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STRATEGIC INCENTIVES OF POLITICAL PARTIES:

POLICY-MAKING, IDEOLOGICAL POSITIONING, & ELECTION CAMPAIGNING

PhD in Political Science

2014

Kevin Cunningham
Declaration

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Summary

This three-paper thesis explores three instruments of party strategy: the party’s policy implementations, the party’s ideological positioning, and the targeting of their political campaigns. In each case we explore how these instruments affect the party’s fortunes and whether those fortunes would have been different if the party had adopted a different strategy. Drawing on new data in each case, the thesis seeks to answer a number of important puzzles of political science.

The first paper explores whether the policies implemented by a party can affect the level of politicization of an issue and secondly whether their ability to do so is dictated by the party’s reputation on that issue. Political parties are incentivised to de-politicize issues where their party is viewed unfavourably in respect of that issue. Using political claims data from two to four newspapers across seven western European countries, the paper tracks the relationship between policy changes introduced by successive governments and changes in the volume and strength of political claims demanding for policy changes. The paper takes immigration policies as its case study. This is an important issue which varies substantially in the extent to which it is politicized. It is also an issue which governing parties often try to de-politicize.

The paper finds that the introduction of anti-migrant policies precedes a reduction in anti-migrant immigration policy demands. Similarly, the introduction of pro-migrant immigration policies also precedes a decrease in the incidence of pro-migrant immigration policy claims. Thus, policy implementations affect the politicization of immigration as the political arena is responsive to the actions of governments. Similar results are observed for integration policy. In relation to the ideological position of the parties involved, the paper finds that pro-migrant governing parties experience periods of higher levels of anti-migrant immigration policy demands, while anti-migrant parties experience periods of higher levels of pro-migrant immigration and integration policy demands. The position of the governing party also affects the extent to which immigration is politicized. Structural variables unemployment and foreign nationals per capita, also have a strong impact on the politicization of immigration and in each case in the expected direction.

The second paper explores whether a party’s ideological positioning affects its ability to convert votes into seats. Focusing on a subset of electoral systems where electors...
can specify an ordinal preference, the paper aims to identify whether parties towards the centre of the political space can convert votes-won into seats-won more than the parties that adopt ideological positions on the extremes. The chapter draws on data from the Scottish local elections to determine whether elector’s ordered preferences reflect the dispersion of parties in the ideological political space. Then, drawing district-level election data the paper evaluates the relationship between votes and seats as in Ireland, Scotland, Northern Ireland, Australia, and France.

The paper finds that individuals assign secondary preferences more often to the parties that whom are also ideologically the most proximate to their first preference. The expected effect of this is that lower preferences tend to accumulate at the centre of the political space and benefit relatively centrist parties over extreme parties in terms of their ability to convert votes into seats. This result is found in each case.

The third paper explores whether campaigns conducted by parties have an impact on vote share. The paper explores the possibility that campaign effectiveness is dependent on incumbency, or the demographic make-up of the party’s support. Where campaigns are effective parties will be dependent on their core supporters and will therefore be somewhat tied to the ideological political positions of those supporters. Using extensive data from the 2010 general election campaign conducted by the British Labour Party, the paper evaluates the extent to which campaigns matter and for whom.

The paper finds that campaigns matter. By drawing on data from betting markets the paper controls for each candidate’s prospects at the outset of the campaign. This circumvents an issue whereby observed differences between incumbent and challenger campaign effects are conflated by the level of difficulty of the contest. The paper thereby finds the relatively unique result that there is little or no difference between the effectiveness of challenger and the effectiveness of incumbent campaign spending. Using a technique known as propensity score matching, the paper also observes that the effect of turning out voters is not confined to voters with a low propensity to vote. This indicates that campaign effects are not the sole remit of parties with significant support among these groups.
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Chapter 1

Introduction

*Three Levers of Party Strategy*

Parties fulfill an essential role in a democracy. A strong party system that is responsive to the public is widely considered to be necessary for the adequate representation of the interests and opinions of society. Through parties, voters can efficiently direct government by supporting a team of politicians rather than individuals. The efficiency of this relationship ensures that the electorate can effectively hold the government to account, creating incentives for responsible governance.

However, parties have their own motivations. While political science since Downs (1957) has popularised the notion that political parties will act rationally and in their self-interest, parties should not be conceived as unitary, unconstrained actors. In this regard, parties may be understood as having vote-seeking, office-seeking and policy-seeking objectives (Strom 1990; see also Chappell and Keech 1986). This three-paper thesis examines how these objectives can be affected by three external constraints.

Firstly, parties are constrained by their reputation. Political competition can be understood not only as a contest of party positioning, but also as a contest defined by the salience of favourable policy-areas (Budge and Farlie 1977; 1983; Budge, Robertson, and Hearl 1987; Budge 1993). If voters base their vote choice on the most politically salient issues, then a given party’s prospects are determined by whether they ‘own’ that issue. Therefore, a party’s ability to manipulate the salience of a policy-area will have significant consequences for the party’s prospects. This in turn has consequences for their policy-seeking, vote-seeking and office-seeking objectives.

Secondly, parties are constrained by the electoral rules of the political system. Parties are typically compelled to maximise their vote share to realise their office-seeking objectives. Downsian logic dictates that, in a two-party system, the optimal position for an office-seeking party is at the centre of the political space. On the other hand, in a multiparty system, parties are incentivised to adopt equidistant positioning based on the distribution of support in the political space. However, the effect of electoral rules on optimal party positioning are not confined to the district magnitude. The ballot structure and ordinal voting systems are of particular interest as they are also believed to affect optimal party positioning.
Finally, from an organisational perspective, campaigns can constrain political parties. If campaign activity has a significant effect on a party’s ability to win an election, then the party will need to accommodate the interests of its activists due to the numbers of activists the party requires to conduct a campaign. Vote-seeking parties require party activists to win elections and are, therefore, likely to make policy commitments to ensure their loyalty for election campaigns. However, such policy commitments may also jeopardize the party’s vote-seeking objectives if it causes the party to deviate from their aforementioned optimal party position (Strom 1990; Tsebelis 1990).

In conclusion, there are likely to be conflicting forces. Some of these may induce party system convergence in the political space (electoral systems), others may foster divergence (the party’s activists), and a third still may encourage parties to remain static (the party’s reputation). This three-paper thesis explores three constraints on party strategy and three levers of party strategy. The first paper explores how the party’s reputation can affect the ability of policy-making to affect the salience of an issue. The second paper explores how electoral rules affect a party’s optimal positioning with respect to the electoral contest. It aims to identify whether there are centripetal incentives in preferential voting systems where party positioning affects the translation of seats into votes. The third paper explores how campaigns can constrain parties. It focuses on the relative importance of volunteer-intensive voter mobilization campaigns determining whether and for whom such campaigns have a significant effect. In each of three papers, we explore how constraints relate to a party’s position in the ideological space. The remainder of this chapter explores how a party’s reputation, the electoral rules, and campaigns may constrain the strategic direction of political parties.


**Party Positions and Policies**

**The Importance of Policies**

Studies of parties often assume that voters are equipped with intricate knowledge of party policy proposals and can compute detailed calculations of what is best for them. However, this is demonstrably not the case. It is understood by political scientists that voters can only commit scarce amounts of time and effort to aggregating the vast amounts of information available to them. As a consequence, voters use cues, shortcuts, and symbols to simplify their vote decision where possible (McKelvey and Ordeshook 1985; Page and Shapiro 1992; Popkin et al. 1976). However, with respect to the most relevant issues voters do absorb parties' positions (Petersen et al. 2010; Sniderman and Stiglitz 2012; Snyder and Tin 2002). To evaluate parties, voters apply a mix of their own party identification and a re-evaluation of the party's reputation with respect to the most salient issues (Belanger and Meguid 2008; Van Der Brug 2004).

In recognition of this simplification, rather than emphasising their positions on a range of policy-areas, office-seeking parties compete by emphasising the relative importance of the policy-areas which position them most favourably with the largest subset of voters (Feld and Grofman 2001; Hammond and Humes 1993; Wagemans, 2001). So, rather than changing their ideological positions, parties compete by emphasising different policy issues during the campaign. There are various incarnations of this concept in the literature, such as the 'dominance principle' (Riker 1993, 1996), 'saliency theory' (Budge and Farlie 1983; Budge 1993) and 'issue ownership' (Petrocik 1996; Petrocik et al. 2003). Common to all is the argument that parties seek to shape agendas by discussing issues that assert their strengths and avoiding issues that provide the opposition with an advantage. There is also clear evidence that parties actively try to manipulate the perceived salience of issues in the political arena (Budge, Robertson, and Hearl 1987; Rabinowitz and Macdonald 1989). This is also a key finding of the extensive cross-national Party Manifesto Project (Budge, Robertson and Hearl 1987: 391; Budge & Farlie 1983).

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1 According to Grofman (2004), the main finding of the Party Manifesto Project is that: “Parties compete by accentuating the issues on which they have an undoubted advantage, rather than by putting forward contrasting policies on the same issues.”

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The extent to which a party ‘owns’ an issue is initially based on the policy stances they adopt and the support they attract. Examples of such issue reputations are plentiful. In the United States, the Democratic Party is known as the party best able to deal with issues of education, welfare, and civil rights, whereas the Republican Party historically has been seen as the party most competent at handling foreign affairs, national defense, and crime (Petrocik, 1996). Similarly, in the United Kingdom the Labour Party is seen as the party most competent at managing health care and education, while the Conservatives typically enjoy a positive image with regard to taxes, crime, and defense issues (Budge and Farlie, 1983). As Petrocik (1996) has demonstrated, aggregate election results can be explained to a large extent by the salience of particular issue types during the campaign preceding the election. For example, it is no coincidence that during the strongest period of support for the UK Labour Party between 1997 and 2007, Healthcare (the NHS) remained the most important issue facing Britain according to voters (Ipsos Mori Issues Index, 2012). While parties are not necessarily constrained by the issues they own, they are somewhat constrained by the issues they do not own. So, with respect to the Labour Party’s ownership of public health issues, the Conservative Party would have been foolish to emphasise their credentials and the importance of healthcare during debates.

Issue ownership is also affected by the party’s performance on the issue. According to Petrocik (1996: 828) a party’s reputation is further shaped – “regularly tested and reinforced” - through the party’s performance on that issue while in office. Given that issue salience is a key arena for political competition, a governing party’s ability to ‘de-politicize’ an unfavourable issue is a great advantage for that party’s vote-seeking objectives. This thesis not only explores the extent to which legislation can de-politicize issues, but also whether parties who own the salient issue have the same capacity to de-politicize the issue as parties who do not own the issue.

While the study of policy importance has largely been confined to the intense campaign periods preceding elections, more attention could be given to the policies of political parties in government. As per Mortensen et al. (2011: 2) “Prioritizing problems and setting policy goals is a crucial aspect of the work of a government...understanding the causes behind these agendas deserves considerably more attention than it has received until now”. Chapter 2 seeks to evaluate the reputational constraints encountered when attempting to introduce policy changes.
Chapter Two: Party Positions and the De-Politicization of Immigration

Taking advantage of a unique dataset of political claims made in the media, Chapter 2 explores the ability of left and right wing governments to de-politicize immigration. Immigration is an ideologically loaded and contentious policy area as evidenced by the strong association between violence and the politicization of immigration (see Koopmans 2004; Koopmans and Olzak 2004). Immigration is also one of the most prominent issues on which parties compete in Western Europe (see Boswell 2003; Koopmans et al., 2005). However, it still shares some traits with what the literature may refer to as ‘valence issues’ (Stokes 1963). As such, some parties are often said to ‘own’ the issue (Petrocik 1996; Green Pedersen 2007; Van der Brug 2004; Green and Hobolt 2008). While parties with a superior reputation with respect to immigration will tend to emphasise the importance of the issue, other parties with inferior reputations will try to divert attention elsewhere.

The immigration policy debate presents an excellent example of the conflict between vote-seeking and policy-seeking objectives of a party. In many countries, immigration is an issue that is typically ‘owned’ by right-wing parties. Thus when a pro-migrant, typically left-wing government is faced with rising anti-immigration sentiment it faces a choice: should it forfeit its policy objectives and de-politicize immigration through anti-immigration legislation? Alternatively, should it ignore the issue and run the risk of forfeiting potential vote share as the salience of the issue increases and the policy area increasingly defines the nature of the political competition.

The effect of policies on political responsiveness should also be dependent on the ideological position of the party introducing those policies. Because party identification acts as a ‘perceptual screen’ (Bartels 2002; Campbell et al. 1960), the impact of the legislative actions of the governing party will still be still be affected by the party’s pre-conceived position on that issue.

In these circumstances it is unsurprising that incumbency can have a negative impact on a party’s electoral prospects (Rose and Mackie, 1980; Strom 1985). However, as is argued by Downs (1957: 103-109), voters reward parties whose behaviour reflects their programmatic promises. Parties therefore have an incentive to remain consistent and maintain relatively stable policy positions. Chapter 2 presents the first paper of this thesis exploring the extent to which policies can de-politicize issues and whether parties who may ‘own’ an issue have any great capacity to de-politicizing that issue.

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The chapter follows the thermostatic model of policy responsiveness (Wlezien, 1995). This model describes the relationship between policy changes and public opinion to determine whether the public responds to policy changes. When the public detects a departure from its preferred policy it produces a signal to adjust policy accordingly and once a sufficient adjustment is made the signal stops. For this study we model the frequency and strength of signals as manifested through the strength and volume of political claims made in the news media.

The thermostatic model of public opinion demonstrates how public responsiveness acts as a moderating influence on public policy. Pre-conceived ideas about the party in government may also dictate the extent to which the public will be more or less responsive to the policies implemented. If a party is perceived as being pro-migrant then perhaps this will induce even greater demands from anti-migrant groups. Or indeed, on the other hand, perhaps this lowers their expectations for policy changes. If the former, then the process of responsiveness may incentivise policy convergence between the two parties, however, if it is the latter then policy responsiveness may incentivise policy divergence. Indeed, recent evidence by Ura and Ellis (2012) indicates that the widely documented polarization between the two main parties in the US may be a consequence of differential partisan responses to policy choices.
Party Positions and Electoral Rules

The Importance of Party Positioning


The spatial model of party competition developed by Downs (1957) following Hotelling (1929) treats parties as vote-seeking entities who can position themselves in an ideological space for maximum benefit. These ‘rational parties’ choose policy positions to minimize the distance between themselves and their voters. For a two-party election, the optimal strategy is for parties to position themselves at the centre of the political spectrum, closest to the median voter. This particular position would in theory maximise the number of votes for a vote-seeking party.

Studies since Downs (1957), Black (1958), and the multidimensional generalizations by Davis and Hinich (1966) and Plott (1967) have analysed two-candidate, simple majoritarian elections under a standard set of assumptions. These studies have found that the Downsian model doesn’t typically predict the set of divergent party strategies that are observed. Parties tend to deviate significantly from their optimal positions presenting policy positions that are similar to, but more extreme than, the positions of their supporters.

Party strategies change radically for multiparty systems. For multi-party proportional representation systems the basic Downsian model fails. Recent applications of spatial models derive equilibrium party positions for parties (see Schofield et al., 1998; Adams et al., 2004) from the number of competitors and the valence qualities of those competitors (see Schofield and Sened 2006). They conclude that in a multiparty setting, parties benefit from divergent strategies. Extending and generalising the results, Calvo and Hellwig (2011) demonstrates how electoral rules have significant effects on party equilibrium positions indicating that while plurality rules tend to produce centripetal incentives (for larger parties), proportional rules tend to produce centrifugal incentives.
While parties in proportional systems appear to have relative congruence between the party’s optimal positions and their actual positions, their positions are still more divergent than would otherwise be expected. However, only a few studies have examined the relationship between electoral rules and ideological differences between parties (see Dow 2001), and those that do indicate that electoral rules favouring multiparty settings also foster a wider ideological range among the parties. This paper contests these assertions by exploring the relatively understudied consequences of the ballot structure. Chapter 3 analyses the potential effects of ordinal voting systems on party strategy.

Chapter Three: Party Positions and Ordinal Voting Systems

The literature on electoral systems suggests that in both two-party and multiparty systems parties tend to diverge from the centre. Parties are incentivised to adopt divergent stances not only from the optimal party positions but also from the optimal positions according to the distribution of voter preferences. In the context of deeply divided societies, electoral systems can create problematic incentives for political parties that may exacerbate pre-existing divisions. In this context, party system convergence is a positive attribute as there is a broad consensus that the centripetal competition can encourage democratic stability (Haggard and Kaufman, 1995; Mainwaring, 1993; Shugart and Carey, 1992).

In relatively normal societies, proportional systems can also lead to distorted consequences benefitting the policy positions of relatively extreme parties. The effects of categorical voting systems mean that a voter’s vote has a high chance of being wasted if the party of its chosen the candidate has a low chance of getting elected (Cox and Shugart, 1996). If there are only marginal differences between parties, then voting for the party with a greater chance of winning is the strategically sensible option for voters wishing to avoid wasting their vote. Thus, party differentiation is a key component of the party’s success and so parties with weaker valence images are incentivised to adopt divergent positions to attract a larger number of votes. Empirical evidence further confirms that parties which occupy the extreme left, the extreme right, or distinctly non-centrist positions do not enhance their electoral appeal by moderating their policy programmes (Adams et al. 2006; Meguid 2005). While party system divergence may be a satisfactory outcome where it reflects the existing diversity of public opinion (see Pitkin 1967), extreme parties can wield a disproportionate influence, especially where they hold the balance of power.
It is commonly argued that features of ordinal voting systems have the potential to produce incentives for cross-party vote pooling and party system convergence – particularly as moderate candidates appealing across ethnic boundaries will have a better chance of getting elected (Reynolds 1999, Horowitz 1991, Reilly 2001, Sisk 1995). Ordinal voting systems are thus very popular among the same set of scholars as a strategy to mitigate conflict. However, the ability to test these assertions and effects is restricted by the small number of cases in which the systems were introduced.

Drawing on a unique dataset we explore the extent to which the distribution of preferences follow a consistent ideological pattern – whether preferences are single peaked. Based on this conclusion we may then assert whether observable differences in district-level partisan bias is the result of these preferences.

The third chapter therefore examines whether the mechanical features of ordinal voting systems can yield centripetal incentives. The chapter explores partisan bias in relation to ordinal voting elections in: Ireland, Scotland, Northern Ireland, Australia and France.
**Party Positions and Campaigns**

**The Importance of Campaigns**

According to Kitschelt (1992), party strategy is driven by electoral competition and constituency representation. When parties compete in elections they do so as advocates and representatives of their core constituencies. In this simple context, policy-seeking objectives and office-seeking objectives are coherent. For parties to maximise their vote share it is likely that they will need to advocate political positions that deviate from the positions of their core supporters.

Where they rely on them, parties are positionally constrained by their activists. As a self-selected group for whom there is more at stake in the election, party activists may adopt more extreme positions compared to those of the median or target voter. Where parties need to placate their activists this will ensure that the party adopt policy positions further away from the median voter (May 1973). The extent to which the political opinions of core activists and target voters deviate from one another will therefore provide a strain on the party’s organisational capacity.

However, this is only a concern where the party’s organisational capacity is an important part of their ability to win elections. Although many party supporters may do no more than vote at elections, some will choose to join the party and some will further choose to campaign for the party. In exchange for their effort, party members have a significant role in selecting candidates and setting policy (see Panebianco, 1988; Strom, 1990). Parties therefore need party activists to win an election and are likely to formulate policy proposals with them in mind. This makes it very difficult or even impossible for the party to move toward a vote-maximising policy position while satisfying the policy needs of activists (Strom 1990; Tsebelis 1990). Indeed, if the needs of activists are not satisfied, and also if the party has little chance of winning, then activists may be somewhat muted or fewer in number.

The extent to which activists are important is dependent on whether campaign activity has a significant impact on a party’s ability to win an election.

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2 Parties are equivalently constrained by their 'external constituency', consisting of groups such as trade unions and business organisations who contribute the bulk of financial resources for the campaigns. To the extent that these groups matter is also dependent on whether campaign finance matters.

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While recent experimental studies and surveys indicate that voter mobilization campaigns can have a significant impact significant and well established evidence suggests that outcomes are still determined well in advance of the formal campaign (Lewis-Beck and Rice 1992). The suggestion is that campaigns matter only to the extent that they steer the vote towards a verdict that can largely be foreseen in advance (Gelman and King 1993). So if campaigns and therefore activists and financiers do not matter, then parties are unconstrained and perhaps they are forfeiting their vote and office-seeking objectives for the sake of policy objectives.

Chapter 4 examines whether campaigns matter by exploring the extent to which the activities of activists together with campaign finance affects the vote-seeking objectives of political parties. The chapter takes advantage of unique access to one of the first examples of a centralised dataset for managing canvassing activity. The dataset comprises of all canvassing activity conducted by activists on behalf of the Labour Party in the lead-up to the 2010 general election. In this case, the chapter uses full access to the Labour Party’s ‘Contact Creator’ database system from the 2010 general election campaign.

Chapter Four: Party Positions and Campaign Effects

While previous studies have relied on experimental studies and surveys, neither of these methods is entirely satisfactory. In the first case, experimental studies are limited by their lack of external validity. For these results to be internally consistent, the experiments must take place where there is no party campaign. However, for results to demonstrate the impact of the campaign effects they are trying to replicate. They need to examine actual, significant, partisan campaigns. Survey evidence based on party members or election agents focus on actual campaigns. However, they may also be unreliable. It would seem likely that respondents who were involved with a successful campaign may recall those campaigns in a more favourable light, whereas respondents involved with unsuccessful campaigns may dwell on the campaign in a less favourable light.

By exploring the Labour Party’s 2010 campaign we are able to evaluate recent survey evidence indicating that campaigns conducted by the Labour Party may have a significant impact and much less if not no effect for campaigns conducted by the Conservative Party (Denver, Hands and McAllister, 2005; Fisher, Cutts and Fieldhouse 2011). The chapter explores this observation that campaigns appear to be more effective for the Labour Party. It is hypothesised that this might be because of the

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relative importance of voter mobilization campaigns to parties with low turnout among the demographic groups that tend to support it. If voter mobilization campaigns have a substantial impact, then it is hypothesized that the parties with support among low-turnout demographic groups will be more likely to benefit from voter mobilization campaigns. This is because it believed that the marginal effects of campaigns will be greater for these people. To explore the extent to which demographics determines campaign effects, the chapter conducts an analysis of individual-level canvassing data of 2.3 million electors in the East Midlands region of England.

If voter mobilization campaigns have marginal benefits for some parties and not others, then perhaps those parties for whom campaigns do have an effect will be marginally more reliant on their activists. As such, the party that is dependent on its activists may be further tied to the ideological positions of its activists, all things being equal.
Chapter 2

Party Positions and the De-politicization of Immigration³

1. Introduction

“If we had not enacted this legislation, the opportunity for right-wing racism to enter Irish politics would have been enormous. Our system, like most systems in the northern European political world, is wide open for people to campaigning on anti-immigration issues.”

Michael McDowell, Irish Minister for Justice

Speaking in relation to the 2004 Immigration Act (Seanad, December 1, 2004)

In 2004, the belief among key policy-makers in Ireland was that the introduction of a series of restrictions⁴ on immigration would diminish burgeoning politicized opposition to immigration. The belief was not confined to Irish policy-makers. In an empirical study of France, Germany and the UK, Givens and Luedtke (2005) found that an increase in the salience of immigration in public discourse resulted in an increase in the level of restrictions imposed on immigrants. It follows that immigration policy in European countries is systematically influenced by support and potential support for anti-immigration movements. As the demands of anti-immigrant voters become more prominent, party strategy tends to co-opt the policy positions of anti-immigration parties in order to capitalize on anti-immigrant sentiment or merely to de-politicize the issue, to attempt to diminish its importance on the political agenda.

However, a cursory glance at mainland Europe suggests that the desired effect has not always materialised. Evidence from Austria (Kraler, 2010) and Switzerland (Skenderovic, 2007) suggests that increasingly restrictive immigration policies have failed to diminish the opposition to immigration and that the issue continues to be

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³ The research leading to these results was carried out as part of the project SOM (Support and Opposition to Migration). The project has received funding from the European Commission’s Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 225522. The author wants to explicitly acknowledge the work of the following researchers in the production of the original datasets: Gianni D’Amato, Wouter van der Brug, Michael Marsh, Laura Morales, Sieglinde Rosenberger, Roger Eatwell, Jean-Benoit Pilet, Didier Ruedin, Joost Berkhout, Laura Sudulich, Virgina Ros, Teresa Peintinger, Sarah Meyer, Daniel Wunderlich, and Guido Vangoidsenhoven.

⁴ The Immigration Act, 2004; The Irish Nationality and Citizenship Bill 2004; coming from the Citizenship Referendum, 2004

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among the most salient of issues in both federal assemblies. The inconsistency is both clear and crucial for policymaking. If policies have no effect on the politicization of issues, then by attempting to placate anti-immigration sentiment are policymakers unnecessarily forfeiting their party’s policy seeking objectives? There are also significant consequences for the ideals of representative democracy, a principal function of which is to provide a mechanism through which public opinion and public policy are connected. A public that monitors and reacts to government actions is a critical incentive for politicians to represent and, as some argue, for representative democracy to work (Dahl, 1971; Verba and Nie, 1972). From that perspective government responsiveness may be viewed positively.

On the other hand, if parties can de-politicize an issue by addressing the politicized demands associated with it, then it is important to consider how this affects a party’s vote-seeking and office-seeking objectives. Given the impact of prominent issues on a party’s electoral chances, parties may be incentivised to de-politicize issues that do not favour them. Exploring ‘issue ownership’, the chapter also seeks to address whether the party’s ownership of the issue, or lack thereof, has a significant role in the level of politicization of the issue.

The chapter builds on Chris Wlezien’s theormostatic model (Wlezien, 1995; Stimson, MacKuen, and Erikson 1995) which demonstrates extensive evidence that policies respond to and cause changes in public opinion through a thermostat-like mechanism. The goal of this paper is to determine whether changes in public policy can diminish the level of politicization of the issues underlying those policies, therefore incorporating the impact of salience. In section three, the theormostatic model and hypotheses are developed.

The chapter takes immigration as a case study to examine these effects. Immigration policy is an ideal case for a number of key reasons. Firstly, in many countries immigration is one of the most important issues, in many places regarded as the second most important issue. Secondly its importance also varies rather considerably across countries and over time. Third and finally, the relative salience of immigration is also important in its own right. It has previously been observed that the politicisation of immigration can exacerbate societal conflict (Koopmans 2004; Koopmans and Olzak 2004). Finally, the recent rise in support for anti-immigration parties continues a trend that began over 20 years ago. For these and other reasons there is a significant separate literature on immigration politics to which this chapter also speaks. Immigration politics is discussed in detail in section four.

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The chapter uses a unique dataset measuring the politicization of immigration in terms of the claims made by political actors in the news media between 1995 and 2009 inclusive. The chapter uses seven western European countries where immigration has been politicized to varying degrees. Section five gives further details about how the key variables are operationalized.

