E. 2009. Strategic Voting in Established and New Democracies: Ticket Splitting in Mixed-Member Electoral Systems. *Electoral Studies* 28/1: 51-61.
- Moser, R.G. and Scheiner, E. 2012. *Electoral Systems and Political Context: How the Effects of Rules Vary Across New and Established Democracies*. Cambridge: Cambridge University Press.
- Nai, A. 2015. The Maze and the Mirror: Voting Correctly in Direct Democracy. *Social Science Quarterly* 96/2: 465-486.
- Nishikawa, M. and Herron, E.S. 2004. Mixed Electoral Rules' Impact on Party Systems. *Electoral Studies* 23/4: 753-768.
- Ohmura, T. 2014. When Your Name is on the List, it is Time to Party: The Candidacy Divide in a Mixed-Member Proportional System. *Representation* 50/1: 69-82.
- Olivella, S. and Tavits, M. 2014. Legislative Effects of Electoral Mandates. *British Journal of Political Science* 44/2: 301-321.
- Partin, R.W. 2001. Campaign Intensity and Voter Information: A Look at Gubernatorial Contests. *American Political Research* 29/2: 115-140.
- Patzelt, W.J. 1999. What Can an Individual MP Do in German Parliamentary Politics? *The Journal of Legislative Studies* 5/3-4: 23-52.
- Paxton, P., Hughes, M.M. and Painter II, M.A. 2010. Growth in Women's Political Representation: A Longitudinal Exploration of Democracy, Electoral System and Gender Quotas. *European Journal of Political Research* 49/1: 25-52.
- Plescia, C. 2016. *Split-Ticket Voting in Mixed-Member Electoral Systems*. Colchester: ECPR Press.
- Redmond, P. and Regan, J. 2015. Incumbency Advantage in a Proportional Electoral System: A Regression Discontinuity Analysis of Irish Elections. *European Journal of Political Economy* 38: 244-256.
- Rich, T. S. 2013. The Electoral Incentives for Legislator Perceptions in Mixed Systems: Integrating Evidence from East Asia. *Representation* 49/1: 17-31.
- Riera, P. 2013. Electoral Coordination in Mixed-Member Systems: Does the Level of Democratic Experience Matter? *European Journal of Political Research* 52/1: 119-141.
- Scully, R. 2014. Policy Response to: House of Commons Welsh Affairs Committee on the Draft Wales Bill. Available: sites.cardiff.ac.uk/wgc/files/2014/01/Written-Evidence-to-Welsh-Affairs-Select-Committee-on-Draft-Wales-Bill-RScully-Jan-2014.pdf.
- Shugart, M. 2001. Electoral 'Efficiency' and the Move to Mixed-Member Systems. *Electoral Studies* 20/2: 173-193.
- Shugart, M. and Wattenberg, M.P. 2001. *Mixed-Member Electoral Systems: The Best of Both Worlds?* Oxford: Oxford University Press.
- Sieberer, U. 2010. Behavioral Consequences of Mixed Electoral Systems: Deviating Voting Behavior of District and List MPs in the German Bundestag. *Electoral Studies* 29/3: 484-496.

- Smith, T.H. 2013. Are You Sitting Comfortably? Estimating Incumbency Advantage in the UK: 1983–2010. *Electoral Studies* 32/1: 167-173.
- Sudulich, L. and Trumm, S. 2017. A Comparative Study of the Effects of Electoral Institutions on Campaigns. *British Journal of Political Science* FirstView.
- 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.
- Thames, F.C. 2005. A House Divided: Party Strength and Mandate Divide in Hungary, Russia, and Ukraine. *Comparative Political Studies* 38/3: 282-303.
- Trumm, S. 2018. Representation in Wales: An Empirical Analysis of the Policy Divisions between Voters and Candidates. *The British Journal of Politics and International Relations* 20/2: 425-440.
- Trumm, S. and Sudulich, L. 2018. What Does It Take to Make It to the Polling Station? The Effects of Campaign Activities on Electoral Participation. *Party Politics* 24/2: 168-184.
- Westlye, M.C. 1991. *Senate Elections and Campaign Intensity*. Baltimore: John Hopkins University Press.
- Wüst, A.M., Schmitt, H., Gshwend, T. and Zittel, T. 2006. Candidates in the 2005 Bundestag Election: Mode of Candidacy, Campaigning and Issues. *German Politics* 15/4: 420-438.
- Zittel, T. 2009. Lost in Technology? Political Parties and the Online Campaigns of Constituency Candidates in Germany's Mixed Member Electoral System. *Journal of Information Technology & Politics* 6/3-4: 298-311.
- 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.