Using a time-series analysis to explore the relationship between changes in public policy and their effects on the level of politicization of immigration, the paper finds that by co-opting political demands the incidence of those demands diminishes. It further finds that structural variables – migrants per capita and the rate of unemployment – also have a significant effect on the incidence of political claims. Finally, there is some evidence that the perceived reputation of the governing party also has an impact on the politicization of issue-positions. Section five outlines how the variables are operationalised. Section six details the model and results. Section seven concludes.
2. Reputational Constraints

Strategies of Issue Ownership

While policy implementations may be viewed as being motivated by policy-seeking objectives, they may also be motivated by office and vote seeking objectives if the policies have an effect on the party’s electoral prospects. Following extensive work beginning with Budge and Farlie (1983) and Petrocik (1996), electoral outcomes can be explained by the importance of issues and in particular which parties are more positively viewed as being strong on the most important issues (Ansolabehere and Iyengar 1994; Sellers 1998; Simon 2002; Petrocik, Benoit and Hansen 2003; Damore 2004; Holian 2004; Kaufmann 2004; Hayes 2005). This prominence of issue ownership theories is derived from earlier work on the relative inattentiveness of voters. In comparison to proximity or directional theories of issue voting (e.g., Downs 1957; Rabinowitz and Macdonald 1989; Merrill and Grofman 1999), ‘ownership-based’ issue voting is significantly less demanding as voters only need to assess which party is the owner of the ‘primed’ issue.

The ownership-based theory of political competition suggests that parties have strategic incentives to emphasize issues on which they are perceived to be more competent (Bélanger and Meguid, 2008; Iyengar and Kinder 1987; Krosnick and Kinder 1990; Jacobs and Shapiro 1994; Dancey and Goren 2010). As the policy-areas that a party owns gain more coverage in the media, the party positively associated with those issues will tend to acquire positive coverage (Hayes, 2008).

While much recent literature focuses on parties’ attempts to manipulate salience, this work has generally been confined to the intense campaign periods preceding elections (Budge, Robertson, and Hearl 1987; Meguid 2002; Green and Jennings 2012; Meguid 2005). Research is yet to cover the role of policy implementations. If these strategies and emphases matter, they should matter in terms of the legislative outcomes of elected governments. As recent work by Mortensen et al. (2011: 2) indicates “Prioritizing problems and setting policy goals is a crucial aspect of the work of a government...understanding the causes behind these agendas deserves considerably more attention than it has received until now”. This chapter fills the gap by examining the extent to which parties can de-politicize an issue through legislation.
Strategies of Government Policy

It is expected that citizens will respond to government actions equally if not more than the policy commitments made during a campaign. While extensive evidence indicates that voters form accurate perceptions of the policy positions of political parties (e.g., Fuchs and Klingemann 1990; Huber and Inglehart 1995), empirical evidence tends to find only a weak or non-existent relationships between the changes in party positions and the changes in voters’ perceptions of those positions (Adams and Somer-Topcu 2009; Tavits 2007; Adams et al. 2011; Green 2007; Milazzo et al. 2012). On the other hand, empirical evidence reveals strong evidence that voter perceptions are influenced by parties’ coalition arrangements (Fortunato and Stevenson 2012), by voting records of candidates as in the US (Poole and Rosenthal, 1997; Canes-Worne et al., 2002), and by the policies undertaken by governments. As Klingemann et al. (1994: 28) state: ‘Incumbents have a record; the opposition has only its words’.

Perceptions of issue ownership are particularly influenced by the party’s performance in government. Ownership is, therefore, likened to the party’s ‘reputation’ on that issue where reputations can be gained and lost based on actions rather than words (Bélanger 2003; Green and Jennings, 2011). Without the ability to demonstrate capabilities, perceptions of the opposition party weakly mirror those of the government (Fiorina 1976, 1981). Thus, the incumbent party is more stringently evaluated (Butt, 2006) on competence and suffers from what are known as ‘the costs of governing’ (Miller & Wattenberg 1985).

While we may expect a party to focus on the issues it owns, governments are also likely to focus on salient issues of immediate public concern (Baumgartner and Jones 2004; Jones and Baumgartner 2005; Hobolt and Klemmensen 2005; 2008; Jennings and John 2009; Jones et al. 2009; Bevan and Jennings 2010). The rising salience of an issue can therefore present a substantial threat to a political party in government, particularly if the party does not ‘own’ the issue. In such a case, the opposition party may ‘own’ the issue may be perceived as more suited and may, therefore, be viewed as being more preferable to the overall electorate.

Parties are incentivised to de-politicize issues they do not own by implementing the political demands that give rise to the politicization of the issue. However, they are constrained in their efforts to do so. If the party does not own the politicized issue and acts to meet the political demands then it is likely to jeopardize its support among activists. While, it might be tempting for a party to ignore an unfavourable issue, this

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strategy brings with it further difficulties and risks. Difficulties, because parties – especially governing parties – are expected to express an opinion on all issues and risks because all debates have a particular frame or tone to it (Baumgartner and Jones 1993; Stone 1997; Baumgartner et al. 2008) and ignoring this issue relinquishes influence over this aspect (Jerit 2008). Furthermore, by allowing the issue to become more prominent the party risks losing significant support. For example, in the context of increasing demands to control immigration, a left-of-centre government is somewhat restricted in its ability to satisfy this public demand through appeals from its pro-migrant activist base. On the other hand, the Conservative opposition can allow the debate to grow and may emphasise its positions on that issue.

**Agenda-Setting. Politicization**

To understand the relative prominence of the issues that parties focus on, we draw on insights from the agenda-setting literature (Baumgartner et al., 2006). While some studies attempt to identify the prominence of issues through manifestos or surveys, neither of these methods are adequate. Not only are they irregular and inconsistent but they also tend to offer an incomplete representation of the prominence of the political debate. While manifestos are representations of party positions, many of the positions outlined do not become salient due to public indifference. On the other hand, while survey responses identify what voters feel are important the issues highlighted may fail to account for the level of contestation and differentiation between major parties. A media analysis combines both worlds by accounting for the positions of parties and the relative salience of the issues.

The relationship between news coverage and public concern has been known for a long time. An early statement of the hypothesis was formulated by B.E. Cohen (1963) who said the media “May not be successful most of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about.” Evidence of this effect is plentiful dating as far back as McCombs and Shaw’s 1972 survey of a random sample of Chapel Hill voters.

While the study of party-issue competition tends to focus exclusively on the intended emphases of parties, the agenda-setting literature emphasises the space limitations of party-issue competition. The agenda may be seen as a ‘hierarchy of issues’, where some issues are more important than others, and the agenda-setting process must be seen as a competition for attention among different issues (Dearing and Rogers, 1996, pp. 1–5).
The debate among political parties takes place predominantly in the mass media (see Zaller 1999) -- reaching many people in a relatively unbiased manner. This importance of the mass media follows extensive literature on the congruence between aggregate level changes in public opinion and changes in the content of mass media (Brody 1991; Fan 1988; Page and Shapiro 1992; MacKeun, Erikson and Stimson 1992; Sanders, Marsh and Ward 1993), and further arguments stating that the relative salience of issues for elite actors is best measured by an analysis of media coverage (Epstein and Segal 2000). Thus, news is a key location for party issue contestation (Swanson and Mancini 1996). It is through the news that issues are made publicly visible to citizens, and therefore this is where parties attempt to mobilise their campaigns and get their message across to voters. It is for this reason that we analyse the relative prominence of issues through the mass media.

By focusing on the relative coverage (or salience) a policy area gets as a measure of its relative importance (e.g. Jones and Baumgartner, 2005; Baumgartner et al, 2009; Downs, 1972) we do not get an accurate representation of the issue’s importance. In this simplified view the magnitude and character the debate is neglected. For instance, while twenty per cent of US congressional debates may deal with public land, this does not make public land issues highly important. Indeed public land issues would fail to rank in the top ten of the most important issues. Scholars also highlight the positional attribute of an issue and the extent to which parties have different, polarized positions to assess its relative importance (e.g. Downs, 1957; Carmines and Stimson, 1989; Hobolt and De Vries, 2012). The juxtaposition of both salience and positional attributes constitute the level of importance of the issue. Put more succinctly, a key component of the relative importance of an issue is the level of conflict attached to it. Issues that are both salient and contested may be regarded as being politicized. Therefore, to analyse the politicization of immigration we look to the volume of explicit political demands.

To model the relationship between government policy and issue importance we build on the thermostatic model of issue salience. While the original thermostatic model describes public opinion responses to policy changes, we are more concerned with the responsiveness of political demands to policy changes. Politicization as manifested through the media is considered may be a key antecedent of issue importance and vote share. As Boomgaarden and Vliengenthart (2007) show increased politicization of immigration advances significant increases in support for far-right anti-immigration parties.
3. Theoretical Model

Thermostatic Model

Building on the assessment that public perceptions follow mass media (Brody 1991; MacKuen, Erikson and Stimson 1992; Sanders, Marsh and Ward 1993), the ‘feedback’ conceptualisation of the relationship between policymakers and citizens the paper extends the thermostatic model’s focus on policy preferences to examine the effect of policy changes on the politicization of immigration.

Rooted deep in the political science literature (Easton, 1965; Deutsch, 1963), empirical results confirm (1) that the public updates its preferences over time (Page and Shapiro 1992; Stimson 1991), and (2) that aggregate public preferences respond to legislative changes (Page and Shapiro 1992, Erikson et al. 2003; Wlezien 1995, 1996, 2004; Soroka and Wlezien, 2004; 2005; 2010). The ‘thermostatic model’ states that for a given preferred policy level, public preferences behave much like a thermostat, adjusting preferences for ‘more’ or ‘less’ policy in response to changes in public policy. If policy moves in one direction (i.e. an increase in defence expenditure), then the relative public preferences for policy are said to move in the opposite direction (i.e. demand for reduced expenditure in defence).

There is significant empirical evidence for this theoretical model. The effects are observed for example in the context of defence spending in the United States, the United Kingdom, France, Germany and Sweden (Eichenberg and Stoll 2003; Wlezien 1995); and social spending in the United States, the United Kingdom and Canada (see Soroka and Wlezien 2004).

Formally, the model states that relative preferences (R), for more or for less legislation on an issue is a function of the difference between the public’s preferred policy (P*) and the actual policy currently pursued by the government (P). If P* > P, (or indeed if P* < P) the public will send a signal to the government to change its policy until P* = P. For example, in the context of immigration: P may be regarded as the current policy in relation to immigration; P*, the public’s preferred immigration policy; and R, the level of demand in the public domain for a change in immigration policy. To simplify our understanding P, may be seen to represent the policy on how many migrants can enter the country on an annual basis, P* the public’s desired number of migrants to enter the country, and R, would represent whether the public desired an increase or decrease in the number of migrants. The formal model is as follows:
Extensive empirical evidence concludes that the basic thermostat model is not consistent across all policy domains (Franklin and Wlezien 1997; Wlezien 1995, 2004). Rather, the responsiveness of the public to policy changes is conditional on the salience of the underlying issue. In issue domains that are not salient, the argument follows that people are less likely to pay attention to the behaviour of politicians and the signal is likely to be weaker, or non-existent (Franklin and Wlezien 1997). In contrast, opinions on salient issues are likely to form the subject of political debate (Erikson and Tedin 1994) as the public will be more attentive in relation to domains it considers important (Franklin and Wlezien 1997; Soroka and Wlezien 2010; Wlezien 1995, 2004). The model equation thus further developed in Wlezien (2004) as follows with α₀, and εᵣ, the intercept and the error terms, β₁ᵣ and β₂ᵣ as coefficients and S the salience of the underlying issue:

\[ Rᵣ = α(Pᵣ - Pᵣ^*) + \beta₁ᵣPᵣ^* + \beta₂ᵣSᵣPᵣ + εᵣ \]

**Politicization Model**

The evidence from the thermostatic model is still insufficient with respect to any impact on a party’s vote-seeking objectives as it remains unclear whether public opinion responses will affect a party’s vote share. As we know, when it comes to political information, voters are relatively uninformed (see for e.g. Delli Carpini and Keeter 1996). When asked about unemployment figures the electorate can only offer wild guesses (Conover, Feldman and Knight, 1986). Yet, the thermostatic model is shown to work for niche issues such as environmental policy. Erikson, MacKuen and Stimson (2002) argue that while the perceptions of the average voter may be poor, the average of all voters’ perceptions in aggregate may be accurate. However, this is insufficient with regard to affecting a party’s vote share as only a very small number of well-informed voters need to be attentive for the thermostatic model to work as modelled. Furthermore it is likely that the same attentive voters are also likely to be partisan followers of a particular party. Clearly, given evidence that there is no relationship between changes in party position and changes in voter perceptions, it seems likely that attentive voters are insufficient to significantly affect overall vote share. As such, a thermostatic model that affects the party’s vote seeking or office seeking objectives must be modified to focus on changes in salience and politicization.

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A modified thermostatic model must also reflect the importance of the news media as the intermediary between political elites and the public. As Wlezien (1995: 998) himself notes “public responsiveness must reflect information communicated by the mass media.” Rather than focusing on responsiveness of the public, as in the classic thermostatic model, the focus of this chapter is on the responsiveness of political actors in the news media. This is both because of difficulties in measuring public responsiveness and the relative importance of measuring political responsiveness. While we already know that the public responds to policy changes (e.g. Erikson, MacKuen and Stimson, 2002; Page and Shapiro, 1992; Wlezien, 1995) and that the public responds to changes in the news media (Atkinson 2011), there remains a gap in the causal link between policy changes and public awareness in the responsiveness of political actors in the media. Because political actors represent public preferences on salient issues it is posited that the thermostatic model can be applied directly to the activities of political actors, which may be broadly termed as the level of politicization, $Z$:

$$Z_{jt} = \alpha_{j0} + \beta_{1j}P^*_t + \beta_{2j}P_{jt} + \epsilon_{jt}$$

The level of politicized demand is thus modelled in terms of changes in policy conditional on the preferred position of the public. The first hypothesis tests this relationship between immigration policy changes and changes in the politicization of the issue.

With rare exceptions, the public's preferred policy level, $P^*$ is too difficult to determine. For example, in the context of Defence $P^*$ might be the exact amount a person believes the government should spend. In the context of immigration, $P^*$ might be equivalent to surveying the number of immigrants a person believes to be ideal. In both examples, this is information that is rarely available and certainly not with the regularity or consistency that would be required for a reliable time-series model. The public's preferred position is necessarily relative to the rest of the model and a function of underlying contingent factors. Therefore for the purpose of the model, we can rely on proxies for $P^*$, noted here as $W$. For immigration policy, these proxies may be easily imported from the immigration literature, which highlights the importance of changes in: Unemployment, Immigration, and the Political Opportunity Structures in determining differences in demand for anti-immigration parties. We therefore model politicization as follows:

$$Z_{jt} = \alpha_{j0} + \beta_{1j}P^*_t + \beta_{2j}W_{jt} + \epsilon_{jt}$$
4. Immigration Policy

Conflict Politics

Immigration policy is the ideal case study for the study of politicization. Immigration policy befits Gerring's (2007) crucial case logic. If there is evidence that parties can de-politicize an issue it should be found in immigration policy. The high variance in the salience of immigration issues and the specificity of demands make the relationship relatively straightforward to model.

While previous work shows that the salience of immigration issues in the media shapes attitudes towards immigration (Boomgarden and Vliegenthart 2009), and that immigration issues are attractive for the media (Brighton and Foy 2007), immigration politics is a particularly appropriate case study because it is a conflictual policy area. Following the framework first proposed by Wilson (1980) and followed subsequently by Freeman (1995), we may understand issues as falling either into the category of client-based politics, where the benefits of a policy change are concentrated and the costs are weak and diffuse, or interest-group, or 'conflictual' politics (Givens and Lueldke 2005) where the costs are perceived to be more concentrated. For example, rail projects are often politically viable because the benefits are concentrated among contractors, unions, and local politicians, while a large share of their cost is spread widely over a large number of taxpayers (Castelazo and Garret, 2004; Richmond, 2004; Altshuler and Luberoff, 2003).

In the United States or in Europe prior to the 1970s immigration politics may have been considered to be clientelist. However, following periods of heightened general attention to the policy area the degree of public indifference has diminished and the perceived impact of the issue has grown (Baumgartner and Jones, 1993: 20). Thus, immigration has become a conflictual policy area.

Immigration policy is also very important in its own right. While issue politicization is part of the normal policy process in which opposing views can and will emerge, for the politicization of immigration contestation can transform into more damaging forms of conflict.

As per Bale (2008: 322), immigration is a very real and potentially threatening issue for many citizens throughout the European Union. The direct and individual experience of ethnic threats may define immigration politics. Following reunification in the late 1990s, a wave of anti-immigrant street violence engulfed Germany. Infamous events
include: pogroms in Hoyerswerda in 1991, arson attacks at Möln (in 1992) and Solingen (in 1993), and the riot of Rostock-Lichtenhagen (in 1992). It has since been shown that the violence is likely to have been spurred on by highly public debates between government and opposition politicians over immigration control (Koopmans 2004; Koopmans and Olzak 2004) and that increasingly restrictive immigration policies did little to ameliorate the political demands made by anti-immigration groups. Similar race riots have occurred in the United Kingdom in Manningham (1995) and Bradford, Oldham, Leeds and Burnley (all in 2001), and indeed in Spain in Almeria (2000) and Madrid (2007), and in Sweden in Rosengard (2008).

What is clear is that governments must understand not only the effects of policy changes on the politicization of an issue but also the structural factors that cause immigration to become highly politicized. The importance of this matter is even more significant in an era where anti-immigration parties command significant support. As earlier research indicates immigration attitudes are the critical factor for predicting who will vote for radical right wing populist parties (e.g.. Lubbers and Scheepers 2000; Lubbers et al. 2002; Norris 2005). Having consolidated the significant gains from the late 1980s and early 1990s; support for anti-immigrant parties has increased significantly since the mid-2000s. Figure 1 represents a four year moving-average of the average per cent support for far right anti-immigration parties across 19 European countries, 1970 to 2010. While illustrative, electoral data is insufficient for understanding the phenomenon as the uniqueness and infrequency of elections make it difficult to draw general conclusions. As cross-country differences have too many structural, institutional and political differences to control for and there are too few data points (elections) within each country that are also too infrequent.

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To define far anti-immigration parties we follow the categorisations of Golder (2001) and Volpert and Jackman (1996).
Our understanding of conflict politics as exemplified through immigration politics is confirmed through the empirical work of Boomgaarden and Vliergenthart (2007), who highlight that --while controlling for the level of immigration and unemployment-- the more the news media reports on immigration topics, the higher the aggregate share of intention to vote for anti-immigration parties. However, there remains the aforementioned gap in the literature with respect to the responsiveness of politicization to policy changes. The first hypothesis is as follows:

**Hypothesis 1**: The politicization of immigration/integration (in the form of the direction, strength and frequency of demands made by political actors) are diminished where policy converges towards that demand.

The tendency for economic discontent to be channelled into resentment of immigrants is a feature of the visibility of immigration flows (Teitelbaum and Weiner 1995), media coverage and the mobilization efforts of political organisations (Rule 1988). To evaluate the relationship between politicization and policy changes we must, as per the thermostatic model, control for the structural features of immigration demand and the political opportunity structure.
Structural Features

The literature on immigration has often argued that support for anti-immigration movements is strongest in social classes competing with immigrant groups for scarce resources such as employment and housing (Betz 1994, 1998; Lubbers and Scheepers 2000; Knigge 1998). This follows sociologically inspired studies beginning with Gurr (1970) and Runciman (1966) who argued that groups who experience a decline in status relative to others whether real or imagined —either because of another group’s rise or their own decline—are the most likely to fear immigration.

For much of the post-World War II era, Western European societies have not been divided along racial or ethnic lines (Kitschelt 1995). Countries have become increasingly heterogeneous due to continuous immigration. During the 1950s and 1960s, governments actively recruited foreign workers upon experiencing a shortage of domestic labour, targeting workers in less industrially developed European countries (i.e., the Mediterranean countries), former colonies, and non-Europeans (King 1993; Hollifield 1992). Yet, when economic conditions worsened, policy-makers attempted to restrict immigration. However, labour migrants, asylum seekers from developing countries and, most recently a new wave of labour migrants from Eastern Europe came in significant numbers to the EC and have continued to do so. These developments correlated with increasing anti-immigrant sentiments and discrimination as violence against immigrants emerged more systematically and frequently (Baldwin-Edwards & Schain 1994; Knigge 1997).

Due to increased dependency on the state and insecurity about their future, it is frequently argued that people experiencing financial stress will be more likely to fear the implications of increased competition for resources (Citrin, Reingold, and Green 1990; Espenshade and Calhoun 1993; Hoskin 1991). Drawing on theories of economic conflict (e.g. Scheve and Slaughter, 2001) and of sociotropic economic thinking (e.g. Citrin et al., 1997), it is argued that when economic conditions are poor, people will tend to be more concerned about these changes.

While ethnic differences between migrants and host-state populations alarm nativists today as they have done in previous migratory waves (Brimelow 1995; Huntingdon 2004), economic arguments also play the more significant role in the priming of voters. Immigrants are uniquely positioned as a scapegoats as they are not citizens and therefore do not enjoy the benefits of representation (Kolinsky 1992; Ignazi 1992). They therefore also provide the radical right with a unique and easy target.
The most consistent argument is that immigrants threaten existing and potential employment prospects of native people (Espenshade and Calhoun 1993; Harwood 1983). This threat of economic competition is greater among low-skilled low wage occupations and rises accordingly with increases in unemployment (Borjas and Freeman 1992; DeFreitas 1991; Muller 1993; Passel 1994). As key determinants of the salience of immigration, the levels of immigration and unemployment are key control variables in testing the first hypothesis.

It is further hypothesised that as immigration and unemployment increases, the importance of the issue widens to a much larger group. Given the framework outlined by Wilson (1980) it is arguable that with increased immigration and increased unemployment the nature of the immigration debate develops from one of clientelist politics to one of conflictual politics. As it does, the politicization of immigration policies will increase. While much work has indicated that the salience of immigration is a consequence of increased immigration and increased unemployment, its direct impact on the level of politicization is untested.

We distinguish here between immigration policies and integration policies where the former concerns entry into the country (incorporating illegal immigration, asylum-seekers & refugees, family reunification, and labour immigration & visas issues) and the latter concerns immigrants already in the country (citizenship and anti-discrimination issues). The distinction draws on earlier analysis by Money (1999) who shows that immigration control and immigrant integration need to be considered as two separate policy areas, with two very different political logics. While integration issues elicit inter-party conflict, immigration control issues are orthogonal to the left-right continuum. Indeed Givens and Luedtke (2005) also argue that while European governments of both the left and right have often claimed that halting new immigration will aid in the societal integration of already-resident foreigners (Hammar, 1985, 1990). However, political parties have taken widely divergent stances on how to actually carry out this integration with left-wing governments taking a more pro-active stance and right-wing governments adopting a more laissez-faire approach.

Following Money (1999), the political positions of integration politics are aligned with traditional left-right positions. Governments on the left tend to prefer more activist forms of immigrant integration, whereas those on the right tend to have a laissez-faire attitude. As such, integration politics may not require wider engagement from the electorate for the issue to be politicized. It therefore may not require the same increases in immigration and unemployment. Integration politics is noticeably more clientelist

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and given that immigration and integration politics compete for prominence on the same agenda, it may be argued that whereas the politicization of immigration may increase with the number of immigrants and unemployment, the politicization of integration policy may increase even where immigration and unemployment rates are lower.

By subgrouping policy changes into those that relate to immigration politics and those that relate to integration politics we have the opportunity to determine whether there is an appreciable difference between the ability to depoliticize immigration issues, compared to integration issues, and whether there are cross-party differences in party capabilities. Thus, this chapter also builds on extensive work on the salience of immigration politics through an exploration of the determinants of the politicization of immigration and integration politics. The second hypothesis is as follows:

**Hypothesis 2:** The politicization of immigration (integration) is dependent on the levels of unemployment and the number of immigrants in the country.

**Political Opportunity**

For a complete model of the politicization of immigration we must also account for the impact of politics. Social movement theories beginning with Gamson (1968) criticize ‘grievance theories’ for not acknowledging the role of organisations in the mobilization of discontent. The level of observable discontent is dependent on political opportunity structure. The importance of political institutional factors has previously been emphasised in studies on the congruence between public opinion and spending (Brooks 1987; Lijphart 1999; Petry and Mendelshon 2004; Miller and Stokes 1963). To explain cross-national levels of discontent a properly specified model must not only account for ‘demand-side’ grievance factors, but also ‘supply-side’ political factors (Van der Brug, Fennema and Tillie 2005; Koopmans et al., 2005).

The politicization of immigration is not only relevant for extreme right or anti-immigration parties (Alonso and Fonseca 2012). Indeed, the politicization of immigration significantly affects the shape of party competition in Western Europe. Over many years mainstream left parties have converged with centre-right parties around the centre of the classic left–right dimension of economic competition, competing for liberal stances in new cosmopolitan–authoritarian issue dimensions. However, as this re-positioning left traditional working class socio-economic groups without clear political representation, opening up a new space which anti-immigrant parties were able to exploit (Kitschelt 1995; Knigge 1998; Rydgren 2005). As a
consequence, centre-left parties are therefore incentivised to try to recover some of this lost ground by diverging from the centre once again.

Centre-right parties and electorates were also affected by immigration and integration issues. Immigration encapsulates the threats and topics defining core centre-right constituencies, such as keeping taxes low, ensuring law and order, and protecting national security (Bale 2008, p. 319). The discourse based on tightening borders and dealing with multiculturalism has been a powerful strategy for the mainstream right, with or without radical parties competing for the same vote (Perlmutter 1996). However, by winning support from traditional right-wing electorates with authoritarian and conservative values the radical right has won stable support, as opposed to the instable character of non-ideological protest parties (Lubbers et al. 2002; Arzheimer 2009).

Political variables are thus said to shape and influence the extent to which different actors, who have a stake in debates and policies, can mobilize support for their causes. The most significant actors in this respect are political parties, which help to structure as well as reflect voter opinion – not only in terms of what voters think, but also what they think about (Thomassen, 2005). To examine the politicization of immigration and integration we must control for the political position of the governing party. It is conceivable that if the government is composed of anti-immigration parties then it seems likely that opposition to the government, in terms of parties and other actors will necessarily be composed of organisations and individuals of a more pro-migrant stance. In that case, the demands for anti-migrant immigration policies may be relatively fewer and relatively weaker while demands for pro-migrant immigration policies might be more frequent and relatively stronger. Equivalently, if the government is conceived to be composed of pro-migrant parties, then it is similarly likely that demands for anti-migrant immigration policies will be more distinct and more frequent, while demands for pro-migrant immigration policies are quieter and less frequent.

From another perspective the conceived position of the governing party may affect the expectations of actors in society. If a party is conceived as anti-migrant, then this might build an expectation among those demanding anti-migrant policies that their claims may be listened to.

Thus, the extent to which governing parties can de-politicize an issue may also be conditional on the party’s reputation. It is arguable that given the strength of voter
perceptions of party reputations and the aforementioned presence of a party and organisation of opposing views that a party’s ability to de-politicize an issue will be conditional on this reputation.

It is theorised that parties in government will have less success in de-politicizing issues if they are not considered to ‘own’ the issue. While left-wing parties tend to own issues relating to equality and anti-discrimination issues, that is, managing immigrants within the country; right-wing parties tend to own issues relating to the volumes of immigration control, that is, access to the labour market or family reunification. However, due to the orthogonal nature of the immigration issue we use measures of pro- and anti-immigration positions to determine the relative ownership of the party over this issue space under discussion. Even controlling for legislative changes, parties that ‘own’ issues tend to be more effective at depoliticizing those issues.

The extent to which a government can successfully depoliticize an issue is dependent on the position of the government’s party make-up with respect to that issue. Regardless of the policy initiatives of the government, opposition parties are likely to emphasise policy positions opposite to those of the government, without fear of alienating their support base.

So, in the context of immigration, holding everything else constant, right-wing governments may be expected to be more effective in depoliticizing immigration issues, whereas left-wing governments may be more effective in depoliticizing issues relating to migrant integration. Put another way, left-wing governments are less effective at depoliticizing issues relating to the flow of immigration, whereas right-wing governments are less effective at de-politicizing issues relating anti-discrimination and anti-racism. The third hypothesis is as follows:

_Hypothesis 3: The extent to which a government can successfully depoliticize an issue is dependent on the pre-election political position of the government’s party make-up with respect to that issue._
5. Operationalizing Variables

In this section we describe the measurement of (1) the level of politicization of immigration and integration, (2) the changes in policy levels, and (3) the structural and political factors which condition on the relationship between (1) and (2). These include the level of unemployment the number of foreign migrants per capita and the weighted political position of the incumbent government, as per expert surveys, with respect to immigration issues.

Politicization of Immigration

Data Sources

Following Kiver (2007) and Baud (1998), politicization may be defined as: 'The extent to which an issue is contested in the political arena'. Although extensively used as a concept, it has been difficult to operationalize politicization adequately. Whereas some studies attempting to identify the prominence of immigration issues have used the vote share of anti-immigration parties (Jackman and Volpert 1996; Golder 2003), expert survey data (Lubbers et al. 2002), data from manifestos (see e.g., Budge et al. 2001; Fligstein 2008: 227-33), or even surveys of public opinion, these methods are somewhat adequate for this analysis.

While manifestos are representations of party positions prior to elections, many of the positions outlined may not become publicly mobilized or contested to any great extent. As a result, large portions of manifestos remain unseen by voters. The data tells us little about the importance of issues, which must also be a function of what voters feel to be important. On the other hand, survey responses identify the relative importance of what voters feel to be the 'most important issue' or the 'most important problem'. However, these surveys do not take the nature of party competition into account. Whereas voters may regard environmental issues to be crucially important or the most significant problem facing their country, if the leading political parties are undifferentiated with regard to the issue it is unlikely to become an influential or decisive factor. Meanwhile, expert opinion data (e.g., Ray 1999) is derived from educated estimates rather than objectively determined data-sources directly linked to

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6 Kiver (2007) defines politicization as "a process whereby contrasting positions on a policy issue are highlighted, whereby political actors in fact take up contrasting positions, and whereby the resulting friction is reflected in actual policy outcomes."

7 Baud (1998: 581, own translation) defines it as "the process of transformation of a societal problem into a political problem"
parties’ own actions. Indeed expert opinions are likely to be formed partly on the basis of how party competition plays out in the mass media. Claims data from the media therefore tells us how parties highlight their relevant issue positions. It combines both the advantages of manifestos with the advantages of surveys by accounting for the issue positions of that differentiate parties and the relative salience of the issues.

There are further reasons to favour the use of media data. Manifesto data, expert surveys and voter surveys are limited by the infrequency of observations. The infrequency of elections means that manifesto data and vote shares are insufficient measurements of changes in politicization. The within-country sample is likely to be too small to determine whether significant effects exist. By using media data, the statistical analysis can be based on a wealth of data and which helps to ensure consistency and objectivity of its investigation of the agenda-setting process at the source. It also ensures that the level of politicization can be measured accurately even when it is relatively de-politicized.

There is little doubt in the literature that the mass media constitutes the most important arena for public debates on politically relevant issues (see Ferree et al. 2002; Bennett et al. 2004). Indeed, Peter Mair (2006:13-14) identified this as precisely the type of public discourse analysis as a necessary to move beyond the limitations of party manifesto and expert opinion analyses. On the issue of European integration he states: ‘In addition to the imputed location of a party’s core identity, and in addition to the evidence provided by formal policies which it adopts or is obliged to adopt, we need to know more about how Europe actually plays in national political discourse, as well as about the way in which it is conceived…. What is really needed… is a much more systematic, inductive, and largely bottom-up comparison of political discussions at the national level.’

Methodologically, newspaper coverage is an excellent data source for examining party contestation. The analysis of newspaper articles allows us to analyze the statements of political actors as they can be perceived by their opponents, policy-makers and but most of all: the broader audience. Newspaper coverage retrieves data on parties’ stances from mediated political discourse and represents the actual output of the efforts of political actors to communicate with voters. It also constitutes the actual ‘output’ produced by the competitive efforts of political actors to communicate with voters. For these reasons, over the last two decades, newspapers have become a primary data source in various fields (e.g., Ferree et al. 2002; Koopmans et al. 2005; Koopmans 2007; Kriesi et al. 1995; Kriesi et al. 2008; Trenz 2005; de Vreese 2003).

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Political Claims

In the analysis of newspaper coverage, the unit of analysis is not an article but a political claim. Politicization is measured through instances of political claims making where each claim represents a unit of strategic action by a political actor in the public sphere. The technique follows the pioneering work of Koopmans and Statham (1999), building on protest event analysis developed in the field of social movements, and extended to public discourse. Following Koopmans et al (2004), the paper uses measures of positive and negative politicization from the quantity and breadth of political claims made in daily media coverage.

The dataset is composed of claims made in articles from two national newspapers in each of seven western European countries to represent a cross-section of media coverage. The countries that are included in the study differ in the degree to which immigration is or has become politicized. It includes four countries where new or established parties have successfully mobilized support on the issue -- Austria, Belgium, the Netherlands and Switzerland; two countries where the issue is scarcely politicized -- Ireland and Spain; and one country where the issue has been strongly contested without giving rise to a successful far-right anti-immigration party -- the United Kingdom.

Each claim as it appears in the news media consists of ‘the purposive and public articulation of political demands, calls to action, proposals, criticisms, or physical attacks, which, actually or potentially, affect the interests or integrity of the claimants and/or other collective actors’. The number of claims reported in one day therefore constitutes the degree of politicization of immigration. Built into an analysis of daily media coverage, the particular virtue of this method is that it is sensitive to contemporaneous salience, as distinct from a solely retrospective interpretation which would result from using expert surveys (see Soroka 2006).

Because we are looking at the volume and strength of claims, it is important to recognise the difference between claims made in respect of the policy area they address and whether the claim is pro-migrant or anti-migrant in nature. It is consistent with the thermostatic model that while pro-migrant policy movements may diminish pro-migrant demands, it is also expected that such policy movements will increase the propensity of anti-migrant claims. It follows that if the issue is highly polarized

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8 To minimize description bias (McCarthy, McPhail and Smith 1996), only factual coverage of statements is coded.
between two separate camps, then movements towards the median policy position is less likely to appreciably resolve the concerns of either left or right or indeed to depoliticize the issue. Furthermore, claims in one direction can also lead to counter claims in the opposite direction. As such, rather than looking at the total number of claims, we analyse the effects of changes in policy, on pro-migrant claims and on anti-immigrant claims separately. The articles that are coded are those including claims on immigration from a regular sample of seven-hundred days in the period from 1 January 1995 to 31 December 2009. Figure 2 demonstrates the frequency of a subset of claims made against asylum seekers in Austria. Each point represents an individual case where a claim has been made. Here, a large number of claims build up towards 2002 and peter out thereafter.

![Figure 2](image)

**Figure 2** - The incidence of anti-asylum seeker claims made in Austria between 1995 and 2010. Each bar represents an individual claim at that point in time.

**Changes in Policy**

Previous thermostat models quantify changes in policy by changes in government spending in the issue domain (Wlezien, 1995, 2004; Soroka and Wlezien, 2010) or by the quantity of legislation attributed to the issue domain (weighted by the number of sentences in each [Franklin and Wlezien, 1997; Arnold, Franklin and Wlezien, 2010]). Neither of these techniques is appropriate for immigration policy as they fail to account for the significance and the direction of policy changes in terms of how favourable, or unfavourable the legislation may be with respect to immigrants. The approach followed here acknowledges the contested nature of politics by incorporating the direction of the legislation and treating pro- and anti-migrant changes separately.

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A first option to measure legislation is to categorise immigration policies as per Brubaker's categorisations of immigration policy in Europe (Brubaker 1992). That is, into *jus soli* and *jus sanguinis* policies. The attribution of citizenship by birth on the territory of the state, and the attribution of citizenship through blood lines, that is, through citizenship of the parent. Such a categorisation and indeed subsequent developments (Brubaker 2004; Castles and Davidson 2000; Kymlicka 2001) are limited due to the path dependent nature of policy changes where policies evolve along a multiplicity of different paths (Lipset and Rokkan 1967; Collier and Collier 1991; Hacker 1998) that tend to exceed the limitations of categorisations.

Following Hooghe and Reeskens (2009), the framework and data from the Migration Integration Policy Index project (MIPEX) is used to determine an initial set of five policy domains. These are later grouped into the two larger domains representing immigration and integration policies (as per Money 1999; Givens and Luedtke 2005) which are then divided into whether the policy changes are pro- or anti-immigration or integration in either case.

Changes in policy are measured by first observing actual changes in legislation. Each piece of legislation enacted is then coded as being pro-migrant or anti-migrant. In the case of immigration policies, a pro-migrant immigration policies are pieces of legislation that make it easier for potential migrants to enter the country, while anti-migrant immigration legislation are pieces of legislation which impose further restrictions on migrants wishing to enter the country. In the case of integration legislation, for simplicity, 'pro-migrant' policies are broadly denoted by more multiculturalist policies whereas 'anti-migrant' policies are defined by assimilationist policy changes.

Each change is represented by a one unit increase on the dates of the introduction of the legislation. This gives us four monotonic time-series' for each country: a time series of pro-migrant immigration changes, a time series of anti-migrant immigration changes, a time series of pro-migrant integration policy changes and a time series of anti-migrant integration policy changes. The pro- and anti- time series are intentionally kept as separate as we cannot be sure of the actual magnitude of the changes that occur. Some changes may be large and some may be small and the derivation of a ‘net migration’ change therefore creates greater problems than it can possibly solve.

Figure 3 depicts an example of changes in anti-immigration legislative changes in the United Kingdom. These include for example the Immigration and Asylum Acts of

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![Figure 3 - The timing of anti-immigration policy changes in the United Kingdom between 1995 and 2010. Each legislative change is represented by a unit increase at time t.](image)

**Structural and Political Factors**

**Structural Factors**

The thermostatic model requires an estimate of the preferred policy level to account for changes in the underlying environment in which policy changes take place. In other uses of the thermostatic model, for example defence spending in the United States (Wlezien 1995), the preferred policy level is approximated by a measure of the perceived threat posed by the Soviet Union in public opinion data.

In terms of immigration, extensive literature suggests that public opinion on immigration varies with changes in the level of unemployment and changes in the proportion of foreign born migrants (Jackman and Volpert 1996, Knigge 1998, Lubbers et al. 2002, Golder 2003, Arzheimer and Carter 2006, Arzheimer 2009). Thus, these two variables are included as independent variables in the model to control for changes in the preferred level of immigration. The use of these variables reflects their use as aforementioned demand-side grievance factors in the immigration literature. The
use of these variables also coincides with the second hypothesis, that structural variables affect the politicization of immigration and integration policy areas differently according to their respective politicization as conflictual and clientelist policy areas.

While integration policy is rarely treated as separate from the literature on immigration policy. However, if, as per Money (1999), integration politics are aligned with traditional left-right positions, then we may expect integration politics to be somewhat less reliant on the structural determinants for the issue to be politicized. Alternatively, if integration politics is said to compete with immigration politics in a relatively limited agenda space, then we might expect integration politics to be more prominent where immigration is lower and unemployment is lower.

**Political Factors**

To operationalize the position of governing parties with respect to immigration policy the model incorporates data from expert surveys. Where the government is comprised of a coalition a weighted average of the positions of the contributing parties is constructed in proportion with the size of the coalition parties. A continuous time-series of the party position of each party is constructed based on a seven year moving average of the expert surveys.

The use of the political position of the governing party also coincides with the third hypothesis, testing whether prior ownership of an issue-position has a significant impact on the politicization of immigration.
6. Model and Results

Data Specifications

The main goal of this chapter is to assess whether policy changes for a given policy area can affect the level of politicization of that policy area. In respect of immigration policy we assess whether pro-migrant or anti-migrant policy changes can provoke changes in the volume of pro-migrant and anti-migrant political claims.

The dependent variable is the number of political claims made on a given date and in a given country. We distinguish between immigration and integration policies where the former concerns the entry of immigrants and the latter concerns the rights of immigrants that have already arrived. These are separated in line with earlier studies (Money 1999; Givens and Luedtke 2005) because the two policy areas may be contested somewhat differently.

Whereas previous studies examined the salience of issues through media coverage they also failed to account for the level of contestation. Thus, in recognition of the directional attributes of policies and claims we distinguish between positive and negative claims, or pro- or anti- migrant claims. Our understanding is that pro-migrant policies should reduce the volume of pro-migrant claims made in relation to that policy area.

Each claim is defined by (1) whether it indicates a preference for a change in policy or otherwise and (2) whether the position of the claim is 'strongly restrictive', 'somewhat restrictive', 'neutral', 'somewhat open to migrants', or 'strongly open to migrants'. We may combine these two variables into pro-migrant and anti-migrant demands and through the simplification of denoting small changes as one demand, significant changes as the equivalent of two demands, and ignoring neutral claims. Although it is something of a misrepresentation to count more significant demands as if they were two claims, the difference between minor changes and significant changes must be acknowledged. Table 1 describes the break-down of the frequency of each type of claim.
Table 1 - The number of political demands made by political actors and the desired change advocated, 1995 to 2010 all seven countries

<table>
<thead>
<tr>
<th>Position of claim</th>
<th>Position advocated by claim</th>
<th>No Change in Policy</th>
<th>Small Change in policy</th>
<th>Significant Change in policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-migrant Immigration Claims</td>
<td></td>
<td>9,239</td>
<td>140</td>
<td>468</td>
</tr>
<tr>
<td>Pro-migrant Immigration Claims</td>
<td></td>
<td>8,552</td>
<td>322</td>
<td>973</td>
</tr>
<tr>
<td>Anti-migrant Integration Claims</td>
<td></td>
<td>9,317</td>
<td>108</td>
<td>422</td>
</tr>
<tr>
<td>Pro-migrant Integration Claims</td>
<td></td>
<td>8,145</td>
<td>446</td>
<td>1,256</td>
</tr>
</tbody>
</table>

To examine the effect of legislation on demand for such legislation, the approach pursued assesses the effects of changes in legislation on pro-migrant and anti-migrant claims separately. We also separate pro-migrant legislative changes from anti-migrant legislative changes for each given regression. Because claims lead to counter claims the relationship between policies and claims can easily be confused and may be counter-intuitive if the model’s effects are not examined in isolation.

For each of four time series, the dependent variable is regressed on four independent variables: (1) the key variable of interest: the quantified change in policy, (2) the secondary variable of interest: the quantified position of the government on immigration according to available expert surveys, (3) unemployment per capita, and (4) the proportion of the population that is of foreign national origin. The final model is as follows, for issue \( i \) at time \( t \):

\[
\text{Politicization} (t, i) = f(\text{Policy since 1995}(t, i), \text{Government Position}(t), \\
\text{Foreign Migrants per Capita}(t), \text{Unemployment}(t))
\]

Since we have four dependent variables, four models are devised.

\[
\text{Anti Immigration Demands} (t) = f(\text{Anti Immigration Policy since 1995} (t), \\
\text{Government Position}(t), \text{Foreign Migrants per Capita}(t), \text{Unemployment}(t))
\]

\[
\text{Pro Immigration Demands} (t) = f(\text{Pro Immigration Policy since 1995} (t), \\
\text{Government Position}(t), \text{Foreign Migrants per Capita}(t), \text{Unemployment}(t))
\]

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Anti IntegrationDemands (t) = f (Anti Integration Policy since 1995 (t),
Government Position(t), Foreign Migrants per Capita(t), Unemployment(t))

Pro Integration Demands (t) = f (Pro Integration Policy since 1995 (t),
Government Position(t), Foreign Migrants per Capita(t), Unemployment(t))

**Multilevel Poisson Regression Model**

Whereas previous thermostatic models (see for e.g. Wlezien 1995) use OLS regression or GLS-ARMA to explore the relationship between policy changes and positions or issue salience these techniques are not appropriate here because the dependent variable is in the form of count data.

A poisson time-series model is especially effective at modelling the incidence of random events and in particular, in identifying changes in the rate of incidence of the random event. The model has been effective in demonstrating the effects of system changes in a range of applications such as the effect of changes in speed limits on the incidence of traffic fatalities (Ossiander and Cummings, 2002).

Time-series data for political claims have certain properties in common with other event incidence variables. Incidences of homicides for example exhibit peaks on certain days of the week, around holidays, or in certain months. Because homicide and suicide counts are sums of infrequent, discrete random events, the variance is also higher when the mean is higher, as is the case for a poisson process. Similarly political claims tend to occur at certain times or around specific events and often exhibiting occasional peaks.

To verify the use of the poisson process the series must not be overdispersed: that is, the variance must not exceed the mean. In such a case a negative binomial model is more suited. Table 2 shows that the variance does not exceed the mean in this data and that therefore the poisson process is a satisfactory method to apply here.
Table 2 - The mean and variance of the number of claims made on a given day broken down by Immigration and Integration claims.

<table>
<thead>
<tr>
<th>Country</th>
<th>Immigration Claims Mean</th>
<th>Immigration Claims Variance</th>
<th>Integration Claims Mean</th>
<th>Integration Claims Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>0.430</td>
<td>0.245</td>
<td>0.350</td>
<td>0.228</td>
</tr>
<tr>
<td>Belgium - Flanders</td>
<td>0.205</td>
<td>0.163</td>
<td>0.504</td>
<td>0.250</td>
</tr>
<tr>
<td>Belgium - Walloon</td>
<td>0.357</td>
<td>0.230</td>
<td>0.401</td>
<td>0.241</td>
</tr>
<tr>
<td>Switzerland (German)</td>
<td>0.377</td>
<td>0.235</td>
<td>0.374</td>
<td>0.234</td>
</tr>
<tr>
<td>Switzerland (French)</td>
<td>0.447</td>
<td>0.248</td>
<td>0.442</td>
<td>0.247</td>
</tr>
<tr>
<td>Spain</td>
<td>0.410</td>
<td>0.242</td>
<td>0.301</td>
<td>0.211</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.451</td>
<td>0.248</td>
<td>0.297</td>
<td>0.209</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.224</td>
<td>0.174</td>
<td>0.429</td>
<td>0.245</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.372</td>
<td>0.234</td>
<td>0.496</td>
<td>0.250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.329</strong></td>
<td><strong>0.221</strong></td>
<td><strong>0.408</strong></td>
<td><strong>0.241</strong></td>
</tr>
</tbody>
</table>

The observations in an individual country are subject to intra-class correlation. Observations within countries are more alike than are observations across countries as political claims may be more frequent in one country than in another. This may be a function of a variety of variables such as the composition of the opposition, the presence of particular individuals likely to politicize immigration, the political culture or indeed the propensity for particular newspapers to report political claims that may be made on the issue of immigration. These cross-country differences are beyond the focus of this chapter.

Any analysis that ignores this multi-level component may therefore underestimate the standard error of the effects. As a consequence, separate random error terms are used to identify each country. In taking a multilevel approach, we are able to examine the features that vary across time and across the seven countries reflecting the politicization of immigration.

**Results**

The results of the model broadly confirm the first hypothesis: that policies may depoliticize issues. There is strong evidence confirming the second hypothesis. This shows that the classic determinants of the salience of immigration - the rate of
unemployment and the per-capita number of foreign-born migrants - influence the level of politicization of immigration. There is some although much weaker evidence confirming the third hypothesis that the politicization of immigration is determined by the position of the party in government. However, the effects are much more nuanced.

**Immigration Policy**

The analysis provides reasonably strong evidence confirming the first hypothesis. While pro-migrant immigration policies are associated with a reduction in pro-migrant immigration policy demands, the effect - although in the hypothesized direction - is in both cases only significant with respect to the association between pro-migrant immigration policies and pro-migrant immigration policy demands.

Evidence is stronger with respect to the second hypothesis. We expect a conflictual immigration debate to be associated with higher levels of immigration and unemployment as immigrants per capita and the unemployment rate increase as the debate intensifies. Increases in the rate of unemployment are positively associated with both pro- and anti-immigration demands, with the effect slightly smaller for pro-migrant demands. Similarly, increases in the number of foreign nationals per capita are associated with an increase in the volume of anti-migrant demands, as expected. However, although the relationship is in the expected direction, the association between the numbers of foreign nationals and the volume of pro-migrant demands is insignificant. The rise of immigration and unemployment can be broadly viewed as increasing the politicization of immigration.

There is also some evidence for the third hypothesis. While the pre-existing position of the governing party has no effect on the incidence of anti-migrant demands, it does have an impact on the incidence of pro-migrant demands. Governing parties with positions that are less favourable towards migrants are significantly more likely to receive more pro-migrant demands than a government whose preconceived position is more pro-migrant. However there is no difference in the extent to which either party receives anti-migrant claims. This is perhaps reminiscent of the aforementioned orthogonal nature of the pro-anti migrant dimension to the traditional left-right dimension that dominates political competition.
Table 3 – Regression Results: Determinants of increases in the incidence of Anti-Migrant Immigration Claims, January 1995 to December 2009

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SE</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Migrant Policies</td>
<td>-0.026</td>
<td>0.033</td>
<td>0.430</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>1.396</td>
<td>0.658</td>
<td>0.034  *</td>
</tr>
<tr>
<td>Government Position (Anti)</td>
<td>0.004</td>
<td>0.026</td>
<td>0.865</td>
</tr>
<tr>
<td>Unemployment per Capita</td>
<td>0.024</td>
<td>0.013</td>
<td>0.057  .</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.381</td>
<td>0.290</td>
<td>0.000  ***</td>
</tr>
</tbody>
</table>

Table 4 - Regression Results: Determinants of increases in the incidence of Pro-Migrant Immigration Claims, January 1995 to December 2009

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SE</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro-Migrant Policies</td>
<td>-0.156</td>
<td>0.044</td>
<td>0.000  ***</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>0.333</td>
<td>0.467</td>
<td>0.476</td>
</tr>
<tr>
<td>Government Position (Anti)</td>
<td>0.109</td>
<td>0.017</td>
<td>0.000  ***</td>
</tr>
<tr>
<td>Unemployment per Capita</td>
<td>0.019</td>
<td>0.008</td>
<td>0.021  *</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.991</td>
<td>0.249</td>
<td>0.000  ***</td>
</tr>
</tbody>
</table>

Integration Policy

For integration policies the relationship is less clear. In terms of the first hypothesis the pro-migrant integration policies significantly diminish the incidence of pro-migrant and in the expected direction, anti-migrant integration policies are counter-intuitively associated with increase in anti-migrant integration policy demands. Thus, it appears that policies have unusually done little to diminish the volume of negative integration demands.

The second hypothesis holds up rather well. We expect integration demands to be associated with client politics reminiscent of the earlier stages of immigration. We observe pro-migrant and anti-migrant integration policy demands to be significantly more frequent where immigration per capita is lower and unemployment is lower -- where essentially immigration is less of a concern to the wider population and the immigration debate takes on the client-based form of politics.

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In relation to the third hypothesis, the effects are not as what one would expect. The Government Position effect is negative and statistically significant in both integration policy models. It appears that the volume of the integration debate is more prominent where the government is pro-migrant. The result favours the alternative hypothesis that the actors that make claims expect the government to be more receptive to those claims.

**Table 5 - Regression Results: Determinants of increases in the incidence of Anti-Migrant Integration Demands, January 1995 to December 2009**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Migrant Policies</td>
<td>0.279</td>
<td>0.046</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>-1.354</td>
<td>0.653</td>
<td>0.038 *</td>
</tr>
<tr>
<td>Government Position (Anti)</td>
<td>-0.072</td>
<td>0.029</td>
<td>0.012 *</td>
</tr>
<tr>
<td>Unemployment per Capita</td>
<td>-0.027</td>
<td>0.012</td>
<td>0.029 *</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.072</td>
<td>0.307</td>
<td>0.000 ***</td>
</tr>
</tbody>
</table>

**Table 6 - Regression Results: Determinants of increases in the incidence of Pro-Migrant Integration Demands, January 1995 to December 2009**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro-Migrant Policies</td>
<td>-0.041</td>
<td>0.019</td>
<td>0.030 *</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>-1.108</td>
<td>0.391</td>
<td>0.005 **</td>
</tr>
<tr>
<td>Government Position (Anti)</td>
<td>-0.082</td>
<td>0.016</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Unemployment per Capita</td>
<td>-0.014</td>
<td>0.007</td>
<td>0.054 .</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.644</td>
<td>0.248</td>
<td>0.010 *</td>
</tr>
</tbody>
</table>

It may be argued that the salience of the debate is distorted by the overwhelming dominance of media coverage of the financial crisis, between September 2008 and December 2009. Certainly in Ireland and Spain the impact of the global financial crisis had significant consequences on a range of variables used in the model. Not only did the financial crisis affect regular agenda-setting strategies, reducing the relative importance of immigration, but also the level of immigration per capita, and unemployment. However, when we repeat the regression excluding this period, there is no change in the significance or direction of the significant effects (See Appendix A for extensive details of these results).

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7. Conclusions

Policies can de-politicize issues

The findings here offer significant evidence supporting the assertion that policies can de-politicize issues. In three out of the four models the relationship holds up: the introduction of pro-migrant immigration policies precedes a reduction in pro-migrant immigration demands, anti-migrant immigration policies precede a reduction in anti-migrant immigration policy demands, and pro-migrant integration policies precede a reduction in pro-migrant integration policy demands. This fills the gap in the literature between the activities of governments and eventual electoral outcomes.

Given that the dominant effect of the party's activities in government on their reputation, and particularly the impact on the relative prominence of issues evidence from this chapter suggests that where there is a subset of issues which the governing party does not own, it is incentivised to give in to any political demands in respect of those issues in order to de-politicize the issue.

Given significant existing evidence that politicized issues define electoral outcomes and that the activities of governments outweigh activities of campaigns, we may conclude that the level of politicization attached to an issue is a serious concern for the future electoral prospects of any governing party.