Table 1. Campaign behaviour by candidacy type

	Campaign effort	Campaign focus	Campaign complexity
Candidacy type			
Dual	48.6	6.8	4.4
Constituency	33.1	5.0	3.7
Regional list	18.8	8.1	2.8
T statistic			
Dual vs. constituency	2.21**	2.81**	2.37**
Dual vs. regional list	5.41**	-2.70**	5.09**
Constituency vs. regional list	3.12**	-6.36**	2.88**

Note: *p<0.1, **p<0.05

Table 2. Explaining variation in campaign effort and campaign focus

	Campaign effort	Campaign focus
Candidacy type [^]		
Constituency	-15.81** (7.79)	-1.33** (0.66)
Regional list	-23.93** (7.89)	1.53** (0.52)
Past AM	3.50 (8.86)	-0.49 (0.86)
Likelihood of success	8.56** (3.72)	-0.24 (0.47)
Ideological distance	1.62 (2.48)	0.30 (0.20)
Gender	-8.05* (4.45)	0.13 (0.46)
Party ^{^^}		
Plaid Cymru	0.68 (9.68)	0.56 (0.87)
Welsh Conservatives	-12.85* (7.63)	-0.37 (0.86)
UKIP Wales	-23.39** (8.87)	1.30 (1.00)
Welsh Liberal Democrats	-15.25 (9.98)	0.39 (0.99)
Others	-19.76** (7.78)	1.64* (0.90)
Constant	59.27** (14.54)	5.69** (1.38)
Observations	143	147
R-squared	0.35	0.33

Note: robust standard errors in parentheses. *p<0.1, **p<0.05

[^] Reference category is dual

^{^^} Reference category is Welsh Labour

Table 3. Explaining variation in campaign complexity

		Campaign complexity
Candidacy type [^]		
	Constituency	-0.76** (0.28)
	Regional list	-1.34** (0.30)
Past AM		-0.08 (0.43)
Likelihood of success		-0.07 (0.24)
Ideological distance		0.02 (0.10)
Gender		-0.49** (0.21)
Party ^{^^}		
	Plaid Cymru	-0.41 (0.37)
	Welsh Conservatives	-0.43 (0.39)
	UKIP Wales	-0.91** (0.45)
	Welsh Liberal Democrats	-1.45** (0.52)
	Others	-0.98** (0.39)
Observations		133
Log pseudolikelihood		-185

Note: robust standard errors in parentheses. *p<0.1, **p<0.05

[^] Reference category is dual

^{^^} Reference category is Welsh Labour

Table 4. Campaign activities by candidacy type

	Canvassing	Leafleting	Media	Public debates	Social networking
Candidacy type					
Dual	82.4	78.1	97.0	97.0	91.2
Constituency	80.8	78.9	73.5	63.5	76.9
Regional list	70.6	76.5	55.4	36.9	57.6
T statistic					
Dual vs. constituency	0.18	-0.08	2.88**	3.80**	1.71*
Dual vs. regional list	1.28	0.18	4.62**	6.86**	3.63**
Constituency vs. regional list	1.27	0.31	2.00**	2.93**	2.23**

Note: * $p < 0.1$, ** $p < 0.05$