Parties tend to own issues where they hold the majority position. They also tend not to own issues where they do not hold the majority position. For example, in the United States the Republican Party is said to own Defence issues, while in the UK the Labour Party are said to own issues relating the Health. Thus, to de-politicize these issues, the Democrat Party is demonstrably incentivised to act hawkish while the UK Conservative Party is incentivised to advocate policies in favour of expanding the National Health Service, converging towards the position of their opposition party on issues they do not own.

In terms of democratic accountability, the chapter signals a positive note. The observable responsiveness of politicization to changes in government policy suggests that through the media, the relative salience and the relative importance of issues are at least responsive to the behaviour of politicians.

As per the restrictive legislation passed by Michael MacDowell, this too may have served to de-politicize the immigration issue and perhaps it did play a role in the
complete absence of a far-right party in the Irish political system. However, it is also arguable that there are certain features of the Irish electoral system that also make this difficult.

With respect to immigration as a potentially fractious and socially divisive issue, pro-migrant policy-makers certainly face a difficult decision. If they are to introduce restrictive policies they forfeit party policy-seeking objectives but benefit potentially in terms of the vote-seeking and office-seeking objectives. On the other hand if the party maintains its existing stance it may not only lose electoral support from the rising salience of the issue, but it also risks social upheaval if the volume of the debate increases.

**Structural variables determine politicization**

Significant evidence also confirms that the politicization of immigration is a function of structural and environmental factors -- the level of unemployment and the level of immigration in the country. This follows considerable research documenting the relationship between surges in anti-immigration sentiment and sharp economic downturns (Higham, 1985, Olzak, 1992). It also corroborates with the theory that the politicization of the issue increases as the issue becomes contested by concentrated by different demographic groups.

While some studies have found mixed evidence of this relationship, the evidence is most consistent for studies that do not focus directly on electoral results. It is certainly true that electoral results only allow for relatively weak analyses due to the relative uniqueness of elections.

There is also evidence that integration politics is more likely to be prominent where the levels of immigration are lower and unemployment is also lower. Integration politics is more likely to flourish where immigration politics is not conflictual. It can still be politicised as the positions parties adopt on integration issues are easily represented by the left-right stances they adopt for other party political issues.

The importance of the Wilson’s framework for understanding political competition is particularly useful here. It clearly indicates that for typical pro-migrant party policy-seeking objectives are more achievable where unemployment is also lower and therefore when immigration is less politicized. On the other hand it shows that integration politics is likely to be as politicised as it may ever get as it already satisfies the conflictual requirement for an issue to be politicized.

*Kevin Cunningham*
Party Issue Ownership has only a small effect

In terms of issue ownership, the effect is relatively inconsistent. There is no observable effect for party position on anti-migrant immigration demands, while the effect is as expected for pro-migrant immigration policy demands. Anti-migrant governments receive more political demands to take pro-migrant positions than parties that are more inclined to do so, all things considered.

This makes it more difficult for the governments with tougher positions on immigration to de-politicize the issue. However, given the significant likelihood that the party that is less favourable towards immigration may also -- relatively speaking -- own the immigration issue with the wider population it is probably of less concern for that party.

It is clear that for integration politics the politicization of integration issues increases as larger volumes of pro-migrant integration and anti-migrant integration demands become known. It may be the case that left wing parties are significantly more involved with integration politics and promote that sort of policy agenda. As outlined by Money (1999), there is a more distinct difference between left and right wing parties on integration issues, while immigration issues are orthogonal to the left-right dimension, integration issues are aligned with the left-right dimension. As such when the left-right party position is used instead of the pro-migrant and anti-migrant position, the relatively unusual positive relationship between pro-migrant parties and the salience of pro-migrant demands disappears.

Vote-Seeking Objectives and Policy Seeking Objectives

While much research focuses on parties’ attempts to manipulate salience during intense campaign periods much less research has covered how policy implementations during a government’s term may also be used to manipulate issue salience (see Green and Jennings 2012). Exploring the effects of immigration policy we observe that policy implementations on immigration issues can manipulate the salience of those issues. Policy implementations can de-politicize issues by addressing the dominant concerns that the issue raises. While this signals a positive note for democratic accountability, it also signals potentially adverse incentives for political parties.

Given the dominant effect of a party’s activities in government (Bélanger 2003; Green and Jennings, 2011), where there is a subset of issues which the governing party does not own it is incentivised to give in to political demands in order to de-politicize the
issue. In response to the rising salience of anti-immigration claims, governing parties for whom immigration policy is not a favourable issue are thus incentivised to meet the anti-immigration claims through policy implementation.

In this way governing parties are conflicted between policy-seeking objectives and vote-seeking objectives. Where a governing party is motivated by its own policy goals it may ignore the rising salience of immigration. However, where a government is motivated by vote-seeking or future office seeking incentives, motivated by its own popularity, then that government may introduce policies that are not perceived as favourable from a policy-seeking perspective, from the perspective of the majority of its supporters.

Through policy implementations governments therefore have a mechanism which can drive partisans apart or bring them closer together. If a party, facing an unfavourable issue, decides to pursue its own policy-agenda and effectively ignore the issue then it may effectively increase the volume of claims. These assertions corroborate with recent empirical work by Ura and Ellis (2012) in the United States, who show that policy responses to salient issues are the key drivers of partisan polarization.

The party’s reputation among voters is a critical component of whether conflicting incentives arise. If a party is positioned favourably with the electorate in respect to immigration policy, then it is less adversely affected by the rising salience of the issue. It is thus incentivised to behave as its supporters would expect, in line with its policy-seeking objectives. However, if the party is not favourably viewed with respect to immigration policy, then it faces the aforementioned predicament. The path chosen by the government can broadly be determined by the extent to which it seeks to achieve its policy-seeking objectives or its vote-seeking objectives.
Chapter 3

Party Positions and Ordinal Voting Systems

1. Introduction

In eight Australian elections between 1949 and 2001, the Liberal-National Coalition won more seats while winning fewer votes than the Australian Labor Party. Existing research suggests that such partisan bias may be the result of malapportionment or the geographical concentration of support. However, this may also be the result of the Alternative Vote (AV) as a system of ordinal preferential voting. Indeed the introduction of the system in 1918 was the result of an agreement between the various anti-Labor parties that existed. This chapter seeks to evaluate the extent to which ordinal voting systems can induce a partisan bias, which may incentivise parties to adopt relatively centrist positions.

Electoral systems define the translation of votes into seats and thus are characterised as ‘the most manipulative instrument(s) in politics’ (Sartori, 1968: 273). Distortions in the seats-votes translation are the subject of a large body of literature beginning with the ‘cube-law’ of majoritarian systems and subsequent developments by a number of prominent scholars (see Kendall and Stuart 1950; Tufte 1973; Gelman and King 1990). The great majority of observed distortions can be attributed to the seat bonus won by parties that win a larger vote share – an effect that is most prominent in single-member district majoritarian systems and least prominent in multi-member district proportional systems. Scholars have therefore focused on calculating indices of proportionality over several different elections to quantify and understand these effects (see Gallagher, 1991).

However, whereas proportionality is concerned with the expected relationship between seats and votes, partisan bias relates to the difference in seat shares between parties with the same vote share. While scholars have discovered many determinants of

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partisan bias including malapportionment (Baker, 1955; Engstrom, 2005), turnout differences (Campbell, 1996), and the geographic distribution of party vote shares (Gudgin and Taylor, 1979; Brady and Grofman, 1991). The existing research is yet to observe whether a party’s policy positions can have an impact on the translation of vote share into seat share, its ability to convert a party’s district level vote share into seat share.

Although relatively understudied, partisan bias is of significant importance. It also has clear consequences for office-seeking objectives of parties. In France under the two-round system extremist parties such as Front National struggle to win a single seat, while centrist parties of equal vote share, such as the UDF, can win over one hundred seats. If we assume the party system has a consistent level of proportionality equal for each party, then this is a significant distortion of that assumption. Even when accounting for the geographical concentration of support, malapportionment or turnout differences the differences here are too vast. The marginal benefits indicated by such a differential implies significant incentives for moderation by political parties.

Exploring evidence of these distortions in ordered ballot systems, this chapter argues that the distributive properties of these systems provide an environment which facilitates a partisan bias toward centrist parties. In a separate literature, the importance of understanding the ballot structure is clear. Systems defined by ordinal voting – the single transferable vote and the alternative vote – have become very popular among scholars as a strategy to mitigate violent conflict in deeply divided societies (Reynolds 1999, Horowitz 1991, Reilly 2001, Sisk 1995). It is widely theorised that the features of ranked-ballot systems foster inter-ethnic vote pooling and produce centripetal effects so that more moderate candidates, appealing across ethnic boundaries, might have a better chance of becoming elected (Reilly 2001; Horowitz 2003). The systems are seen by some as potential alternatives to or in conjunction with consociationalism, which is often criticised for entrenching the existing identities. Indeed the systems have been taken up by deeply-divided societies in Northern Ireland (PR-STV), Fiji (AV) and Papua New Guinea (AV) specifically to encourage the development of more aggregative party politics (Reilly 2001).

However, the empirical evidence behind these effects is limited, variously based on outcomes from the six countries where the systems have been adopted: Nigeria, Sri

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10 Malapportionment relates to the relative difference in the size of the electorate in different constituencies.
Lanka, Fiji, Papua New Guinea, Bosnia & Herzegovina, and Northern Ireland (McCulloch 2010). The few countries with which one can examine these effects means that even the scant evidence is highly disputed (Fraenkel and Grofman 2004, 2006a, 2006b versus Horowitz 2004, 2006). However, by exploring subnational effects in more detail we can construct controlled comparisons that are more likely to yield valid causal inferences (Snyder, 2001).

The importance of understanding convergence and divergence extends beyond deeply-divided societies as empirical evidence increasingly reveals incentives for divergent policy stances in multi-party democracies. It is observed that niche parties – parties that occupy the extreme left, the extreme right, or distinctly non-centrist positions – do not enhance their electoral appeal by presenting moderate policy programmes (Adams et al. 2006; Meguid 2005). Ezrow (2008) shows that if an extremist party moderates its policies then it is likely to suffer electorally as a result. Non-centrist parties cannot feasibly shift to the moderate positions that would maximize their support because the votes gained by taking more centrist positions would be offset by their credibility and reliability differential compared with established moderate parties (Dow, 2001). The recent persistent support for anti-immigration parties in Western Europe is indicative of this effect. Furthermore, mainstream parties are more receptive to mean voter positional change (Ezrow et al. 2010) and are thus incentivised to adopt the positions taken by niche parties (Adams and Merrill, 2006). However, these studies do not distinguish between electoral systems with ordinal voting as opposed to those with categorical voting.

This chapter evaluates the extent to which there is a centrist bias in ordinal voting systems and whether, ceteris paribus, that bias may fuel centripetal incentives for parties. Following the distinction made by Farrell and McAllister (2004) we analyse the mechanical effects of ordinal systems in terms of the ‘micro-level’ effects of individual voting behaviour and the ‘macro-level’ effects of electoral outcomes. Drawing on an innovative dataset, we first model the ‘micro-level’ relationship between individual first and second preferences to evaluate the fundamental assumptions that (1) there is an ideological relationship between preferences and (2) whether the culmination of preferences leads to a larger number of effective votes for centrist parties. Secondly, at the macro-level, we model whether this centrist culmination of preferences has an impact on a party’s electoral prospects. We model the effect of a party’s position on the party’s ability to convert votes into seats.

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We find strong evidence for both hypotheses. Firstly, using full preference data from the Scottish local elections we find strong evidence of an ideological pattern to voter preferences. Parties in closer proximity to one another transfer votes between one another with much greater frequency than do relatively distant pairs of parties. Centrist parties therefore earn a greater return on their first preference vote share than do non-centrist parties. Secondly, using election data from a number of countries with ordinal preference voting systems, we find that centrist parties require fewer first preference votes to win seats, while non-centrist parties require more first preference votes. To have a 50/50 chance of winning a seat in a given 4-seat constituency, some candidates may need just 11 per cent whereas others may need up to 14 per cent.

The chapter proceeds in section two with an analysis of the literature in terms of the macro and micro level evidence of partisan biases in preferential voting systems. Section three develops the theoretical model exploring the distributive nature of preferential voting. Section four describes the measures and methods. We use a proportional odds regression to model the relationship between the district-level seats won by a party compared to the proportion of the quota won by that party. Section five describes the results of the hypotheses and section six concludes.
2. Literature Review

We first cover the extent to which electoral systems induce convergent (centripetal) and divergent (centrifugal) competition and identifying a gap in the literature in respect of the distinctions between categorical and ordinal ballot structures. We then observe evidence in relation to work done on ordinal systems in individual voter behaviour. Finally, to measure electoral outcomes we look to partisan bias noting further innovations in this work in respect of that literature.

Centripetal Incentives and Ordinal Ballot Systems

**Centripetal Incentives**

Electoral systems are known to shape the number of political parties, their cohesiveness and the characteristics of representative democracy. Gary Cox's (1990) study marks the beginning of contemporary research into their impact on the spatial incentives of political parties. Considering an almost exhaustive set of factors determining electoral rules Cox made predictions linking electoral laws to the dispersion of parties in policy space. Parties either converge toward the median voter (centripetal incentives), or to diverge away from the median voter (centrifugal incentives). Cox concludes that parties in majoritarian systems will converge towards the centre of the ideological space and whereas parties in proportional systems will diverge away from it.

A series of somewhat inconsistent empirical research (Dow 2001, 2011; Ezrow 2008, 2011) indicates that proportionality fosters party-system divergence. Ezrow (2011) regresses party vote share on the interaction between disproportionality and party policy distance finding no significant effect owing to the variable of interest. However, Dow (2011) extends all previous analyses to fifty-three elections in thirty-one nations between 1996 and 2006 and finds a significant relationship between party system extremism and proportionality. He concludes that the strength of this relationship is due to the vote-seeking incentives of parties.

Much of our understanding of incentives induced by electoral systems remains limited to the impact of the district magnitude through observing the interactions between voter preferences and party policy positions along a pre-defined policy space. While studies since Cox (Dow 2001; Ezrow 2005, 2008; Calvo and Hellwig 2010) have focused on the impact of proportionality on party system dispersion, there is relatively little work on the effect of the ballot structure of electoral systems.
While the ballot structure is one of three primary features of an electoral system along with the district magnitude and the electoral formula (Rae 1969), the prominence of majoritarian systems, dictates that research tends to concentrate on the most common types of electoral systems, along the majoritarian-proportional axis. The research subsumes systems that may otherwise be defined by their ballot system into other categorisations. The Single-Transferable Vote is categorised as an open-list PR system with small districts (Farrell and McAllister 2000; Gallagher 2005) and the Alternative Vote (AV) and the Two-Round System (TRS) are categorised as special cases of single-member plurality (Grofman 2008). Thus, research into the effects of these rarer and more complex systems is much less widespread.

**Ordinal ballot systems**

The ballot structure determines the extent to which voters can discriminate between parties and candidates. In Rae’s classification (Rae 1969), the ballot structure is differentiated by simple ‘categorical’ ballots where voters are able to vote for a single candidate and ‘ordinal’ or ‘preferential’ ballots where voters can offer an ordered preference which can transcend more than one party. This classification is modified by Gallagher and Mitchell (2004) who account for differences among non-categorical systems identifying an intermediary category of ‘dividual’ ballots where the ballot is neither categorical nor ordinal but voters can divide their vote among parties. This differentiates mixed-member system in Germany and New Zealand and PR systems where voters can distribute preferences across lists as in Luxembourg and Switzerland. It leaves the Alternative Vote (AV) and the Single Transferable Vote (STV) as the two undisputed ordinal systems as they entail the rank-ordering of candidates by voters. Although categorised by Gallagher and Mitchell (2004) as categorical, the French two-round system (TRS) also allows voters to vote for different parties without dividing their vote. The voter can select a different candidate in the first ballot to the candidate they select on the second ballot if they opt to do so.

While Carey and Shugart (1995) show how it may affect the incentives to cultivate a personal vote, and Farrell and McAllister (2006) show how it can affect a voter’s overall satisfaction, there is little conclusive evidence of macro-level or micro-level affects of ordinal voting systems. While their uniqueness is frequently observed little is known empirically about the winners and losers of these systems.

The most relevant attention that ordinal systems get is through the analysis of their effects on deeply-divided societies (see Fraenkel and Grofman, 2004). Ordinal ballot

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systems are said to lead to centripetal campaign strategies, with strong incentives for moderation in the policies pursued, the result of reciprocal preference swapping between parties (Cullen 1993). However, this work tends to focus on the argument of whether the central aim should be proportionality in conjunction with consociationalism advocating PR list systems (Lijphart 1991, 1994, 1999), or whether vote-pooling should be the central aim, advocating AV (Horowitz, 1991a, 1997; Reilly, 1997a, 2001). Following inconclusive evidence in Ireland (Weeks, 2011) indicating that lower preferences are not ideologically based, we may conclude that the causal mechanism showing centripetal political competition in ordinal systems is yet to be empirically concluded.

The earlier focus on cross-national evaluations of electoral effects was dependent on a large sample of electoral systems and the assumption that all political competition takes place along a specific left-right dimension. However, these studies are unable to address the wide range of socio-economic and cultural factors driving the dispersion of parties. For example, while elections in Ireland, Northern Ireland, and Malta are conducted via STV with similar district magnitudes, for each country and for entirely different historical reasons, the nature of political competition is wildly different, ranging from the highly polarized to the highly centrist. With just one observation per country the effects cannot be adequately controlled for through the use of multi-level variables. To examine the effects of ballot systems requires an exploration of the mechanical effects of electoral systems. Fraenkel and Grofman (2006) provide the most detailed analysis of preference flows in an ordinal election. Analysing Fijian elections they determine the proportion of single peaked preferences. However the study does not account for the variability in political competition or the cross-district consistency of those effects.

Through comprehensive analysis of the seats-votes relationship for different parties and across different types of electoral system, this chapter aims to determine whether ordinal voting systems yield a partisan bias towards or against different types of party. By doing so, we aim to determine whether centrist partisan bias induces centripetal incentives for moderation among political parties, all things being equal. To proceed with more general effects on the broader political system we must first observe the behaviour at the level of an individual voter. We therefore explore the micro-level effects of individual voter behaviour, followed by the macro-level effects of electoral outcomes, being sure to account for additional conditions on those effects.
**Micro-Level Effects**

**Individual Voter Behaviour**

It is widely theorized that the need for candidates to attract secondary preferences in a preferential voting system induces centripetal appeals that have to be more moderate to be credible (Horowitz, 1991: 97; Reilly, 2001; Sisk 1995). Following the work of Sisk (1995) and Cox (1990), this has become known as centripetalism. Horowitz has argued that these incentives work mostly at the voter level.

However, there is a sizeable gap between theoretical predictions of the likely effects of ordinal voting systems and the empirical record of places that use these systems (Mitchell 2013). As Gallagher et al. (2011, 389) argue in relation to STV: ‘the system is used in too few countries to be sure what its general effects are’. Indeed it may be further argued that any cross-national analysis based on country-level outcomes will suffer as country-level observations will be confounded by a multitude of external factors that may be too many to adequately control for.

It may also be argued that STV in Ireland is too candidate-focused to yield these interparty effects. If voters place little attention to the policies of their first choice, how can we be certain that they will issue second preferences in accordance with what we understand to be ideologically proximate. While it is true that voters under STV as in Ireland are to some extent candidate-focused, we also know from election surveys that voters are also influenced by party labels (see Marsh, 2000; Sinnott, 1995; Marsh et al., 2008).

While Farrell and McAllister (2004) may argue that there is little evidence that preferential voting has a significant bearing on the final outcome, it is also undeniable that preferences are important. This is particularly the case in recent years where the number of candidates requiring lower preferences to ‘cross the line’ (and get elected) in Australia has increased, at 66% in 1998 (Reilly 2001).

While it is also observed that secondary preferences decide a very small number of contests – in the sense of changing the order of first preferences -- this observation ignores the endogenous nature of vote choice and party size. Because the vast majority of candidates are not elected solely on the basis of their first preference votes, they therefore rely heavily on having a broad appeal across party lines. It is thus important for individuals and their parties that the levels of intra-party vote transfers are maintained at high levels (Gallagher, 2000, 2008). Successful parties motivated by
rational, office-seeking incentives will observe and anticipate the benefits of vote-pooling and position themselves accordingly. Meanwhile voters will also observe the relative potential of different parties in accordance to their perception of what a viable party looks like. Thus, following the psychological effect of Duverger’s Law, parties that are unfavourably biased with respect to the electoral system will also be disadvantaged in terms of their electoral appeal. The party system thus may be expected to evolve to the extent that party leaders moderate their positions.

For example, the relatively favourable position of the Irish Green Party allowed them to break through and achieve representation. It seems quite likely that the Green Party’s inauspicious beginnings would have been extinguished were it not for its ability to attract lower preferences. When Roger Gartland lost their first and only seat in 1992 (in an extremely tight contest), in the same election Trevor Sargent won one in Dublin North. However, he did so having been on first preferences, 8.8% to 11.3% behind Fianna Fail candidate G.V. Wright – his competitor for the last seat in Dublin North. Were it not for his ability to attract transfers from other parties the party would perhaps have been unlikely to gain any momentum for future elections. In 1997, the Green Party won two seats. Sargent was again marginally behind Labour candidate Sean Ryan for the last seat. By 2002, Trevor Sargent topped the poll in Dublin North. A feat that arguably would have been highly unlikely were it not for the earlier successes. In 2002 and 2007 the party won six seats on each occasion — a third of which were a direct consequence of lower preference votes.

Ordinal preferences can also be a ‘sleeping giant’. For example, the short-lived rise of the anti-immigration One Nation party in Australia was somewhat indicative. In 1998, Pauline Hanson contested the Blair constituency, winning 36% on first preferences, over 14% ahead of her Liberal Party rival. However, by the final count she had lost by 53% to 47% to the Liberal Party candidate. Similarly in 2001 in the Australian Senate election, despite having 10% to the National Party’s 9% and Australian Democrats 6.7%, both the National Party and the Australian Democrat Parties won seats while the One Nation candidate did not.

If we assume voter preferences and party positions to be normally distributed across a single dimension, parties in the centre will benefit from transfers from the left and the right, while relatively extreme parties on the periphery of the political space will be disadvantaged as they attract fewer secondary preferences. The evidence from of preference effects in TRS systems as in France is most revealing. Across the four elections between 1988 and 2002, the far-right Front National party received between

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10 and 15 per cent of the vote share. However, the party won just 3 seats in this entire period. Comparing the results of the centrist UDF party to the Front National is illustrative. In 1997, the UDF won 14.2% in the first round compared to the 14.9% won by the Front National. However, while the Front National won just 1 seat, the UDF won 112 seats.

Élite-led Behaviour

The literature on ordinal systems also highlights the relative prominence of pre-election alliance formation and pre-election pacts. There are clearly powerful incentives for these. Parties identify coalition allies in advance of an election so they can benefit from mutually beneficial arrangements with other parties. The use of pre-election alliances are based on the assumption that élites can influence whom their first preference supporters will preference next.

Under STV in Ireland, sometimes two or more parties explicitly form a pre-election coalition as in the elections of 1973, 1989 and 1997. It remains clear to voters which party is their closest ally and vote transfers flow accordingly as in 1981 and 1982 (Gallagher 2004). Furthermore, as time has passed it is said that parties have become more ‘coalitionable’ and more ‘promiscuous’ (Mair and Weeks 2005:155). In recent years a variety of pre-election alliances have formed including the ‘Mullingar Accord’ between centre-left Labour and centre-right Fine Gael and the all-but-explicit transfer pact between the relatively right-wing Progressive Democrats and relatively centrist Fianna Fáil (Mitchell 2003). In 2002, all parties (apart from Fine Gael) became potential coalition partners of Fianna Fáil. This had a direct effect on the index of disproportionality that year as Fianna Fáil achieved an 8% seat bonus (with 49% of seats compared to 41% of votes); the index of disproportionality for that year increased to 6.6 (Gallagher 2004).

Pre-election alliances and pacts are even more prominent in political systems under AV. Secondary preferences of minor parties are crucial for bigger parties to win marginal seats. In Australia, inter-party bargaining is a significant feature of pre-election politics. Parties also bargain with one another on how to advise voters how to allocate preferences. This is undertaken through the use of ‘how to vote cards’ which specify for voters of each party how to allocate lower preferences. While it may be demonstrated that half of voters use these cards, it is also the case that voters use the cards where they agree with the preferential order, and discard it where they do not.
Their effect is perhaps overstated given that parties will form coalitions with ideologically proximate parties.

Incentives to form pacts are strongest under the two-round system (Blais and Indridason, 2007). According to Algie (2004), larger parties need to build alliances with smaller parties to ensure that they can win the election when they get through to the second round. Smaller parties can thus wield power without actually getting any of their candidates elected. Calculating the support for smaller parties thus forms the basis of alliance-building as in France. Geddes (2003) argues that this provides an incentive for small parties to form even if the likelihood of winning a seat is relatively low.

The existing evidence suggests that pre-election coalition agreements are more frequent in ordinal and dividual systems. As per Golder (2006), 'the most likely place to find evidence of pre-electoral coalitions is in single-country case studies, particularly those focusing on France, Germany, or Ireland'. Meanwhile, pre-electoral agreements are a consistent feature of Australia and Fiji. This alliance building is both a cause and consequences of convergence between parties. The fact that significant parties with similar policy programs can exist in ordinal systems makes pacts and alliances easier and more appropriate to form. As is argued by Sartori (1994), pacts are most likely to be effective among ideologically proximate parties. Thus, the prominence of alliances in ordinal systems is symptomatic of the preponderance of parties with relatively similar policy positions. The systems of pre-election alliances that parties advance are evidence that the parties recognise the importance of lower preferences and act to maximise their influence in this regard. The incentives to form alliances act against incentives to differentiate and induce convergence.

The prevalence of non-competitive pacts in AV and TRS is also a manifestation of the convergence of significant parties. In France, the Socialist Party and the Green Party agreed to present a common candidate in 121 of the 487 constituencies ahead of the 2002 French Legislative Election (Blais and Indridason, 2007), while in Australia the pacts between the Liberal Party and the National Party and its various incarnations have dominated Australian politics. Similar non-competitive pacts occur under the mixed member system, particularly between the German CDU and CSU parties. The mixed-member system may be regarded as a 'dividual', semi-ordinal system. Non-competitive pacts have also occurred in Northern Ireland under STV where unionist and nationalist parties have in a small number of cases do not compete in order to benefit their coalition partner.
While transfers may be somewhat influenced by elites, it is voters that choose to respond to the signals emanating from party leadership or their own concerns in relation to coalition formation (Sinnott 1995:216; Laver 2000; Kennedy 2002). While there is evidence of a desire by parties to control transfers through pre-election pacts, it is also clear that lower preferences are likely to bear a relationship with higher preferences in any case. If parties wish lower preferences to behave in the strategic manner they desire they must converge with the parties with whom they wish to form reciprocal arrangements with. This may involve highlighting their common agenda and converging positionally. In either case, as Bartolini argues, parties will select their political and electoral alliances in a way that is congruent with the secondary preferences of its supporters. Party leaders will also know not to form alliances with parties that are significantly different from themselves. To do so could potentially be damaging to their primary preferences. Hence, in the 2002 French Legislative election the centre-right UMP favoured an alliance with the centrist UDF party over an alliance with the Front National even though the Front National had significantly more support.

This literature also highlights the importance of non-proximate features of voting. It would be strategically sensible for supporters to assign lower preferences to a leading party to sufficiently weaken it so that it cannot form a government on its own and will therefore rely on a coalition to govern (Gallagher, 2005). This may have occurred in relation to Fianna Fáil as parties have aimed to prevent the party from securing an overall majority (Laver 2000). Thus, evidence from case-wise studies on transfer voting indicates that it is also necessary to control for the strategic motivations as well as proximity arrangements.

**Individual Level Data**

While the centripetal effects of ordinal systems are certainly observable, they are not observably persistent. In an empirical study of Irish STV elections Laver (2000) finds that transfers between the centre-left Labour Party and the centre-right Fine Gael party fluctuate radically over the post-war period without corresponding changes in party policy positions. Thus, the observations we have observed indicating single peaked preferences may be the result of local, perhaps spurious effects.

Using terminal transfer patterns, studies of STV in Ireland indicate that strategic incentives influence lower preferences for larger parties (Farrell and McAllister 2005; Gallagher 2005; Kennedy 2002; Sinnott 1995; Mitchell 2013). The studies are somewhat constrained in terms of statistical inference as transfers must to take place in

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identical circumstances in order to be comparable. In many cases however, transfers are based on a limited set of options which are not directly comparable in another context where the set of options are different. Furthermore, the observations are not only dependent on who is remaining, but also the alternatives that have been eliminated as the voters tend to issue a limited number of preferences and if a slightly more favourable alternative, even from the same party as some of the remaining candidates, then that will also be a consideration.

Other studies use an even more limited set of first round transfers to overcome this issue (see Clarke et al., 2009). However, this leads to even more limited sample sizes and focuses almost exclusively on voters of candidates with large first preference votes, or voters of largely independent candidates with very little first preference votes. These are again biased subsets of the population and are more severely limited to the context in which certain candidates have large surpluses.

Another approach looks to mock ballot surveys (Bowler and Farrell, 1991; Curtice and Marsh, 2008). However, the danger exists with survey data that forgetfulness or fatigue may mean that respondents do not accurately or fully recall how they completed their ballot paper. Furthermore, the number of respondents will be too limited in number to infer the strength and consistency of cross-district transfer patterns.

To test the first hypothesis, we use a unique dataset consisting of the actual individual voter preferences of almost 400,000 voters in the 2012 Scottish local elections. This data provides an unbiased account of whether voter preference orders follow the ideological proximity of first preferences.

**Macro-Level Effects**

The current approach to evaluating partisan bias uses election-level data comparing electoral outcomes across multiple years to see how a party’s share of seats varies with its share of votes (e.g., Kendall and Stuart 1950; Tuft 1973; King and Browning 1987; King 1990). However, there are some significant weaknesses in this approach stemming from the fact that they require data from a large number of elections in order to produce stable estimates (Niemi and Fett 1986; Jackman 1994). These methods also do not account for the significance of time variant effects such as changes to composition of significant parties. They do however uncover the effects of the geographic concentration of party support and cross-district turnout differences.
More recent studies have developed methods focusing on individual elections (Gelman and King, 1990b, 1994; King and Gelman; 1991, and Jackman 1994). These methods combine estimates of how parties' vote shares are distributed across districts with information about the election-to-election variability in districts' vote outcomes. By focusing on district-level data from a single election, this chapter focuses on party system effects without having to control for the geographical determinants of partisan bias, malapportionment and turnout differences.

These models still suffer in terms of their extensions to multiparty systems. The models focus on determining a single estimate for the entire electoral system. For two-party systems this is sufficient for both parties, the 'seats-votes curve' for each party can be determined from the other party. However, this is insufficient for multiparty systems where we wish to understand the partisan bias of a number of different parties. The implied assumption of previous research is that the effects of electoral systems apply equally to every party regardless of their size, distribution of support and ideology. This assumption may be plausible in countries using proportional electoral rules or even in majoritarian countries with only two parties but it is not true in general.

Linzer (2011) produces a 'first attempt' at estimating the seats-votes bias for individual parties from a single multi-party election using district-level data. Linzer estimates a density function for each party using a finite mixture model for compositional data. By doing so, Linzer is the first to effectively account for the patterns of party support. This indicates how, at the district level, parties are expected to jointly trade off voter support. Using this distribution, Linzer then simulates the impact of changes in each party's share of legislative seats for plausible changes in vote share. Multiparty politics also produces the additional complication in that not every party fields a candidate in every district; thus, the 'pattern of contestation' is a complication that Linzer accounts for through conducting a separate analysis for each pattern of contestation.

Linzer explores the effects of district magnitude, the number of parties contesting the election, the level of popular support for each party and the distribution of parties' supporters across electoral districts. However, Linzer's study doesn't identify characteristics about party position that directly influence bias. Although work by Monroe and Rose (2002) identifies a partisan bias favouring rural parties due variance

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11 In conducting separate patterns of party contestation Linzer follows the work of Tomz, Tucker, Wittenberg (2002, 69)
in district magnitude, this exploration focuses on the variance of district magnitude of PR systems.

Building on evidence of S-shaped curves in national seats-vote comparisons (Kendall and Stuart 1950; Tufte 1973; King and Browning 1987), this chapter models the district-level bias in ballot systems, examining the role of centrism therein. To evaluate the centripetal effects of ordinal voting systems the chapter looks to determine whether there is a partisan bias that favours centrist parties.

Because they are positioned at the lateral ends of the political spectrum Fisichella (1982, 2003: 325-37) and later Sartori (1994: 67-9) argue that extreme parties have less access to transfers needed to get seats, while centrist parties have greater access. Candidates from extreme parties may rely on support from electors from just one side of the political spectrum, moderate parties occupy an ideal space to receive transfers from their left and right. Indeed, it is further argued that even electors belonging in the camp of extremist parties may desert extremist and extreme candidates because the vote has limited ‘transferability’.

Although evidence from individual countries point to the persistence of alliance building in preferential systems, there is insubstantial empirical evidence with respect to the preference swapping that motivates this alliance building. As per Monroe and Rose (2002), there is little insight into how electoral systems shape the type of parties that will form and be successful.

The chapter conducts a second stage of the analysis of preferential systems to determine whether the proximate and strategic effects of electoral systems create the strategic incentives induced by this type of electoral system beginning with the analysis of macro-level effects. The chapter seeks to evaluate the presence partisan bias in the votes-seats translation of preferential voting systems.
3. Theoretical Development

Formalizing the intuitions of Horowitz (1991), we argued that – with or without the prompt of party leadership – preferences tend to accumulate with parties in close proximity to other parties, the Horowitz model is formulated here in terms of standard social choice theories based on an assumption that voter rankings of alternatives follow a ‘single peaked’ distributions (Arrow, 1951: 75-76; Black, 1958).

Deterministic Voting Model

To demonstrate the effect of ordinal voting and our implicit assumptions we begin with a conceptual example of a party system consisting of four parties: a Right Wing Party (RW), a Centre Right Party, (CR), a Centre Left Party (CL) and a Left Wing Party (LW). The twenty-four contests as in Column 1 of Table 1 consist of twenty-four combinations where each party has 100, 101, 102, and 103 votes. Under plurality rules each party would win six contests, come second in six, third in six and fourth in another six contests. However, under ordinal voting the scenario is likely to be rather different.

In keeping with a typical ordinal election, in each round when the party with the lowest votes is eliminated, its votes are distributed. The distribution of preferences in this example follows simple deterministic rules. Following the theory of ‘single-peaked preferences’ votes are distributed to the parties adjacent to the eliminated party. Half of the eliminated party’s votes are distributed to the party to the right of it and the other half are distributed to the party to the left. For the Centre Left Party half of its votes transfer to the Centre-Right Party and half transfer to the Left Party. For the Centre Right Party half of its votes transfer to the Centre-Left Party and half transfer to the Right Wing Party. For parties on the margins, half of the votes are not transferred to any party as there is no significant party to the left of the Left Wing Party or to the Right to the Right Wing Party.

The scenario plays out in Table 7. For each party their vote shear is the same as is their geographic concentration of votes. Following the transfer of lower preference votes the RW and LW parties with 25% of the vote each, but win 0% of the seats whereas the CL and CR parties whom also win 25% of the vote win 50% of the seats each. The transfer of votes yields twelve seats for the CR Party and twelve seats for the CL Party. The example clearly demonstrates the potential for significant unexplained partisan bias in the seats-votes relationship of ordinal voting systems.
Table 7 – The effect of lower preferences on the share of seats won by parties in a hypothesized left-right political system under ordinal Voting (AV)

<table>
<thead>
<tr>
<th>District</th>
<th>First Preference Votes</th>
<th>Results of Count 2 (After Transfers)</th>
<th>Results of Count 3 (After Transfers)</th>
<th>Winner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>103</td>
<td>101</td>
<td>100</td>
<td>102</td>
</tr>
<tr>
<td>2</td>
<td>103</td>
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<td>3</td>
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<td>4</td>
<td>103</td>
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</tr>
<tr>
<td>24</td>
<td>102</td>
<td>100</td>
<td>101</td>
<td>103</td>
</tr>
</tbody>
</table>

Totals

<table>
<thead>
<tr>
<th>First Preferences by Party</th>
<th>Seats won by party</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,436</td>
<td>2,436</td>
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<tr>
<td>2,436</td>
<td>2,436</td>
</tr>
<tr>
<td>2,436</td>
<td>2,436</td>
</tr>
</tbody>
</table>

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Probabilistic Voting Model

The scenario above treats secondary preferences as deterministic with each party distributing all lower preferences equally among immediately adjacent parties to the left and right. Furthermore, if there are no parties to the left or to the right (as for LW and RW), then that half of the party’s lower preferences do not transfer to any party. While this deterministic approximation conveys the mechanism of preference flows it is also relatively limited.

The assumption is that not only do voters invariably support the candidate whose policy beliefs are closest to their own, but that they can also identify a second party that are ideologically close to that party. Empirical studies find that other factors such as the candidate’s personal qualities, the voter’s party identification, and retrospective evaluations of an incumbent’s performance can motivate voters to support a candidate even when a rival candidate better reflects these voters’ measured policy beliefs (Campbell et al. 1960, Alvarez 1997, Schofield et al 1998). These additional factors are often unobserved, and can be modelled as random variables in a probabilistic model (Adams, Merrill and Grofman, 2005).

Probabilistic models posit that the likelihood of voting for a particular candidate increases as the voter’s ideological distance from the party decreases. Put another way, voter decisions are discrete under deterministic assumptions but continuous under probabilistic assumptions. In a probabilistic model the likelihood that a voter will opt for a particular choice may be characterised by a probability density function around that voter’s ideal preference. The probability that a voter i chooses a party k is proportional to the exponential of the deterministic component of the utility (the aforementioned proximity metric) derived from choosing that party. Thus, a probability density function describing voter choice may typically follow a unimodal distribution with parties positioned about the voter according to their left-right position. The party closest to the voter is the most likely choice, while parties further away are less likely.

As is standard with spatial models (Cox, 1990: 908; Calvo and Hellwig 2011), electoral competition is assumed to take place along a single dimension of policy contestation. If we assume a single policy dimension, x, the distribution of the voter’s ideal points may be defined by a normal distribution defined as f(x) and a set of parties, p where each party has a position on x, such that: \( p_0 < p_1 < p_2 < \cdots < \)
The probability $v_i$ that a voter may cast their ballot for party $i$ is defined by the integral of the distribution:

$$v_i = \int_{\frac{p_i + p_{i+1}}{2}}^{\frac{p_i + p_{i+1}}{2}} \frac{1}{\sqrt{2\pi}\sigma^2} e^{-\frac{(x-\mu)^2}{2\sigma^2}} dx$$

Where the distribution of preferences is defined by the normal where $\mu$ is the ideological position of the voter and $\sigma$ the dispersion parameter. Figure 4 plots a distribution with the respective probabilities for each party. With the voter positioned at zero, the area under the probability density function defines the probability that the voter will select party $p_1$, $p_2$, $p_3$, $p_4$, $p_5$, or $p_6$. As per the formula, the width of the political space owned by the party as well as their relative proximity defines the likelihood that they will win votes from the given voter. In this particular example, the voter is 37.6% likely to vote for $p_4$.

Figure 4 - A single-peaked density function for a given voter's preferences across six parties distributed along a left right policy dimension.

Distribution of Lower Preferences

The predominant probabilistic models of preferences reflect the process by which people compare alternatives (see Marden, 1995). The models are based on a ‘reference ranking’ from which user rankings are seen as noisy perturbations. A commonly used model adopted widely in machine learning is Mallows $\Phi$ model (Mallows 1957), which is defined by a reference ranking and a dispersion parameter. Broadly-speaking preferences are commonly argued to be single-peaked (Black, 1958; Arrow, 1963),

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such that the ordering of the alternatives for voter’s utility function may be graphed as a single-peaked curve as above.

Typical vote choice models often assume that voters prefer the alternatives that are closest to their ideological position. This can formally be represented by a probability density function where alternatives can be located along a single dimension with ideal points drawn from a particular distribution such as the normal.

Second preferences on their own do not favour centrist parties as the added variance induced by the inclusion of lower preferences will actually widen the variance of the overall preference distribution. Thus the relative variance of the distribution of lower preferences around the first preference is an important factor. The assertion of Fisichella and Sartori does not stand without an accompanying skew in the distribution of lower preferences with both right wing preferences left skewed and left wing preferences right skewed. This naturally occurs where a party occupies a flank of the political space.

**Single-Peaked Preferences**

The effect of preferential voting is fundamentally dependent on whether the distribution of preferences as above is ’single-peaked’ or ‘impartial’ according to the social choice literature. Black (1948) defines single-peaked preferences as ‘the set of preference orderings over a finite set of options where there exists an ordering of the alternatives such that, with respect to that ordering, each and every voter’s utility function may be graphed as a single-peaked curve’. Standard applications of the idea of single-peaked preferences apply them to ideological divisions over a left-right dimension. For example, in post-war Europe, the left-right division was such that those on the right were likely to rank centrists higher than leftists, and vice versa (Arrow, 1951: 75-76). It broadly follows that electoral systems which require voters to rank order parties will favour candidates located toward the centre of the political spectrum.

Probabilistic analysis in social choice also highlights the impartial culture model, which asserts that all preference orderings are equally likely (Guilbaud, 1952; Fishburn and Gehrlein, 1977). The plausibility of this assumption may be based on the limited amount of information held by voters on party policy positions. An understanding of which parties are politically closer to one’s vote choice certainly requires a more subtle understanding of the distribution of parties within the political system. While this may be apparent at a national-level, it is yet to be empirically determined as a consistent

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feature of each individual district. It is not only important to consider the distribution of where transfers are coming from, but also where they are likely to go to.

The party’s ability to attract transfers is not only affected by the relative proximity of the party towards other parties, but also the perceived strategic threat that the party poses to the party of a voter’s first preference vote choice. In recognition of this threat, it is argued that larger parties and parties farther away are likely to be a strategic threat and are also likely to receive proportionately fewer lower preference votes.

To maximise a party’s total preference votes, the proximity value is therefore maximised such that the party is located approximately at the centre of the political space as defined by the policy positions of the parties, weighted by their relative support. To evaluate the second hypothesis the chapter models partisan bias of centrist and non-centrist parties by evaluating the relationship between seats and votes for different parties.

**Hypotheses**

The first hypothesis looks to evaluate the inconsistent observations in relation to single-peaked preferences:

*Hypothesis 1: The ideological position of secondary preferences reflects the ideological position of first preferences.*

From the assumption of single-peaked preferences brings us to the second hypothesis the second hypothesis tests whether there is an observable partisan bias favourable to centrist parties in ordinal voting systems:

*Hypothesis 2: In rank-order electoral systems, centrist parties have a significant advantage over non-centrist parties in terms of their ability to convert votes into seats.*
4. Measurements and Methodology

Hypothesis 1 - Individual Effects

Innovative Data

A number of significant analyses use count data to find out where votes transfer from and to. The pattern of transfers when a candidate's surplus is distributed or a candidate is eliminated is used as an indication of a voters’ willingness to vote for more than one party. This use of terminal transfers (see Mitchell 2013) and first round transfers patterns (see Clarke et al., 2009) are limited in their ability to identify the relationships between preferences. In the first case the subset of available candidates constrains the ability to determine voter preferences. Indeed if candidates are eliminated prior to the observation, then the pattern of candidates eliminated will also determine the likelihood of a certain pattern of lower preferences appearing.

The analysis of first round transfers constitutes a slightly better approach. However, such an analysis is often limited to the transfers of independent candidates and candidates with large numbers of first preference votes. As such they are biased not only towards voters of certain parties but also perhaps a certain type of voter that votes for the mainstream, most popular candidate. Furthermore, this approach is limited in terms of the number of observations, which must be combined with other districts. The nature of individual candidates and the set of candidacies available to transfer will constrain and bias the observed effects.

Surveys have significant value in this field and many studies have asked voters to complete a mock ballot (Bowler and Farrell, 1991; Curtice and Marsh, 2008). However, the danger exists with survey data that forgetfulness or fatigue may mean that respondents do not accurately or fully recall how they completed their ballot paper. Furthermore, the number of respondents will be too limited in number to infer the strength of consistent cross-district transfer patterns. The composition of parties and the number of candidates fielded by those parties will vary significantly from one contest to the next. This will affect our overall ability to infer consistent effects from a set of voters that may be drawn from across a range of constituencies.

A significant advance is Michael Laver’s (2004) and Liam Week’s (2011) studies of actual preferences for the e-voting trial in the Irish 2002 general election. Drawing on the preferences from 138,011 voters Weeks (2011) states that there is an ‘undesirable degree of arbitrariness involved’. Concluding further that STV has ‘the potential to
produce an outcome that violates social choice concerns'. However, the consistency of any observed relationship between preferences is undeterminable as the data is drawn from just three constituencies. Furthermore, the use of Irish data alone to determine the effects of STV is also somewhat problematic. Not only is Ireland somewhat more candidate-focused, but having STV for a long time, by its very nature the parties may have adapted to it and converged to somewhat less distinguishable party positions than in other systems. In this regard the Scottish political system is a useful case study as it consists of parties with more distinctive positions.

In accordance with The Scottish Local Government Elections Amendment (No.2 Order 2012), for the first time in an election the exact number of every type of preference ordering in each district is to be made publicly available. This provides us with an invaluable source for evaluating exactly the extent and consistency with which preferences from one party are likely to yield preferences in another.

We collect data on eight local authorities in Scotland including Edinburgh, Glasgow, Inverclyde, Moray, North Ayrshire, Perth and Kinross and the Scottish Borders. This yields eighty-two contests and the actual preferences of over 400,000 voters. As per Figure 5 this data is reconfigured to constitute the distribution of second preferences for each first preference in each ward, with additional controls for the number of candidates each party is running in the ward. The parties are broken into: Labour, Liberal Democrat, Conservative, Scottish Nationalist, Green, Independent, UK Independence, other right wing parties, other left wing parties, and Local candidates such as the Scottish Borders party which represents the local interests of that locality.

| Council          | Ward | P1 | P2_Con | P2_Grn | P2_Lab | P2_LD | P2_SNPF | P2_None | P2_Oth | Lab | Con | Grn | LD | SNP | Gm | LD | SNP | Grn | LD | SNP | Gm | LD | SNP | Grn | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm | LD | SNP | Gm |

Figure 5 - Reconfiguration of Individual-level preference data

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Seemingly Unrelated Regression

While a common method for assessing vote shares is to use OLS regression for each party, the assumptions of OLS regression are violated when party vote shares in multi-party elections are analysed. To account for the competitive nature of transfers we use seemingly unrelated regression (SUR) to model the distribution of party preferences of each party (Tomz, Tucker and Wittenburg, 2002).

The rate at which transfers move from one party to another is a function of the relative availability of competing options. In terms of modelling the dependent variable, vote shares are, by definition, related to one another. As the vote share of one party increases, the vote share of a competing party will decrease. Thus, even with actual transfer records the consistency of relative options remains difficult to model. The dependent variables for the SUR models are logistic transforms of second preference vote share. The SUR equations for the first hypothesis are as follows:

\[
\ln \frac{P_{2_{\text{LAB}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

\[
\ln \frac{P_{2_{\text{LD}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

\[
\ln \frac{P_{2_{\text{CON}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

\[
\ln \frac{P_{2_{\text{SNP}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

\[
\ln \frac{P_{2_{\text{Dubs}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

\[
\ln \frac{P_{2_{\text{None}}}}{P_{2_{\text{GRN}}}} = \alpha + \beta_1 P_{1_{\text{LAB}}} + \beta_2 P_{1_{\text{LD}}} + \beta_3 P_{1_{\text{CON}}} + \ldots + \beta_9 P_{1_{\text{Loc}}} + Y_1 C_{\text{LAB}} + Y_1 C_{\text{LD}} + Y_1 C_{\text{CON}} + \ldots + Y_6 C_{\text{Loc}}
\]

Where \(P_{1_A}\) and \(P_{2_A}\) represents the per cent first and second preferences as won by party \(A\) and \(C_A\), the number of candidates run by \(A\) in than district.

Hypothesis 2 - Electoral Effects

To illustrate the effects of ordinal ballot structures, the chapter focuses on the evidence from ordinal voting systems, focusing on the Single Transferable Vote, the Alternative Vote, and the Two-Round System. Each of these systems enable electors to indicate how they would vote if their favoured candidate was defeated and they had to choose among those remaining.

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- The Single Transferable Vote (STV) is the quintessential proportional variant of ordinal voting systems, allowing voters to rank candidates in order of their preference. The count proceeds in iterative rounds until the required number of candidates reach a predefined quota. In each round the candidates with the lowest number of preferences are eliminated and their votes are distributed among the remaining candidates. The system has been used in the United States, the United Kingdom, Canada, India, and South Africa and features prominently on electoral reform ballots. It is most prominently used in Ireland, Malta, the Australian Senate, Northern Ireland, and most recently in Scotland.

- The Alternative Vote (AV) is similar to that of STV. Under AV voters again rank the candidates listed on the ballot paper in order of their choice. The process of counting is again based on the redistribution of eliminated candidates until one candidate has either reached a specified quota, or the candidate with the highest number of votes cannot be overtaken. However, for AV, there is just one representative elected per seat. The system is used in a number of US Mayoral and district elections, Fiji, Papua New Guinea, the Irish Presidential election, but most prominently the Australian House of Representatives. While AV is sometimes regarded as being very similar to single-member plurality systems (SMP) (Butler 1973: 96; Rae, 1967: 108). If any candidate achieves a majority when the first preference votes are counted then preferential voting works just like first-past-the-post (simple majority or plurality) voting.

- The Two Round System (TRS) also concerns single member districts and is a rather more limited preferential system than AV. The election proceeds like a single member plurality election, with the exception that if no candidate wins at least 50% of the vote then, all candidates, excluding the top two with less than 12.5% of registered voters are eliminated and a second round of voting proceeds. Thus, low turnouts decrease the likelihood of a three-person runoff. The system is used in a large number of countries for presidential contests including Argentina, Austria, Egypt, Finland, India, Peru, Poland, Portugal, and the Ukraine. It features

---

12 The STV system has also been in use in Nepal from 1950 in local government units and assemblies; in Pakistan State Assemblies between 1985 and 1999 for State assembly elections; In the Indian upper house; In Sri Lankan Lower House between 1948 to 1971, In Canadian State Assemblies in Alberta and Manitoba, The Gibraltar Legislative council; in the South African Senate and local councils in the United States, most recently Cambridge Massachusetts.

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most prominently in France where it is used for presidential, legislative and cantonal elections.

This set of jurisdictions includes a range of systems and underlying contexts, from the deeply divided societies in Northern Ireland (STV) to relatively homogenous governments in Ireland (STV), Scotland (STV), Australia (STV and AV), France (TRS). Given that the paper will examine this relationship at both national and local levels, it is of considerable importance that relevant control variables are used to account for potential differences therein.

**Modelling the Seats-Votes Bias**

To model the effect of centrism on bias we must first ensure that the expected seats-votes relationship is already accounted for. Earlier analyses of partisan bias tend to focus on the relationship between seats and votes at a national level. As such, the relative size and composition of constituencies won by each party will affect the interpretation of distortions. While malapportionment is cited as a key feature of partisan bias, the turnout of a given constituency and the marginality of the seats are clear complicating factors. For example, while we may observe parties to be disadvantaged at the national level, as in the case of the Australian Labor Party, until we analyse the district-level vote shares we cannot ascertain whether the apparent disadvantage of the ALP is the result of partisan bias of preferential voting, or malapportionment due to the party’s potential relative concentration of support in ‘safe’ seats.

By analysing the relationship between electoral results and electoral outcomes at the district level we ignore the effects of malapportionment and the tendency for support to vary across districts. Whereas Linzer explores the effects of district magnitude, the number of parties contesting the election, and the level of popular support for each party he does not identify whether there are characteristics about party positions that might influence partisan bias.

The dependent variable is thus the number of seats won by the party in that given district. To model the seats-votes bias we must include the vote share, or indeed the equivalent measure. While under AV or TRS, the vote share can be used in a relatively straightforward manner, in STV systems the district magnitude can vary across districts. This has a significant impact on cross-district comparability as the vote share needed to win a seat in one district will depend on the number of seats up for election in that district. Therefore, rather than the party’s vote share, we utilise the party’s share...
of the district quota -- that is, the minimum number of votes needed to get elected. The quota needed to win a seat is calculated in terms of the total votes cast and the total number of seats up in the district:

\[
Quota = \frac{Total\ Votes}{District\ Magnitude + 1} + 1
\]

For example, if a candidate wins a vote share of 20\% + 1 in a 4 seat constituency they will have won 1 quota while winning 10\% equates to roughly 0.5 quotas and 30\% 1.5 quotas. In a 3 seat constituency a 25\% + 1 vote share equates to 1 quota while 0.5 quotas is 12.5\% + 1.

Building on evidence of S-shaped curves in national seats-votes comparisons (Kendall and Stuart 1950; Tufte 1973; King and Browning 1987) this chapter determines district-level seats-votes relationship though a logistic function, calculating the relative odds that a party will win 1, 2, 3, or 4 seats based on the share of the quota that they receive. We can observe this S-shaped relationship in the outcomes of candidate first preference shares of the quota. Figure 7 plots the relationship between the proportion of candidates winning a seat for each quota decile in Irish General Elections between 1987 and 2007. Here we see distinct evidence of this S-shaped curve. The difference of a candidate’s chances where he or she wins 0.45 of a quota compared to one who wins 0.55 of a quota is quite significant, though by no means is the result definite in either case.

Figure 6 - Decimalised aggregation of single candidates from the last five general elections

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To determine whether there are party effects we model the relationship between quotas won and seats won in conjunction with party-specific variables on centrism and party size (as a measure of the party’s strategic threat). The logistic regression is performed using a proportional odds logistic regression model, regressing the number of seats won by the party in a given constituency on the quota received in that constituency. The model is used in empirical work in a variety of areas (see Beggs et al. 1981; Hausman and Ruud 1987; Ruud 1986). It is particularly appropriate due to its cost effectiveness, enabling more information to be collected per observation, thereby reducing sampling costs. In doing so, the proportional odds model constrains the effects of the independent variables to be identical across equations i.e., the odds of response below a given response level are constant regardless of which level. This assumption of identical effects across cut-point equations is known as the parallel regression or proportional odds assumption (Long 1997:140; Fullerton 2009).

For example in a three seat constituency, the model estimates three binary logit equations simultaneously for a four-category dependent variable. The first dependent variable, \( y_1 \), compares winning 0 seats to winning 1, 2 or 3 seats. The second dependent variable, \( y_2 \), compares winning 0 or 1 seat to winning 2 or 3 seats. The third dependent variable, \( y_3 \), compares winning 0, 1 or 2 seats to winning 3 seats. For each equation the dependent and independent variables are held as constant.

In this case, each level represents the number of seats won by the party in a particular constituency. The model has an intercept for each cumulative logit and constrains each continuous predictor to have a single parameter for all logits. In effect, it is a method designed for an ordinal dependent variable, which in this case is the number of seats won by a party in a constituency.

**Measuring Centrism**

The party that is positioned closer to other parties, particularly to the larger parties, is the party that – ceteris paribus – should benefit most from preferential voting. To evaluate the extent to which centrist parties located towards the centre of a single-peaked political system benefit from preferential voting we must first measure a party’s relative centrism.

To define the political landscape and the positions of parties within that landscape we must evaluate the positions taken by parties and the relative importance of those positions to that party. Both of these features vary over time and across countries. Whereas differences in economic policies tend to dominate there is rarely a consensus.
on the second dimension of political competition (Huber and Inglehart 1995). One therefore cannot treat party positions in terms of a universal dimension as, although convenient for cross-national comparisons, it will not accurately represent how the voters perceive parties or how parties perceive themselves. Although the ‘political left’ and the ‘political right’ are well understood in general, in specific cases the nature of party competition will not necessarily follow those exact lines and certainly the relative proximity of parties will be distorted by applying a metric which does not make much sense in that context.

The relative proximity between parties and the evaluation of centrism must therefore account for the issues that are most relevant to that political system. To take most extreme but relevant examples, defining politics in Northern Ireland or Scotland without acknowledging the overwhelming importance of the Nationalist-Unionist dimension would be naïve. By basing the mainstream estimates on the party system, we avoid the problem of subjectivity that arises when determining which issues are ‘niche issues’ and which are ‘mainstream issues’.

To measure centrism, or the degree to which a party’s positions are aligned with mainstream party positions, the chapter looks at the underlying theory behind niche parties. Meguid’s differentiation of different parties into niche parties and non-niche parties, and strategies that are adversarial and accommodative is of huge value (Meguid 2005). This is intuitive following the definition of niche parties by Adams et al. (2006): “Niche parties are characterized by their ‘non-centrist’ or extreme ideologies”. However, the characterization of ‘niche-ness’ or ‘centrism’ in this chapter is not just that the party is different from all other parties and the issues it focuses on, rather that the stances the party takes on these issues are explicitly different -- a factor that is important to the centripetal hypothesis. Specifically, the focus is on how different the agenda of the party is to that of the mainstream. In terms of the interpretation in Meguid (2005), the definition used here corresponds with niche parties whose relationships with mainstream parties are ‘adversarial’ (divergent in policies) rather than ‘accommodative’ (convergent in policies). The paper uses the term ‘centrism’ to emphasise this difference.

Much of the existing work on niche parties categorises niche parties based on party family membership (Adams et al. 2006; Ezrow 2008, 2010; Jensen and Spoon 2010; Meguid 2005, 2008). This implicitly defines niche party as a status that is both fixed and binary -- neither of which are realistic assumptions. For example, a clear change from mainstream-to-niche occurred in Austria in the 1980s, when the Freedom Party

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(FPO) gradually transformed from a relatively centrist, liberal party to an extreme-right (and arguably niche) competitor. This fact is highlighted by Wagner (2010), who provides the first treatment of the niche party label as a fluid, continuous characteristic.

Using the expert surveys (from Laver and Hunt, 1992; and Benoit and Laver, 2006) and the comparative manifesto project (CMP; from Budge et al., 2001; and Klingemann et al., 2007) Wagner's niche parties emphasise a non-economic issue by more than one standard deviation above the weighted (by vote share) mean for all other parties as well as de-emphasising economic issues to a similar degree. The cut-off of one standard deviation is too important to be so arbitrary, providing a binary interpretation of something that is more nuanced. Wagner's method also generates two variables, which are difficult to combine into the single measure. The measure further relies on assumptions that: there will only be one niche party in any one sphere; that niche parties do not exist in the economic sphere; and that moderately niche parties do not exist.

However a further problem, introduced by Wagner's assessment is that existing approaches require subjective interpretation in terms of which issues are 'niche issues' and which are not. Wagner (2010) defines niche parties as those that de-emphasise economic concerns and stress the importance non-economic issues that are de-emphasised in the main. Again such a mechanism would tend to characterise all parties in Northern Ireland as 'Niche'.

The measurement used here follows Wagner in using the CMP. The determination of party position is thus solely based on the party's programmatic offer to the voting public, rather than any ideological preferences or sociological characteristics of their supporters (Kriesi et al. 2008; Mudde 1999). Crucially, the CMP also relates party positions to the time of the election. The method takes a weighted average (using the seat share of the previous election) for each of the fifty-six issues in the CMP. It then compares the resulting array to the CMP arrays for each party. The correlation between the weighted average array and each party's array is thus regarded as a measure of the extent to which that party correlates with mainstream issues and positions -- its 'degree of centrism' on a scale of zero to one.

Whereas Wagner reduces the fifty-six CMP categories to ten (following Stoll, 2010), this revised method utilises the full range of issue positions. Where a party differs from the weighted average of all other parties -- by emphasising or in de-emphasising an issue -- this reduces the party's measured degree of centrism. Furthermore, the greater
this difference is, the greater will be the reduction. The categories of the CMP are also oriented in terms of a political position; for example, where relevant there are separate "Military: Positive" and "Military: Negative" categories. This allows the measure to not only compare the relative salience of the issues for parties, but also to incorporate the relative positions of the parties to those of the mainstream -- both factors being important for the measure. The latter factor, overlooked by Wagner due to measurement difficulties, also allows for the fact that the issues addressed by niche parties tend to cross-cut existing partisan alignments (Meguid 2005: 348).

By incorporating issue positions in their raw form, we account not only for the degree to which parties emphasise certain issues, but also the stances they take on those issues. Furthermore, by using manifesto data the measure is solely based on the party's programmatic offer to the voting public rather than ideological preferences or sociological characteristics of their supporters (Kriesi et al. 2008; Mudde, 1999). The fact that CMP data relates to party positions at the time of the election is another crucial advantage as expert data can be subject to mid-term policy positions that are not quite fully formed and are therefore not as appropriate.

The method takes a weighted average on all issue positions for each of the fifty-six issue positions in the CMP. This resulting array is treated as an array of positions the most typical mainstream party would take. Where a party differs from the 'typical mainstream' -- in emphasising or de-emphasising an issue position -- the party may be regarded as being further from the mainstream. By calculating a Pearson's Correlation statistic between this array and the array of issue positions of an individual party we get a measure of the degree to which each party correlates with the mainstream -- the measure of party centrism on a scale of zero to one.

To give the example of Ireland in Table 8, Fianna Fáil and the Progressive Democrats are the two parties that dominate discourse in Ireland and as such have the largest scores for centrism. Fine Gael, Labour and to a lesser extent the Green party all share very similar positions, focusing to the same extent on similar issues. Sinn Féin is slightly more distinct in terms of its focus and the positions it adopts puts it slightly farther away from the other parties.

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13 Specifically, weighted by seat share in the last election. This reflects the degree of representation during the last electoral cycle; which, it is argued, is a good measure of the proportion of mainstream political discourse that the party shaped.

14 See the Appendix B.1 for formal details

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Table 8: Centrism estimates for Irish parties at the 2007 Irish general election and their vote share as of the 2002 general election

<table>
<thead>
<tr>
<th>Party</th>
<th>Centrism Estimate</th>
<th>2002 Seat Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fianna Fail</td>
<td>0.96</td>
<td>48.8%</td>
</tr>
<tr>
<td>Fine Gael</td>
<td>0.87</td>
<td>18.7%</td>
</tr>
<tr>
<td>Labour</td>
<td>0.87</td>
<td>12.7%</td>
</tr>
<tr>
<td>Progressive Democrats</td>
<td>0.95</td>
<td>4.8%</td>
</tr>
<tr>
<td>Green Party</td>
<td>0.82</td>
<td>3.6%</td>
</tr>
<tr>
<td>Sinn Fein</td>
<td>0.58</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Controlling for Counterfactuals

A large number of features affect the extent to which the distribution of first preferences modifies the overall distribution of preferences. The chapter explores the magnitude of the effects through differences in each party’s ability to convert first preference vote shares into seats. By controlling for a number of additional factors it is argued that lower preferences are the only remaining feature that can account for the differences in the number of seats a party wins in a given constituency.

Strategic Threat: Party Size

Although a rough approximation of party strategy, it is arguable that larger parties are more likely to pose a strategic threat for the average strategic voter. It is argued that in addition to centrist parties attractive secondary preference votes, larger parties will – due to strategic influences – attract fewer secondary preference votes from other parties. The system will therefore be most biased towards small centrist parties and most biased against large non-centrist parties.

Pattern of Party Competition: The Effective Number of Parties

In order to ensure cross-district comparability we must also control for differences in the nature of the political competition. The effects represented in the example are dependent on the distribution of first preferences in the district. Where a relatively large number of parties with relatively even vote shares contest an election, the number of second preferences needed by any one party to meet the quota and get elected will be a larger. If one or two parties tend to dominate a district, then they will require
fewer transfers as a proportion of their total in order to get elected and then the effect of transfers will be smaller.

The conceptual example given earlier is a relatively extreme representation in this regard and as a consequence almost 50% of all votes transfer to another party over the course of the count. It therefore produces the relatively extreme results where transfers entirely determine the eventual winners. By comparison, in the 2007 Scottish local elections, 16.4% of votes were transferred to other parties. The effect there is likely to be more moderate.

Notably, a party may win a seat with a lower vote share if there are a large number of smaller parties present. The number of preferences required is therefore related to the number of active parties. This feature has also been raised by Farrell and McAllister (2004) and Sharman et al. (2002): ‘It also noted that the number of preferences required is related to the growing number of parties’. Thus, if a party tends to perform better where smaller parties also tend to contest elections, then it will be significantly advantaged over other parties. While this is potentially also a feature of the political positions adopted by the party, it is also important to control for this feature to understand the relationship between party positioning and partisan bias.

**Vote Management: Party Candidates**

By adding together the first preference quotas of each candidate for a given party we assume that we are taking into account the overall vote share for the party. However there are two features that affect the relationship between the party’s quota share and the likelihood that the party will win seats.

Fielding more candidates may appear to have a positive effect. If the party fields two candidates then it can at most win only two seats. If it fields three candidates, then it can potentially win three seats. However, the distribution of preferences among the selected candidates is also important. To maximise the number of seats won, parties often opt for a strategy to encourage candidates to ‘spread the preferences’ evenly between them. This, it is argued, gives the party the best expected outcome as the party is most likely to benefit from transfers from other parties the longer its candidates can remain in the race (Lakeman and Lambert, 1970; Gallagher, 1992). However this strategy can also fail if the party over-selects beyond the optimal number of candidates. In that situation the party ends up splitting too much votes between their candidates as not all votes will transfer between candidates. To accommodate for effects due to vote
management, the model controls for the number of candidates fielded by the party and in the constituency altogether. This reflects the inefficiency of intra-party vote splitting and the heightened impact of transfers in a larger field\(^\text{15}\).

The extra differences between votes and seats are assumed to be largely the result of secondary preferences. This is a relatively safe assumption, for, in the absence of lower preferences the first preference quota should equate directly to the number of seats won by each party based on their first preference vote\(^\text{16}\). However, in making this assumption, we also assume that candidate effects are ideologically random and do not affect the overall model where the number of observations is sufficiently large. Centrism is incorporated into the model as an interaction term with the quota variable, separate from the main effect of quota. The model therefore aims to determine whether centrism can explain the differences in the cross-party explanatory power of quota.

**Hypothesis 2 Model**

Hypothesis 2 is broken into two components. Hypothesis 2(a) tests whether there are significant differences between a party’s ability to convert votes or into seats and hypothesis 2(b) extends this analysis to test whether the party’s centrism estimate provides an explanation for differences between parties. In this specific case, we test the party’s ability to convert its share of the quota into seats, as conditional on district magnitude and the pattern of competition as represented by the numbers of candidates running. Formulating the model for hypothesis 2(a) in terms of a proportional odds regression equation:

\[
X_{pm} = \beta_1 \text{Party Quotas} + \beta_2 \text{Effective No. of Parties} + \beta_3 \text{No. of Party Candidates} + \\
\beta_4 \text{Party}_i + \epsilon
\]

Where: \[\text{Log} \left( \frac{\Pr(y=m|x)}{\Pr(y>m|x)} \right) = \tau_m - X\beta_m\]

\(^{15}\) Under STV there are two common strategies for maximising seat share. The first is to ‘plump for one’ (PFO) and it is commonly practised in Australia. Under this strategy the party helps votes to pile up on one candidate with the hope that surplus transfers travel down the line to other party candidates. This is widely regarded as inferior to the ‘Spread the Preferences’ (STP) strategy (Lakeman and Lambert, 1970; Wright, 1986; Gallagher, 1992). In Ireland, the STP strategy dictates that all candidates have exactly the same number of first preference votes and when eliminated, the candidate’s lower preferences will transfer evenly among all the party’s other candidates.

\(^{16}\) A quota between 1 and 2 equating to 1 seat; a quota between 2 and 3 equating to 2 seats; a quota between 3 and 4 equating to 3 seats

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To formally test the hypothesis of whether or not party covariates are collectively statistically significant, we undertake a likelihood ratio test. In this case, such the test of significance compares the deviance of a full model with all party covariates to the deviance of a model without the party covariates. Formally, the null and alternative hypotheses for this are as follows:

$$H_0: \beta_{4(FF)} = \beta_{4(FG)} = \beta_{4(L)} = \beta_{4(SF)} = \beta_{4(G)} = \beta_{4(PD)} = 0$$

$$H_1: \text{One of } \beta_{4(FF)}, \beta_{4(FG)}, \beta_{4(L)}, \beta_{4(SF)}, \beta_{4(G)}, \beta_{4(PD)} \neq 0$$

The drop in deviance is approximately chi-square in distribution with k-1 the degrees of freedom.

Hypothesis 2(b) tests whether this apparent difference can be attributed to the party’s centrism and size. For hypothesis 2(b) we replace the set of parties with their respective measurements reflecting centrism and the party size reflecting the strategic threat. We test whether, conditional on district magnitude and the pattern of competition as represented by the numbers of candidates running, a party’s ability to convert first preference votes into seats is conditional on its relative centrism and the strategic threat it poses to other parties. The model for testing hypothesis 2(b)b in terms of a proportional odds regression equation:

$$X\beta_m = \beta_1 \text{ Party Quotas} + \beta_2 \text{Effective No. of Parties} + \beta_3 \text{No. of Party Candidates} + \beta_4 \text{Party Centrism} + \beta_5 \text{Party Size} + \epsilon$$

Where: $\log \left( \frac{Pr(y = m|x)}{Pr(y > m|x)} \right) = \tau_m - X\beta_m$

Formally, the null and alternative hypotheses for this are as follows:

$$H_0: \beta_2 = 0$$

$$H_1: \beta_2 \neq 0$$
5. Results and Analysis

The goal of this chapter is to conduct a thorough analysis into preferential voting systems to determine whether preferential systems provide a systematic bias toward centrist parties and whether that bias is sufficiently significant so as to influence the direction of political competition. This section explores the results from the three hypotheses. The first hypothesis concerns whether at the individual-level there is a relationship between first and lower preferences. The second hypothesis concerns whether or not there is a centrist bias in preferential systems.

Hypothesis 1 – Single-Peaked Preferences in Ordinal Voting Systems

The thesis that centrist parties benefit electorally from preferential voting is dependent on the assumption that a voter’s secondary preferences are related to their first preferences. Furthermore, any macro-level evidence found when exploring the elections is also subject to an ecological fallacy if micro-level effects cannot also be demonstrated. The first section of the analysis concerns the relationship between voter’s first and lower preferences.

Simple Analysis

Using data from the 2013 release of preference profiles from the Scottish Local Elections we observe the relationship between first and lower preferences. Two examples are given in Tables 9 and 10, illustrative preference flows in two wards in Scotland. In both Costorphine in Edinburgh and Drum Brae in Dumfries and Galloway each of the five main parties fielded a single candidate. This was particularly rare occurrence, given that the each ward in the election elected either 3 or 4 members and the two leading parties, the Scottish Nationalists and the Labour Party tended to field at least two candidates where they knew at least one of their candidates would be assured of an election victory.

In the two tables, the given percentages relate the percentage of first preferences from the candidate in the first column that go teach of the candidates in the subsequent columns. For example, in Costorphine 31.1% of those that gave their first preference to the UK Independence party opted for the Conservative candidate next. The strongest preference flow given in here is those from the Conservative candidate to the Lib Dem candidate in Costorphine and from the Conservative candidate to the third independent candidate in Drum Brae.
**Table 9** — The distribution of second preferences (across the top) for each possible first preference party choice (along the left hand side) in Costorphine Ward, for the 2012 Edinburgh council elections. Conditional formatting highlights the areas with relatively high transfers.

<table>
<thead>
<tr>
<th>First Preference</th>
<th>Second Preference</th>
<th>None</th>
<th>SNP</th>
<th>Labour</th>
<th>Green</th>
<th>Lib Dem</th>
<th>Con</th>
<th>UKIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNP</td>
<td>24.2%</td>
<td>0.0%</td>
<td>19.8%</td>
<td>23.7%</td>
<td>18.4%</td>
<td>8.2%</td>
<td>5.7%</td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>27.0%</td>
<td>16.6%</td>
<td>0.0%</td>
<td>23.3%</td>
<td>21.9%</td>
<td>7.4%</td>
<td>3.7%</td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>16.5%</td>
<td>21.1%</td>
<td>24.6%</td>
<td>0.0%</td>
<td>23.0%</td>
<td>7.1%</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>Lib Dem</td>
<td>17.1%</td>
<td>14.8%</td>
<td>20.0%</td>
<td>16.6%</td>
<td>0.0%</td>
<td>30.0%</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>28.6%</td>
<td>5.1%</td>
<td>7.5%</td>
<td>6.7%</td>
<td>40.7%</td>
<td>0.0%</td>
<td>11.3%</td>
<td></td>
</tr>
<tr>
<td>UKIP</td>
<td>23.0%</td>
<td>13.0%</td>
<td>11.8%</td>
<td>14.9%</td>
<td>6.0%</td>
<td>31.1%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

**Table 10** — The distribution of second preferences (across the top) for each possible first preference party choice (along the left hand side) in Drum Brae Ward, for the 2012 Edinburgh council elections.

<table>
<thead>
<tr>
<th>First Preference</th>
<th>Second Preference</th>
<th>None</th>
<th>SNP</th>
<th>Lab</th>
<th>Grn</th>
<th>Lib</th>
<th>Con</th>
<th>Ind 1</th>
<th>Ind 2</th>
<th>Ind 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNP</td>
<td>17.3%</td>
<td>0.0%</td>
<td>15.3%</td>
<td>9.5%</td>
<td>4.3%</td>
<td>5.8%</td>
<td>16.0%</td>
<td>8.6%</td>
<td>23.3%</td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>24.6%</td>
<td>14.7%</td>
<td>0.0%</td>
<td>11.9%</td>
<td>3.9%</td>
<td>3.5%</td>
<td>19.3%</td>
<td>8.4%</td>
<td>13.7%</td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>11.3%</td>
<td>20.9%</td>
<td>8.7%</td>
<td>0.0%</td>
<td>12.2%</td>
<td>2.6%</td>
<td>2.6%</td>
<td>16.5%</td>
<td>25.2%</td>
<td></td>
</tr>
<tr>
<td>Lib Dem</td>
<td>10.3%</td>
<td>8.0%</td>
<td>6.9%</td>
<td>10.3%</td>
<td>0.0%</td>
<td>11.5%</td>
<td>16.1%</td>
<td>9.2%</td>
<td>27.6%</td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>16.8%</td>
<td>5.4%</td>
<td>2.3%</td>
<td>2.0%</td>
<td>6.3%</td>
<td>0.0%</td>
<td>12.0%</td>
<td>7.3%</td>
<td>46.7%</td>
<td></td>
</tr>
<tr>
<td>Indep 1</td>
<td>26.2%</td>
<td>13.4%</td>
<td>15.2%</td>
<td>2.8%</td>
<td>3.6%</td>
<td>11.4%</td>
<td>0.0%</td>
<td>8.8%</td>
<td>15.8%</td>
<td></td>
</tr>
<tr>
<td>Indep 2</td>
<td>9.9%</td>
<td>8.5%</td>
<td>8.5%</td>
<td>13.5%</td>
<td>4.3%</td>
<td>11.3%</td>
<td>17.7%</td>
<td>0.0%</td>
<td>26.2%</td>
<td></td>
</tr>
<tr>
<td>Indep 3</td>
<td>10.5%</td>
<td>11.6%</td>
<td>6.9%</td>
<td>6.9%</td>
<td>6.5%</td>
<td>36.3%</td>
<td>12.4%</td>
<td>9.0%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

The preference flows reflect the proximity of parties. We can compare these preference flows to the distribution of parties according to the two dimensions in Wheatley et al.
(2012), represented in Figure 7. The party positions in the two-dimensional space are represented according to the responses of over 12,000 partisan responses from a voting advice application. The Conservative Party are positioned a significant distance from the four other parties, with the Liberal Democrats closer than the rests.

![Diagram of party positions](image)

**Figure 7** – The mean ideological positions of a sample of supporters for each of the five main parties at the Scottish Parliament Elections 2011 (Wheatley et al., 2012)

We argue here that the strong preference flow from Conservatives to Liberal Democrats in Table 3 is the result of the relative proximity of the Liberal Democrats to the Conservatives. Similarly, the low number of preferences from Labour, the SNP or the Greens to the Conservatives is the result of many other preceding alternatives. However this is easily overcome where a proximate independent candidate stands in the election as in Drum Brae where one of the Independent candidates (No. 3) attracts 43% of second preferences from Conservative voters. The Labour Party preferences strongest to the Green party followed by the Liberal Democrats and the Scottish Nationalist Party. This also reflects the relative positioning of parties according to Wheatley’s study. Equivalently the SNP also preferences the Greens the strongest followed by the Labour Party and the Liberal Democrats.

While the relationships convey a somewhat consistent relationship the results above are two of very few wards where each candidate fielded one candidate. Furthermore,
extrapolating results from a single ward may lead to spurious conclusions as we cannot assume candidate effects to be completely insignificant in a given district. Indeed, it is clear, even from these results, that the effect of additional candidates -- independents in this case -- can potentially distort the expected relationship.

In order to generalise these results we look to modelling the results of eighty-two district-level results while including the relevant control variables to account for variations in the pattern of party contestation.

**Regression Analysis**

To generalise the effects observed in the simple example we run a regression model using the Seemingly Unrelated Regression algorithm. The results are given in Table 11. However they are not sufficiently easy to interpret. However it is clear that the Green Party would appear to be the overwhelming beneficiaries of secondary preferences. The model is a good fit reporting a McElroy's R-Squared of 0.69.
Table 11 – The results of a seemingly unrelated regression modelling the relationship between first and second preferences controlling for differences in the composition of the number of competing candidates.

<table>
<thead>
<tr>
<th>Number of Second Preference Votes</th>
<th>Conservative Party</th>
<th>Labour Party</th>
<th>Liberal Democrats</th>
<th>SNP</th>
<th>Others</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-3.8 **</td>
<td>7.2 ***</td>
<td>4.5 **</td>
<td>5.6 ***</td>
<td>8.7 ***</td>
<td>11.0 ***</td>
</tr>
<tr>
<td>Lab First Pref.’s</td>
<td>8.8 ***</td>
<td>-4.5 ***</td>
<td>-1.1</td>
<td>0.2</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>LD First Pref.’s</td>
<td>10.2 ***</td>
<td>0.7</td>
<td>-10.7 ***</td>
<td>0.6</td>
<td>-0.1</td>
<td>-0.8</td>
</tr>
<tr>
<td>SNP First Pref.’s</td>
<td>8.7 ***</td>
<td>0.1</td>
<td>-1.2</td>
<td>-2.1 ***</td>
<td>-0.5</td>
<td>-0.9 *</td>
</tr>
<tr>
<td>Grn First Pref.'s</td>
<td>18.5 ***</td>
<td>10.4 ***</td>
<td>9.3 ***</td>
<td>10.6 ***</td>
<td>10.3 ***</td>
<td>9.1 ***</td>
</tr>
<tr>
<td>Ind First Pref.'s</td>
<td>9.7 ***</td>
<td>0.4</td>
<td>-1.2</td>
<td>0.6</td>
<td>-1.5 *</td>
<td>-0.6</td>
</tr>
<tr>
<td>UKIP First Pref.’s</td>
<td>10.1 ***</td>
<td>0.2</td>
<td>-0.3</td>
<td>0.9</td>
<td>-1.0</td>
<td>-0.1</td>
</tr>
<tr>
<td>Oth Left First Pref.'s</td>
<td>8.4 ***</td>
<td>-0.9</td>
<td>-0.4</td>
<td>-0.1</td>
<td>-0.2</td>
<td>-0.6</td>
</tr>
<tr>
<td>Local First Pref.'s</td>
<td>9.4 ***</td>
<td>0.9</td>
<td>-1.0</td>
<td>1.9</td>
<td>-2.2 *</td>
<td>-0.7</td>
</tr>
<tr>
<td>No. Lab Cand.’s</td>
<td>0.6</td>
<td>3.7 ***</td>
<td>1.0 **</td>
<td>0.4</td>
<td>0.5</td>
<td>0.7 **</td>
</tr>
<tr>
<td>No. LD Cand.’s</td>
<td>0.3</td>
<td>1.3 *</td>
<td>7.5 ***</td>
<td>-0.5</td>
<td>-0.1</td>
<td>-0.03</td>
</tr>
<tr>
<td>No. Con Cand.’s</td>
<td>4.3 ***</td>
<td>-0.7</td>
<td>-0.2</td>
<td>0.5</td>
<td>-0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>No. SNP Cand.’s</td>
<td>-0.4</td>
<td>-1.1 *</td>
<td>-1.3 *</td>
<td>3.0 ***</td>
<td>-0.4</td>
<td>-0.2</td>
</tr>
<tr>
<td>No. Grn Cand.’s</td>
<td>-10.7 ***</td>
<td>-11.2 ***</td>
<td>-10.1 ***</td>
<td>-10.6 ***</td>
<td>-11.0 ***</td>
<td>-10.7 ***</td>
</tr>
<tr>
<td>No. Ind Cand.’s</td>
<td>0.3</td>
<td>-0.4</td>
<td>-0.3</td>
<td>-0.1</td>
<td>1.67 ***</td>
<td>0.4 *</td>
</tr>
<tr>
<td>No. UKIP Cand.’s</td>
<td>0.9 *</td>
<td>-0.6</td>
<td>-0.8</td>
<td>-0.3</td>
<td>1.1 **</td>
<td>-0.1</td>
</tr>
<tr>
<td>No. Oth (R) Cand.’s</td>
<td>-0.01</td>
<td>0.9</td>
<td>-1.4 **</td>
<td>1.0 *</td>
<td>0.9 **</td>
<td>0.8 **</td>
</tr>
<tr>
<td>No. Oth (L) Cand.’s</td>
<td>-0.1</td>
<td>0.6 *</td>
<td>-0.1</td>
<td>-0.1</td>
<td>1.4 ***</td>
<td>0.3</td>
</tr>
<tr>
<td>No. Local Cand.’s</td>
<td>0.16</td>
<td>-1.45</td>
<td>0.92</td>
<td>-0.1</td>
<td>3.0 ***</td>
<td>0.7</td>
</tr>
<tr>
<td>RSE:</td>
<td>3.47</td>
<td>4.06</td>
<td>4.12</td>
<td>3.86</td>
<td>3.14</td>
<td>2.68</td>
</tr>
<tr>
<td>SSR :</td>
<td>5309</td>
<td>7260</td>
<td>7497</td>
<td>6582</td>
<td>4342</td>
<td>3161</td>
</tr>
<tr>
<td>MSE :</td>
<td>12.0</td>
<td>16.5</td>
<td>17.0</td>
<td>14.9</td>
<td>9.9</td>
<td>7.2</td>
</tr>
<tr>
<td>RMSE :</td>
<td>3.5</td>
<td>4.1</td>
<td>4.1</td>
<td>3.9</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>R-Squared :</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Adj. R-Squared :</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

We can use this model to estimate the preference flows in a typical ward with one candidate fielded for each party. The relationships in from this prediction are given in Table 12. These closely follow the expected flows with the Liberal Democrats and the Greens benefitting strongly from preferences, from both the SNP and Labour, while the Conservatives and SNP candidates earn much fewer preferences from elsewhere.

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The relative poverty of SNP preferences may be the result of its relatively dominant position in the political system as the leading party that potentially poses a strategic threat to voters of other parties.

Table 12 – The estimated flows between first and second preferences across a hypothesized ward with one candidate standing for each of the five main parties. The estimates are determined using the seemingly unrelated regression model.

<table>
<thead>
<tr>
<th>First preference</th>
<th>Conservative</th>
<th>Labour</th>
<th>Lib Dem</th>
<th>SNP</th>
<th>Green</th>
<th>Others</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con. tive</td>
<td>0.0%</td>
<td>8.0%</td>
<td>40.6%</td>
<td>2.0%</td>
<td>10.0%</td>
<td>3.0%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Labour</td>
<td>6.0%</td>
<td>0.2%</td>
<td>24.3%</td>
<td>4.7%</td>
<td>18.3%</td>
<td>3.2%</td>
<td>43.3%</td>
</tr>
<tr>
<td>Lib Dem</td>
<td>21.4%</td>
<td>25.7%</td>
<td>0.0%</td>
<td>5.7%</td>
<td>15.8%</td>
<td>4.2%</td>
<td>27.2%</td>
</tr>
<tr>
<td>SNP</td>
<td>6.2%</td>
<td>17.7%</td>
<td>24.4%</td>
<td>0.5%</td>
<td>19.7%</td>
<td>3.5%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Green</td>
<td>4.5%</td>
<td>21.7%</td>
<td>33.8%</td>
<td>6.3%</td>
<td>0.0%</td>
<td>6.8%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Others</td>
<td>4.3%</td>
<td>11.7%</td>
<td>21.6%</td>
<td>3.8%</td>
<td>25.2%</td>
<td>1.4%</td>
<td>32.1%</td>
</tr>
</tbody>
</table>

The empirical evidence supports the assertion that second and lower preferences reflect first preferences. Transfers between the major parties in the 2012 local elections in Scotland reflect the party positions. The Labour Party and the Conservative Party are most diametrically opposed in terms of economic issues from Wheatley’s study, while the SNP and the Conservative Party are also diametrically opposed on Scottish devolution. 40.6% of Conservative transfers select the Liberal Democrat candidate as their second choice, followed by the SNP 2.0% and Labour 8.0%. The Liberal Democrats are arguably the next closest party from the perspective of the Conservative Party voter in terms of economic issues.

For the Labour Party, 24.3% transfer to the Liberal Democrats, followed by 18.3% to the Green Party, 6.0% to the Conservative Party and 4.7% to the SNP. Again the position of the Conservative Party and the Labour Party at opposite ends of the political spectrum is clear. Diverging views on Scottish Nationalism and the nature of the strategic threat posed by the SNP induces lower preferences from the Labour Party towards the SNP. For the Liberal Democrats, 25.7% of first preference votes transfer to the Labour Party, 21.4% to the Conservatives, 15.8% to the Green Party and 5.7% to the SNP. The party transfer the largest amount of preferences to the Conservative party. They are also significantly closer to the Conservatives in terms of their policy.

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positions. The Scottish Nationalists also transfer a large amount of votes to the Liberal Democrats (24.4%), Green Party (19.7%) and Labour Party (17.7%). These are the three parties closest. The lower volume of preferences to the Labour Party is perhaps reminiscent of the strategic threat posed by the success of the Labour Party. In most council areas, the coalition or party in control of the council will depend on whether the SNP or the Labour Party is largest. Table 13 represents the negative relationship between preferences between parties and their euclidean distance in the ideological policy space. The correlation coefficient gives a value of -.65 representing a strong negative relationship, albeit for such a small number of party-pair cases. This is as expected. Regressing one variable on the other gives an R-Squared of 0.42.

We also observe that preferences appear to be skewed toward the centre of the political space. The Labour Party and Conservative Party are the furthest ideologically from any other party and as such demonstrate higher percentages of single preferences at 43.3% and 36.4% respectively, first preference voters of these parties still issue secondary preferences in over 50 per cent of comparable cases. The Labour Party in particular is less likely to transfer to one of its more proximate parties, the SNP, due to the strategic threat it poses.

### Table 13 – Examining the Goodness-of-fit in the relationship between average estimated preference flows between 1st & 2nd preferences and the Euclidean distance between parties as per Wheatley et al 2011

<table>
<thead>
<tr>
<th>Party Combination</th>
<th>Ideological Euclidean Distance</th>
<th>Preference Flow %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNP-Labour</td>
<td>1.69</td>
<td>11%</td>
</tr>
<tr>
<td>SNP-Conservative</td>
<td>2.92</td>
<td>4%</td>
</tr>
<tr>
<td>SNP-Lib Dem</td>
<td>1.46</td>
<td>15%</td>
</tr>
<tr>
<td>SNP-Green</td>
<td>0.66</td>
<td>13%</td>
</tr>
<tr>
<td>Labour-Conservative</td>
<td>2.12</td>
<td>7%</td>
</tr>
<tr>
<td>Labour-Lib Dem</td>
<td>0.95</td>
<td>25%</td>
</tr>
<tr>
<td>Labour-Green</td>
<td>1.19</td>
<td>20%</td>
</tr>
<tr>
<td>Conservative-Lib Dem</td>
<td>1.52</td>
<td>31%</td>
</tr>
<tr>
<td>Conservative-Green</td>
<td>2.87</td>
<td>7%</td>
</tr>
<tr>
<td>Lib Dem-Green</td>
<td>1.35</td>
<td>25%</td>
</tr>
</tbody>
</table>

Pearson’s Correlation Coefficient: -0.65  
R Squared (from regressing the two variables against one another): 0.42
Hypothesis 2 - Electoral Bias in Ordinal Voting Systems

If voters assign secondary preferences to parties that are ideologically similar to their first preferences, then parties closer to the centre of the distribution of policy preferences and thus close to the centre of the political space will benefit systematically from preferential voting.

The second hypothesis is broken into two parts. Hypothesis 2a is concerned with whether there is a significant difference between parties in terms of their ability to convert first preference votes into seats, as under PR-STV. Hypothesis 2b seeks to explain apparent differences between parties in terms of characteristics that increase the likelihood that a party will attract lower preferences – the party’s centrist or extremist positioning and the party’s strategic threat as measure by the party’s size.

The hypotheses are tested in respect of the Irish general elections (STV), Scottish Local elections (STV), Northern Irish local elections (STV), Australian Senate elections (STV), Australian House elections (AV), and French legislative elections (TRS).

Irish General Elections (Single Transferable Vote)

The Irish political system is itself an enduring puzzle for comparative political scientists (Bryne and O’Malley, 2011). The party system is relatively narrow in terms of the perceived differences between parties. Whyte (1974) claimed the party system to be sui generis in this regard. Unlike the rest of Europe it was without social bases. Carty (1983) also found parties to be ‘heterogeneous in their bases of support, relatively undifferentiated in terms of policy or programme, and remarkably stable in their support levels’.

The political system has a prominent Fianna Fáil-against-the-rest shape (Mair 1987: 36). As the largest party for each of twenty-four elections between 1932 and 2007 parties have aimed to prevent Fianna Fáil securing an overall majority thereby rendering their own party redundant in the government formation process (Laver 2000). Fianna Fáil is often described as a centre party with centre right tendencies. While it has a history of close association with the Catholic Church and a slightly more prominent cultural nationalism, the party also has unusually warm relations with the trade union movement and to the extent that at one stage almost swallowed the Irish Labour Party completely (Garvin, 1974). The party easily formed coalitions with the
left and the right, with Labour, the Green Party, and the Progressive Democrats with few signs of ideological discomfort in each case (Mitchell 2000).

Among the other parties in the system, Fine Gael and the Labour Party are more typical Christian democratic and social democratic parties. However, they are also atypically weak in this respect. The Labour Party in particular has averaged just 11% in elections since 1945. The Progressive Democrats (PDs) combine traditional European liberal appeals of the church-state separation and free-market economics. While Sinn Fein is a slightly radical party espousing distinctly more left wing policies, but also quite a strong nationalist element. Finally, the Green Party are typical of Green Parties, in this case gravitating towards the centre from being a loose protest movement opposed to conventional politics in the early 1990s towards the centre of mainstream politics by the late 2000s (Bolleyer, 2010).

We use data from four Irish General Elections between 1992 and 2007 to examine the electoral effects for the six parties: Fianna Fail, Fine Gael, Labour, the Progressive Democrats, Sinn Fein, and the Green Party. This was a period of relative stability in the composition of the political system. We exclude other small parties and independent candidates from the analysis due to their relative infrequency and inconsistency respectively.

Using the proportional odds model we regress the proportion (or indeed the multiple of the quota) won by the party on the number of seats won by that party in a given constituency. By including the parties in the model we can see whether there is a systematic difference between a parties ability to convert votes into seats. The results of this first model are given in Table 14. With Fianna Fail as the baseline party we observe that the Green Party followed by the Progressive Democrats are more likely to win a seat with a given share of the quota. The Labour Party, Fine Gael and Fianna Fail follow these two parties. Sinn Féin have significantly greater difficulties winning seats with a given first preference quota.

The results also reveal significant and as expected relationships for the control variables. There is a significant and positive relationship between the effective number of parties and the likelihood of winning seats. This helps to control for cross-district differences in the pattern of party competition. In districts that are more evenly contested between a large numbers of candidates, the number of secondary preferences required to get elected is expected to be larger. There is also a significant negative relationship between the number of candidates fielded by a party and the likelihood of

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success. Candidates that field too many candidates are penalized for doing so as it inhibits their capacity for vote management.

To formally test hypothesis 2(a) whether or not party covariates are collectively statistically significant, we conduct a likelihood ratio test is undertaken. The test of significance compares the deviance of a model with all party covariates to the deviance of a model without the party covariates. In this case, the likelihood ratio test yields a drop-in-deviance of 20.04 between the two models. With a chi-square distribution, we get a p-value of 0.0012 indicating that there is strong evidence to reject the null hypothesis and state confidently that the ability to convert votes into seats is dependent on the party.

Table 14 – Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for Ireland under STV

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Quota Won</td>
<td>9.627</td>
<td>0.667</td>
<td>9.229</td>
<td>0.628</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.416</td>
<td>0.136</td>
<td>0.389</td>
<td>0.132</td>
</tr>
<tr>
<td>Party Candidates</td>
<td>-0.429</td>
<td>0.254</td>
<td>-0.301</td>
<td>0.240</td>
</tr>
<tr>
<td>Green Party</td>
<td>1.950</td>
<td>0.685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progressive Democrats</td>
<td>1.436</td>
<td>0.638</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>1.015</td>
<td>0.519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Gael</td>
<td>0.780</td>
<td>0.396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fianna Fáil</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sinn Féin</td>
<td>-0.401</td>
<td>0.702</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>4.754</td>
<td>1.551</td>
</tr>
<tr>
<td>Party Size</td>
<td>-3.168</td>
<td>1.302</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For hypothesis 2(b), we replace the set of parties with their respective measurements reflecting centrism and the party’s size as a measurement of the strategic threat posed by the party – the two components deemed to affect a party’s ability to attract transfers. Taking the correlation coefficient from the comparative manifesto project as a measure of a party’s centrism, we repeat the previous regression including the ‘centrism’ variable – where a pure niche party holds a value of 0 and a pure mainstream party

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holds a value of 1 and a measure of the party’s size to account for the strategic threat imposed by the party. The centrism and party size variables are both statistically significant and in the expected direction. The centrism variable at the 0.001 level and the party size variable at the 0.05 level. The therefore conclude that more centrist a party is and the smaller the party is, all things including first preference vote share being equal, the more likely a candidate from that party will get elected.

**Scottish Local Elections (Single Transferable Vote)**

The significant presence of the Scottish National Party (SNP), in seeking independence for Scotland and articulating Scottish interests in UK politics is a major but not the only manifestation of a separately defined Scottish party system and issue space to the rest of Britain. While the two leading parties (the SNP and Labour) are both centre left they have divergent views on the question of Scottish Independence. While the Labour Party introduced Scottish devolution while in Government in Westminster, it falls short of advocating an independent Scotland. The two parties are opposed by smaller representations of the centrist and socially liberal Scottish Liberal Democrat Party, the Scottish Conservative and Unionist Party and a significant Scottish Green Party. Also present, though less significant are the Scottish Socialist Party and the UK Independence Party (UKIP). These parties occupy the left and right margins of the political spectrum in Scotland.

The single transferable vote was introduced for council elections in Scotland in 2007 and used again in 2012. We use data from both elections to examine the electoral effects of seven parties. Between 2007 and 2012 there were 3,534 party-district level observations. In total across the two elections the Labour Party and the Scottish Nationalist Party fielded the most candidates contesting 612 and 680 wards across the two elections. The Liberal Democrats and the Conservative Party contested 500 and 660 wards. The Green Party contested 186 wards, The Scottish Socialist Party 186 wards, and UKIP 46 wards.

Using the proportional odds model we first model the effect of party positioning on the prospects for individual parties, excluding other small parties and independent candidates from the analysis due to their respective infrequency and inconsistency. The results are given in Table 15. With the Conservatives as the baseline party we observe that the Liberal Democrats followed by the Green Party are more likely to win a seat with a given share of the quota. The Labour Party and the Scottish Nationalist Party
follow these two parties. The Socialist Party and UKIP have significantly greater difficulties winning seats with a given first preference quota.

The results also reveal a significant and as expected relationship for the effective number of parties. However, the effect for the number of candidates fielded by the party is opposite to as it was in Ireland. Here, parties appear to benefit by fielding more candidates. This may be a consequence of reports from the 2007 election that the Scottish Nationalist Party failed to field sufficient numbers of candidacies in many places where they would have won more seats if they had fielded more candidates.

Using the likelihood ratio test to evaluate hypothesis 2(a), the drop-in-deviance between the two models is 46.82. Following a chi-square distribution, we get a highly significant p-value of $1.7 \times 10^{-9}$ indicating that there is strong evidence to reject the null hypothesis and state that the ability to convert votes into seats in Scotland is dependent on the party.

Table 15 - Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for Scotland under STV

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Quota Won</td>
<td>10.508</td>
<td>0.419</td>
<td>9.616</td>
<td>0.395</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.210</td>
<td>0.101</td>
<td>0.284</td>
<td>0.100</td>
</tr>
<tr>
<td>Party Candidates</td>
<td>1.609</td>
<td>0.268</td>
<td>1.570</td>
<td>0.264</td>
</tr>
<tr>
<td>Liberal Democrats</td>
<td>1.478</td>
<td>0.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>1.124</td>
<td>0.422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>0.581</td>
<td>0.221</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottish Nationalist</td>
<td>0.350</td>
<td>0.218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialist</td>
<td>-0.990</td>
<td>1.939</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK Independence</td>
<td>-14.107</td>
<td>2375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>3.015</td>
<td>1.195</td>
</tr>
<tr>
<td>Party Size</td>
<td></td>
<td></td>
<td>2.365</td>
<td>0.662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinal Logit Intercepts</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>9.878</td>
<td>0.559</td>
<td>11.795</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>22.240</td>
<td>0.986</td>
<td>23.823</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>34.304</td>
<td>1.461</td>
<td>35.255</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>41.469</td>
<td>2.021</td>
<td>42.099</td>
</tr>
</tbody>
</table>
For hypothesis 2(b), we refit the regression model replacing the set of parties with centrism and party size measures, we again observe that the party’s centrism score is statistically significant, here at the 0.05 level indicating that as the party moves towards the centre the partisan bias improves in favor of the party. Party’s size is also a favourable characteristic in this example confounding our interpretation that larger parties pose a strategic threat placing them at a disadvantage for attracting lower preference votes.

For illustrative purposes we graphically represent seats-votes bias in Scotland using a generalised additive model to plot the relationship in Figure 8 between the likelihood of winning at one seat (on the y-axis) and the vote share won by the party (on the x-axis) as derived from the quota. Here, we can see how the centrist Liberal Democrat Party has a clear advantage over its competitors in terms of its ability to convert votes into seats. The Liberal Democrat candidates typically require 11% the first preference vote share in a 4-seat constituency, compared to almost 14% for a Conservative Party candidate.

Figure 8 - The probability of obtaining a seat depending on the vote share won by the party in a given district (Scottish local elections 2007, 2012)

The Generalised Additive Model used here regresses seats won by the party on the vote share won and the party variable. We graphically represent the predicted probabilities from this model.

Kevin Cunningham
Northern Ireland Local Elections (Single Transferable Vote)

Northern Ireland is deeply divided along cleavages identifying themselves as either Irish nationalist or British unionist. Each cleavage has a relatively moderate and a relatively extremist party: the moderate nationalist Social Democratic Labour Party (SDLP), the extreme nationalist Sinn Féin, the moderate Ulster Unionist Party (UUP) and the extreme Democratic Unionist Party (DUP). There is also the Alliance party, which aims to represent the middle ground.

While cross-cutting cleavages can produce centripetal party behaviour as in India (Chandra, 2005), this source of centripetalism has not developed in Northern Ireland as left–right divisions play no significant role in conditioning party support (Tilley et al. 2008: 712). Instead, electoral competition is contained within a dual party system with fierce competition within the context of a bipolar constitutional cleavage (Evans and Duffy, 1997; Mitchell, 1995; 1999; O’Leary and McGarry, 1996; Tonge, 2005). Surveys demonstrate the ethnically exclusive nature of support for the four main parties in Northern Ireland.

The UUP and SDLP were the two largest parties for the respective communities since the early 1970s. Following the landmark Good Friday Agreement it was expected that the SDLP and UUP would receive electoral rewards for reaching the historic compromise. However, since then both the DUP and Sinn Féin have increased their support dramatically at the expense of the moderate parties. Something Mitchell, Evans and O’Leary (2009) attribute to power sharing. It is argued that in the context of power sharing each communal group wants to be represented by its ‘strongest voice’. We label this ‘ethnic tribune’ voting.

For reasons that are beyond the nuances of electoral systems, preferential voting systems do not necessarily produce a unimodal distribution about which parties converge. If they did, the Alliance party would be the main beneficiary of this arrangement. Although the Alliance party may be regarded as holding the centre ground of politics in Northern Ireland, by not having a clear position on the dominant issue – the status of Northern Ireland – the Alliance party is positioned slightly adjacent to the other four parties. For illustrative purposes in Figure 9 we plot the distribution of parties in Northern Ireland using data on the Euclidean distance between the parties derived from the comparative manifesto project. The point size for each party is based on their electoral result in the 2003 assembly elections.

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The moderate nationalist and moderate unionist parties are marginally closer to one another than the extreme parties. They are also closer to the Alliance Party. While the SDLP and UUP can benefit from transfers from Sinn Féin and the DUP respectively, they can also benefit from transfers from non-aligned groups such as the Alliance Party. However, the Alliance party is some distance from each bloc and therefore unable to attract as many transfers as might be expected from such a centrist party.

Figure 9 - Plot describing the ideological distance between Northern Irish political parties from manifesto data as computed by multidimensional scaling

We use data from seven sets of local election results between 1992 and 2011 giving 506 ward-level contests, with district magnitudes of between five and seven seats. As before, we regress the number of seats won in a given ward on the share of the quota won by the party in that ward together with an indicator for the party itself. Evidence from party coefficients reveals whether or not there is a systematic bias towards or against that party. The model also accounts for a number of counterfactuals to account for the nature of the political competition including the district magnitude, the number of party candidates, and the number of district candidates.

Table 16 gives details of the results of the regression analysis. The return of seats on votes is very favourable for the UUP, SDLP and Alliance parties compared with those for Sinn Féin or the DUP. The non-centrist positions of Sinn Féin and the DUP somewhat hinder their ability to attract lower preferences compared to their respective

Kevin Cunningham
rivals. Certainly where an Alliance candidate is eliminated it would appear to be unlikely that they would next choose one of the extreme parties over one of the more moderate parties. However, the same cannot be said for the moderate parties, they would appear to be significantly more likely to transfer to their more extreme equivalent. Other non-aligned political parties fare similarly to the Alliance party, a slightly worse return than the UUP and SDLP, and a slightly better return than the DUP and Sinn Féin.

The results also reveal significant relationships for the control variables. There is a significant and positive relationship between the effective number of parties and the likelihood of winning seats. There is also a significant positive relationship between the number of candidates fielded by a party and the likelihood of success. It is certainly arguable that candidates will either help a party to win seats or penalize them for fielding too many candidates which might inhibit their capacity for vote management. It may be the case that parties tend to under subscribe their candidacies due to prior arrangements with parties from their community.

To test hypothesis 2(a), whether party covariates are collectively statistically significant, we conduct a likelihood ratio test. The test of significance compares the deviance of a model with all party covariates to the deviance of a model without the party covariates. In this case, the likelihood ratio test yields a drop-in-deviance of 54.48 between the two models. With a chi-square distribution, we get a p-value of $4.2 \times 10^{-11}$ pointing to strong evidence of partisan bias in the seats votes relationship.
Table 16 - Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for Northern Ireland under STV

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Quota Won</td>
<td>8.453</td>
<td>0.354 ***</td>
<td>8.149</td>
<td>0.324 ***</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.512</td>
<td>0.089 ***</td>
<td>0.465</td>
<td>0.081 ***</td>
</tr>
<tr>
<td>Party Candidates</td>
<td>0.954</td>
<td>0.172 ***</td>
<td>0.910</td>
<td>0.163 ***</td>
</tr>
<tr>
<td>Ulster Unionist</td>
<td>0.398</td>
<td>0.253</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Democratic Labour</td>
<td>0.194</td>
<td>0.194</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alliance</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sinn Féin</td>
<td>-0.753</td>
<td>0.267 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Unionist</td>
<td>-0.862</td>
<td>0.254 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>2.587</td>
<td>0.615 ***</td>
</tr>
<tr>
<td>Party Size</td>
<td></td>
<td></td>
<td>2.117</td>
<td>0.661 **</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinal Logit Intercepts</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>8.243</td>
<td>0.513</td>
<td>10.189</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>18.161</td>
<td>0.835</td>
<td>20.172</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>27.117</td>
<td>1.165</td>
<td>29.028</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>37.057</td>
<td>1.554</td>
<td>38.787</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>45.992</td>
<td>1.938</td>
<td>47.492</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>51.489</td>
<td>2.394</td>
<td>52.645</td>
</tr>
</tbody>
</table>

To analyse hypothesis 2(b) we refit the regression model using centrism and party size estimates in place of party variables. Substituting party identifiers for the centrism and party size variables reveals a strong relationship in the expected direction even in the context of this bipolar political system. The centrism estimate is significant at the 0.001 level. While the results point to incentives to moderate as Sinn Féin and the DUP have done, they also indicate that the SDLP and UUP should benefit significantly, however over time their first preference vote shares have increased substantially, as have their seat shares as a consequence. These movements in first preference support can also be explained by earlier research indicating by these parties’ ‘tribune’ appeals (Mitchell, Evans and O’Leary, 2009).

For illustrative purposes, the differences between parties are represented graphically in Figure 10 from a generalised additive model. The effect of partisan bias from the electoral system is the result of an empirical threshold of approximately 12% for the SDLP and UUP to have a 50% chance of getting elected, whereas for Sinn Féin and the DUP the figure is just over 14%. This is again quite a considerable difference.

Kevin Cunningham
Figure 10 - The probability of obtaining a seat depending on the vote share obtained by the party in a given four-seat constituency as per the Northern Irish Local elections.

Australian Senate Elections (Single Transferable Vote)

Australian electoral politics is centred on the contest between the Australian Labor Party and a series of anti-Labor parties (Jackman 2002). These include the first Liberal Party, the Nationalist Party, the United Australia Party, Liberal-Country League, Country Liberal Party etc. Since 1944, Australian electoral politics is more broadly dominated by the two groups: the Australian Labor Party (the ALP) and ‘the Coalition’, which is led by the Liberal Party, aided by the more rurally-based National Party (formerly the Country Party). The ALP is Australia’s oldest political party, pre-dating the country’s federation. Its electoral success is widely believed to rest on building a broad coalition of support centred on its trade union base while the Liberal Party broadly presents itself as ‘anti-Labor’ or ‘anti-socialist.’ The Liberal Party is a centre-right party with a base in business and socially conservative middle classes.

While rarely winning seats in the House of Representatives seats, minor parties have occasionally won sufficient seats in the Senate to hold the balance of power. Smaller parties included here are: the socially liberal Australian Democrats (AD) and Australian Greens (GRN), and socially conservative Democratic Labor Party (DLP) and relative extreme far-right One Nation Party (ONE). Recent analysis by Weakliem

Kevin Cunningham
and Western (1999) using Gallup polls from 1943-96 identifies a second dimension to explain the positions of these parties. They indicate that support for the Australian Democrats and later the Green Party is underpinned by post-materialist (Western and Tranter, 2001) concerns cutting across the traditional ALP-DLP-Liberal dimension. McAllister and Vowles (1994) further suggest that Labor has moved to accommodate this dimension, as evidenced by the fact that Labor tends to win more of the post-materialist vote than the Liberal Party.

For illustrative purposes in Figure 11 we plot the political space using a principle components analysis of the issues emphasised by each party as per the comparative manifesto project. The two axes represent the two dimensions that separate the parties the most from one another. The point size for each party is a reflection of each party’s support in the 2010 elections. We can observe how the Liberal Party is relatively proximate to the National Party, but also that the Labour Party is proximate to the Australian Democrats and to a much lesser extent the Green Party. We also note that the One Nation Party is significantly farther away from all other parties.

![Figure 11 - Plot describing the ideological distance between Australian political parties from manifesto data as computed by multidimensional scaling](image)

We use data from twenty-four Australian senate elections between 1949 and 2010 – 1949 being the first year where STV was used in Australian Senate elections. The
district magnitude for Australian Senate Seats varies between five, six, or seven seats. However, the district magnitude is 2 seats in the Australian Capital Territory and Northern Territory and is 10 and 12 seats in a select number of seats in certain elections in the 1970s and 1980s. The results of the proportional odds model are given in Table 17.

The results show the Liberal National Coalition to benefit significantly from the electoral system followed by the Liberal Party and then the Australian Democrats. The Labour Party has the next best return followed by the National Party (including its previous incarnations, the Country Party and the National Country Party), followed by the Green Party, the Democratic Labor Party, and significantly worse One Nation Party. The relative performance of the Labour Party may be a function of the aforementioned ‘anti-Labor’ structure to politics in Australia. The performance of the relatively extreme One Nation party is to be expected, suffering from the relatively extreme positions they adopted. The results also reveal significant and as expected relationship for the effective number of parties\textsuperscript{18}. In districts that are more evenly contested between a large numbers of candidates, the number of secondary preferences required to get elected is larger and so this variable narrows that gap.

Formally testing hypothesis 2(a) we conduct a likelihood ratio test. In this case, the likelihood ratio test yields a drop-in-deviance of 43.52 between the two models. With a chi-square distribution, we get a p-value of $2.7 \times 10^{-7}$ indicating strong evidence to reject the null hypothesis and state that the ability to convert votes into seats is dependent on the party.

\textsuperscript{18} We were unable to determine the number of candidates fielded by each party for the Australian Senate election.
Table 17 - Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for Australia (Senate) under STV

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Quota Won</td>
<td>13.868</td>
<td>1.395</td>
<td>12.606</td>
<td>1.152</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>1.736</td>
<td>1.976</td>
<td>1.366</td>
<td>0.412</td>
</tr>
<tr>
<td>Liberal-National Coalition</td>
<td>1.444</td>
<td>2.024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>0.632</td>
<td>0.632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Democrats</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>-0.666</td>
<td>1.976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>-0.781</td>
<td>0.908</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>-1.906</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Labor</td>
<td>-2.936</td>
<td>0.977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Nation</td>
<td>-7.193</td>
<td>2.547</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>2.961</td>
<td>1.021</td>
</tr>
<tr>
<td>Party Size</td>
<td></td>
<td></td>
<td>-4.417</td>
<td>1.531</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinal Logit Intercepts</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>12.564</td>
<td>1.950</td>
<td>13.324</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>29.276</td>
<td>3.790</td>
<td>27.111</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>42.833</td>
<td>4.855</td>
<td>39.309</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>55.615</td>
<td>5.920</td>
<td>50.553</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>69.246</td>
<td>7.312</td>
<td>62.944</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>84.139</td>
<td>8.586</td>
<td>76.872</td>
</tr>
</tbody>
</table>

Re-fitting the regression model for hypothesis 2(b), we replace the set of parties with centrism and party size measures. By doing so, we again observe that the party’s centrism score is statistically significant, here at the 0.001 level indicating that as the party moves towards the centre the partisan bias improves in favor of the party. Party’s size has a negative impact here, also at the 0.01 level19.

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19 Given the relative success of the larger parties the negative relationship here may give some cause for alarm in relation for the potential for multicollinearity. However, when the model is run without the party size variable, the centrism variable remains positively statistically significant at the 0.01 level and when the model is run without the centrism variable, the party size variable remains significant at the 0.01 level.

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Extending this work to other majoritarian forms of preferential voting we first analyse the impact of ordinal voting systems in respect of the Alternative Vote as in Australia. Australia is unique in its use of the alternative vote in democratic elections over a period of many decades. ‘Preferential voting’, as it is commonly referred to in Australia, was introduced at the federal level in the election of 1919.

Historically, the non-Labor parties in Australian politics have tended to be less organisationally cohesive than the Australian Labor Party and preferential voting was introduced by a coalition of those parties seemingly intent on keeping the Labor Party from winning seats where the non-Labor vote was split among two or more candidates (Bean, 1997). When the Liberal and National parties are unable to reach agreement on which of them should field a candidate in a particular seat, in most cases they are able to put competing candidates up against each other safe in the knowledge that as long as their combined first preference vote is greater than Labor's, one of them will ultimately win the seat through the second preferences of the other candidate's supporters. The introduction of AV which began in the Queensland Legislative Assembly was influenced by the French two round system (Reilly, 1997).

According to Bean, in the election campaign of 1990 the Labor Party adopted a 'second preference strategy' in which Labor advertising acknowledged that many voters would probably give their first preference vote to the Australian Democrats or another minor party and pleaded for the second preferences of these voters.

To analyse Australian election data we draw on Australian House election data for the three elections of 2004, 2007, and 2010, which constitute 451 electoral contests. A logistic regression models the relationship between seats and votes for these elections. Due to the very limited success of smaller parties only three parties are considered. While a Green candidate did win one seat, this single victory is insufficient with which to base any understanding of the threshold of success for Green Party candidates. For this analysis we also drop the number of candidates fielded by the party as in each case the party fielded just one candidate.

The results from the Australian Alternative Vote elections as given in Table 18 indicate that the Labor Party are best positioned to benefit from partisan bias evident in the

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20 Note that expanding the data back to even 1951 would still yield a scattering of independent candidate victories and the single Green Party candidate election victory that occurred in 2010.
voting system, while the Liberal Party and the National Party are negatively biased. This sharp contrast to the results from the Senate elections may be a function of the scope of the analysis. Whereas the Senate study stretches back as far as 1949, this study covers the limited number of elections in the mid to late 2000s, analysing the relationship between just three parties.

Testing hypothesis 2(a), the likelihood ratio test yields a drop-in-deviance of 70.3 between the two models. With a chi-square distribution, we get a p-value of $5.6 \times 10^{-16}$ indicating strong evidence to reject the null hypothesis and state that the ability to convert votes into seats is dependent on the party.

**Table 18 - Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for Australia (House) under AV**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-59.267</td>
<td>6.672 ***</td>
<td>-92.332</td>
<td>10.321 ***</td>
</tr>
<tr>
<td>First Preference Vote Share</td>
<td>47.202</td>
<td>4.939 ***</td>
<td>47.202</td>
<td>4.939 ***</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>7.712</td>
<td>1.270 ***</td>
<td>7.712</td>
<td>1.270 ***</td>
</tr>
<tr>
<td>Labor</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td>-3.173</td>
<td>0.785 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>-3.401</td>
<td>0.512 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>33.233</td>
<td>4.990 ***</td>
</tr>
<tr>
<td>Party Size</td>
<td></td>
<td></td>
<td>1.145</td>
<td>0.229 ***</td>
</tr>
</tbody>
</table>

Refitting the regression model with centrism and party size estimates to test hypothesis 2(b) we find a strong relationship in the expected direction for centrism. We also find that party size has a positive effect. Both coefficients are significant at the 0.001 level.

**French Legislative elections (Two-Round System)**

The general conclusion of the two-round systems is that it produces strong incentives for multi-party competition and for alliance-building. If a party that is successful at the first round it must seek out allies at the second round. Otherwise it runs the risk of being overtaken by a party which has managed to construct a successful coalition of support.

*Kevin Cunningham*
For example, in France since 1958 the two-ballot majority system has encouraged second-ballot alliances between parties of the left on the one hand and parties of the right on the other. Whatever their ideological differences the socialists and communists have regularly constructed formal or informal second-ballot alliances in order to defeat the right, while the Gaullists and liberals have regularly done the same in order to defeat the left.

Smaller parties are said to be incentivised to stand across all constituencies for two key reasons. Firstly, it takes less for them to win at the first ballot of two-ballot majority systems than at the single and decisive ballot of first-past-the-post plurality systems and in the second round, and if they have stronger alliances then their opponents they will be able to win those seats. Secondly, due to the aforementioned system of alliances, well organised small parties will compete with a view to influencing the outcome for the larger parties with whom they may intend to form alliances with.

In this analysis, the two main parties fare significantly poorer than the smaller parties to the extent that the UMP performs even worse than Front National in terms of its ability to convert votes into seats. The discrete nature of the TRS may be what causes such a strong response to the larger parties. The smaller partners in alliances: the UDF, the Communist Party and the Green Party benefit at their expense. The Front National fares relatively poorly compared to other smaller parties. For this analysis we also drop the number of candidates fielded by the party as in each case the party fields just one candidate. Testing hypothesis 2(a), the likelihood ratio test yields a drop-in-deviance of 115.9 between the two models. With a chi-square distribution, we get a p-value of $<1.0 \times 10^{-16}$ indicating strong evidence to that the ability to convert votes into seats is dependent on the party.
Table 19 - Modelling the effect of votes won by a party in a district on the number of seats won by that party in that district: Results for France (Legislative) under TRS

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-19.936</td>
<td>1.396</td>
<td>-23.777</td>
<td>1.396 ***</td>
</tr>
<tr>
<td>First Round Vote Share</td>
<td>0.412</td>
<td>0.020</td>
<td>0.411</td>
<td>0.020 ***</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>2.091</td>
<td>0.160</td>
<td>2.077</td>
<td>0.160 ***</td>
</tr>
<tr>
<td>UDF</td>
<td>0.539</td>
<td>1.260</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verts (Green Party)</td>
<td>-0.683</td>
<td>1.396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialist Party</td>
<td>-1.376</td>
<td>0.853</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front National</td>
<td>-2.780</td>
<td>1.122</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>UMP</td>
<td>-3.093</td>
<td>0.868</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Centrism</td>
<td></td>
<td></td>
<td>5.767</td>
<td>1.261 ***</td>
</tr>
<tr>
<td>Party Size</td>
<td></td>
<td></td>
<td>-0.088</td>
<td>0.009 ***</td>
</tr>
</tbody>
</table>

Refitting the regression model with centrism and party size estimates to test hypothesis 2(b) we again find a strong relationship in the expected direction for centrism. We also find that party size has a significant negative effect. Both coefficients are significant at the 0.001 level.
6. Conclusions and Implications

Aims and Innovations
Examining the role of secondary preferences in ordinal voting systems we aim to determine the extent to which these preferences influence the overall result. The chapter first explores the effect of the ordinal preferences first in terms of the ‘micro-level’ effects of individual voting behaviour and secondly in terms of the ‘macro-level’ effects of electoral outcomes.

In the first part, we draw on the first incidence of the availability of individual preference data from an ordinal voting election (from the 2012 Scottish local elections) to determine the consistency with which preferences are more likely to transfer between ideologically proximate parties. Then, exploring a range of political systems where ordinal voting is used including: Ireland, Scotland, Northern Ireland, Australia, and France, we conduct the first known exploration into the incidence of partisan bias as a result of the political positions adopted by parties. By focusing on district-level outcomes rather than national-level outcomes we control for other confounding features of the partisan differences in the seats-votes relationship. These include the geographical distribution of support, malapportionment, and turnout differences.

It is argued here that the party’s proximity to the ‘centre’ of the political space will define its ability to attract lower preferences. This, in turn, will provide an advantage for the party with respect to its opponents. Rather than defining centrism as the centre of a predefined left-right economic spectrum, we treat the dimensions of political competition as unique to each political system defining a party’s centrism as based on the positions and the strength of those positions as defined by the parties themselves. We also explore the extent to which the party’s size diminishes its ability to attract preferences as larger parties may also be a strategic threat to first preference voters of other parties.

Key Findings
Exploring the micro-level effects of individuals we first model the relationship between first and second preferences of individual voters across over eighty contests. By comparing the strength of these preferences to the relative proximity of parties in a two dimensional space we conclude that there is an ideological pattern to preferential voting. Voters who assign a first preference to a given party are more likely to issue a
second preference to a party that is ideologically closer to their first preference than to one that is ideologically more distant.

This research indicates the presence of what are known as ‘single-peaked preferences’ which indicate that voters are sufficiently knowledgeable to differentiate between ideological positions of parties so as to be able to issue preferences that ideologically match their preferences in a systematic manner. The assumption of single-peaked preferences, as opposed to the impartial culture model, is a key assumption of the theory that relates the preference profiles of voters to distinct advantages for centrist parties in ordinal voting systems.

Exploring the macro-level effects of electoral outcomes we model the district-level seats-votes relationship for each party to determine whether certain parties have a distinct advantage in terms of their ability to convert votes into seats in ordinal voting systems. The results of the research indicate in each case that under ordinal ballot systems the translation of votes into seats is biased in favour centrist parties giving them a share of seats that is larger than what their district-level share of the vote might otherwise indicate.

Notably the magnitude of the effects is weakest in Ireland where the parties are less distinguished and STV has formed the basis with which politics has been conducted since 1921. This may be a consequence of the parties adapting to the system. It may also explain the previously observed inconsistency in observations of preference flows in Irish election data.

The results perhaps more clearly indicate that non-centrist parties are significantly disadvantaged. Giving those parties a number of seats that is fewer than their share of the vote might indicate. The parties adversely affected by this in each case are: Sinn Féin (in both the Republic of Ireland and Northern Ireland), the Democratic Unionist Party in Northern Ireland, the UK Independence Party and to a lesser extent the Scottish Socialist Party in Scotland, One Nation in the Australian Senate, and Front National in France, although the two leading parties the UMP and the Socialist party are quite significantly disadvantaged in France though this might appear to be the result of their relative size. In each case each party is on the periphery of the system. Partisan bias is not only important in its own right, but it also plays a significant role in producing strategic incentives for parties and the overall shape of the political system. By clarifying the spatial incentives of parties, this research provides insights into the
effects of ballot systems for mainstream party objectives, the presence of extremist parties and moderation in deeply divided societies.

Implications for Extremist Parties

One of the key implications of this research concerns the viability of extreme parties. A key criticism of proportional representation is that although it allows for a ‘fairer’, more proportional result it also attributes disproportionate levels of power to extreme parties. Existing evidence indicates that ‘valence-disadvantaged’ parties have electoral incentives to differentiate themselves on policy grounds (Schofield and Sened, 2006). Thus, if a valence-disadvantaged party presents policies that are similar to those advocated by valence-advantaged parties, then voters will be incentivised to choose the other party based on this valence dimension. To differentiate the party from its competition valence disadvantaged parties are incentivised to diverge from the centre of the policy space. Empirical evidence supports these findings indicating that parties which occupy the extreme left, the extreme right, or distinctly non-centrist positions do not enhance their electoral appeal by presenting moderate policy programmes (Adams et al. 2006; Meguid 2005).

The impact of strategic voting is an important additional consideration. Its effects in categorical voting systems of proportional representation are well known (Cox and Shugart, 1996). Where voters assign a single preference, there vote has a high chance of being wasted if the party of the candidate has a lower chance of getting elected. This is particularly the case where there is a legislated threshold of representation which parties must achieve nationally in order to be represented -- as in Austria, Italy, Norway, and Sweden. The relative importance of strategic voting and valence measures mean that party positioning and party differentiation are key components of a party’s success. If there are only marginal differences between parties, then voting for the party with a greater chance of winning will be the strategically sensible option for voters wishing to avoid wasting their vote.

Preferential systems are said to produce sincere voting. It is argued that STV presents such different calculations to voters seeking to behave tactically that it makes little sense to do anything other than register sincere preferences for the parties that they would most like to see win (Bowler and Grofman 2000: 268). Indeed an analysis by Bartholdi and Orlin (2003) states that sincere voting remains optimal in STV ‘even in the ideal situation in which the voter knows the preferences of all other voters and knows that they will vote their complete and sincere preferences’. From this
perspective, it may be argued that electoral systems with categorical ballots produce distortions compared to the results of ordinal preferential voting systems.

However, the effect of preferential voting can be more extensive than a mere return-to-normality. For the TRS the partisan bias against Front National in France would appear to be extremely large based on their return on vote share. While part of this may be the result of the lack of concentration of their vote share, a significant part is also their inability to convert votes into seats even when the party is in contention at the second round. Extreme parties are thus forced to either remain on the fringes or converge toward the centre of the political spectrum. In the context of this bias, Sartori states that the two-ballot system eminently facilitates governability under adverse conditions (Sartori 1997: 69). Thus, preferential systems may be said to improve proportionality by penalizing the larger parties; while increasing proportionality by also penalizing relatively extreme parties. Rather than a distortion, the system of transferring votes is perhaps closer to the natural order as votes that are transferred are those that would otherwise be wasted or are cast strategically.

Legacy Effects

In many cases the partisan effects of ordinal voting may be only marginal to the main effect of a party’s first preference vote share. Preferential voting alone cannot exclude non-centrist parties from trying to compete. Nor can it ensure that non-centrist parties cannot win considerable support via their first preference vote share. Indeed in Northern Ireland the two parties on the periphery hold the most support
tagged. However, preferential voting can ensure that extremist parties will fail to win seats before they can gain the momentum that holding office affords to parties.

A voter’s anticipation of the prospects of different parties are expected to affect the likelihood that they might vote for that party. Existing research into the psychological impact of Duverger’s law (Calvo and Hellwig, 2011) indicates that voters account for biases in electoral systems when they decide whom to vote for. Larger parties receive more votes by virtue of being larger parties. Equally, it may be argued that as centrist parties, ceteris paribus, receive more votes in ordinal systems then centrist parties should also receive more first preference votes as a consequence of the marginal benefits of their earlier performances.

However, it is also arguable that the two peripheral parties in Northern Ireland, the DUP and Sinn Fein, have significantly moderated their stated political positions as they became the larger of the two parties in Northern Ireland.

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Future work might explore the extent to which the utility attached to voting for a given party is affected by the individual’s expectations over the transmission of votes into seats. Accounting for the relative valence and proximity determinants of voting behaviour, future work might examine effect of preferential bias on first preference voting intention.

Implications for Deeply Divided Societies

The evidence indicates that preferential voting tends to produce centripetal incentives for parties in ordinal voting systems. However, we do not expect preferential voting systems to be transformative in the sense that all preferential voting systems will produce highly centrist political systems. Indeed, by merely observing the use of preferential voting in Ireland, Northern Ireland, and Malta we observe three wildly different systems – a centrist multiparty system, a bipolar multiparty system, and a two-party pluralist system.

While it is important for political science to understand these incentive structures of electoral systems and mechanical biases therein, it is also essential for the study of the effects of electoral systems on ‘deeply-divided’ societies. In the absence of strong parties, and the existence of divergent incentives, the logic of elections can change from one of convergence on median policy positions to one of extreme divergence (Huntington, 1968: 412), a particularly dangerous form of party system known as ‘polarized pluralism’, featuring competition between increasingly extreme movements (Sartori 1976). Under such fragmented party constellations, violence and the breakdown of democracy is more likely (Powell 1982). It is claimed that almost all cases of violent civil war in recent years have featured mono-ethnic political parties striving to implement ethnically exclusive agendas (Gurr 2000).

In the literature on conflict mitigation in deeply divided societies (Reynolds 1999, Horowitz 1991, Reilly 2001, Sisk 1995), the importance of understanding rank-order preferential voting systems is clear. Both STV and AV have become very popular among scholars as a strategy to mitigate violent conflict in deeply divided societies (Reynolds 1999, Horowitz 1991, Reilly 2001, Sisk 1995). It is assumed that the features of ranked-ballot systems might will inter-ethnic vote pooling and produce centripetal effects so that moderate candidates, appealing across ethnic boundaries, might have a better chance of becoming elected (Reilly 2001; Horowitz 2003). The systems are seen by some as a potential alternative to consociationalism, which is often criticised for entrenching the existing identities. Indeed the systems have been taken up

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by deeply-divided societies in Northern Ireland (PR-STV), Fiji (AV) and Papua New Guinea (AV) specifically to encourage the development of more aggregative party politics (Reilly 2001).

Empirical evidence of these effects are quite limited, variously based on the outcomes from six countries: Nigeria, Sri Lanka, Papua New Guinea, Fiji, Bosnia & Herzegovina, and Northern Ireland (McCulloch 2010). However this set is further reduced when one considers that Sri Lanka and Nigeria did not adopt the system for legislative elections; that Papua New Guinea has only recently adopted it (as of 2003) and has therefore used the system just once (in 2007); that the Fijian experiment with AV is also brief, limited to the 1999, 2001, and 2006 elections; and that in relation to Bosnia and Herzegovina, AV was only applied for presidential elections in Republika Srpska – the Serbian governed federal entity.

The limited number of episodes means that any sort of macro-level quantitative study, employing contextual factors will yield spurious results. The limitation means that even scant evidence is highly disputed (Fraenkel and Grofman 2004, 2006a, 2006b, as against Horowitz 2004, 2006). The fact that there have been two coups d'etat in Fiji in this period is used as an indication that the system is so far unsuccessful. This view is then often countered with evidence from Northern Ireland, where although the political parties on the extremes (Sinn Fein and the DUP) have gained support over their moderate counterparts (the SDLP and the UUP), those parties have substantially moderated their positions and this, it is argued, has led to peace in the region.

Indeed, events in both Fiji and Northern Ireland may be attributed to any number of contemporaneous factors, only a micro-level study of the centripetal effects of rank-order systems will benefit the debate. As per Snyder (2001) a focus on sub-national units makes it easier to construct controlled comparisons that increase the probability of obtaining valid causal inferences in small-n research. From this research we can conclude there that preferential voting systems produce a partisan that, ceteris paribus, yields centripetal consequences.
Chapter 4

Party Positions and Campaign Effectiveness

1. Introduction

Recent innovations in the 2012 US presidential election campaign raise interesting questions about the importance of political campaigns. Whilst innovations in voter mobilization campaigns claimed to orchestrate the ‘biggest mass mobilization in campaign history’ (Time.com, 2012)\(^2\), innovations in election forecasting\(^3\) also claimed to have accurately predicted the result months in advance (Silver 2012; Wlezien and Erikson 2012; Linzer 2012).

Much of the literature on campaigns suggests that electoral support between parties is relatively stable and electoral results can be predicted by fundamental economic variables (Gelman and King 1993; Holbrook, 1996; Arceneaux, 2006; Campbell 2008; Erikson and Wlezien 2012). It is argued that the observed volatility in polling data is perceived to lead to what the fundamental models predict prior to the campaign. However, even if a campaign merely reinforces voter opinion, the absence or presence of a campaign will still affect the likelihood that votes are cast ‘as they should be.’ A somewhat separate literature reveals significant evidence that voter mobilization campaigns have a highly significant effect on the likelihood that an individual will vote (see Gerber and Green 2000). When parties canvass their supporters, they affect the party’s overall vote share by driving up turnout among their supporters. While these studies indicate that individual-level effects exist, the same studies also fail to find these effects in aggregate at a national-level. We therefore remain in an indeterminate state as in relation to the impact of campaigns. Do they have any significant effect?

The literature on campaign effects is limited by the scarcity of appropriate data and an inability to distinguish between persuasive and mobilizing effects of campaigns. National-level studies tend to focus on the impact of campaigns through campaign spending -- partly due to implications for campaign finance reform, particularly in the United States (Green and Krasno 1988; Jacobson 1978, 1980, 1983, 1990; Erikson and Palfrey 1998; Gerber 1998). However, campaign spending is a somewhat an incomplete approximation for campaign intensity. This is the case in the US where

\(^2\) The turnout rates of African-Americans exceeded those of White Americans for the first time (US Census Bureau 2013)
\(^3\) Recent innovations in election forecasting have applied the use the ‘fundamentals’ of economic performance and presidential approval ratings and polls.
Campaign spending tends to capture the costs of broadcast advertisement, and in the UK where the printing costs of leaflets and direct mailing in the UK. These effects broadly constitute the efforts to persuade voters to choose one party over another ('persuasion' campaigning) rather than efforts to increase turnout among supporters ('mobilization' campaigning). These methods are also less targeted and tend to be less effective than canvassing efforts. As a consequence studies of campaign spending portray an incomplete picture of campaign effects. On the other hand, studies that focus on voter mobilization efforts such as canvassing use field experiments and surveys thereby identifying effects at the individual level. While they highlight the existence of significant effects, these studies are unable to capture whether mobilization effects have an observable impact on vote share – the key outcome we seek to understand and the ultimate test of campaign efficacy.

An additional issue to address is that existing studies insufficiently the endogenous nature of campaign efforts with respect to candidate’s pre-election prospects. Candidates with relatively favourable chances also tend to get and spend extra resources and commit further man-hours. This endogeneity bias produces incoherent results manifested most clearly in what is known as the ‘incumbency puzzle’ of campaign spending.

Campaign effects have an importance beyond solving the immediate puzzle of whether they ‘matter’. In the first case, if campaigns -- particularly mobilization campaigns -- have an effect then they can potentially distort electoral competition. Much evidence suggests that party positioning is anchored by the position of party activists (Aranson and Ordeshook 1972; Aldrich 1983; Aldrich and McGinnis 1989; Miller and Schofield 2003). If a party relies on its activists to win elections then it will be constrained by those activists in terms of the positions it is able to take. It follows that if campaigns affect parties then the policy preferences of vote-seeking parties may not perfectly reflect those of the median voter (Baron 1989, Grossman and Helpman 1994).

This brings into focus the possible impact of differential campaign effects. Although it may be plausible that a party’s campaigns are equally competent in some aggregative sense, it is perhaps less plausible when one considers the comprehensive differences in the demographics of party support and the potential for differential effectiveness of voter mobilization campaigns. Indeed, if there are partisan effects to political campaigns that may provide an advantage for one party over another, this may potentially produce some differences in the constraints felt by different political parties.

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Much research into voter mobilization campaigns centers on how these campaigns affect the likelihood that a given elector will vote. However, there is little research into which electors are more responsive to such campaigns. It is sometimes argued that mobilization campaigns will be more effective for demographic groups with a lower propensity to vote as these groups will consist of a larger portion of people that may be open to mobilization. These conclusions would appear to be supported by significant evidence that British Labour Party campaigns are effective whereas British Conservative campaigns are not (Denver, Hands and McAllister, 2005; and Fisher, Cutts and Fieldhouse 2011). This follows the fact that the demographics of support for the British Labour Party’s tends to come from demographic groups with a low propensity to turn out, whereas the demographics of support for the Conservative Party’s tends to come from demographic groups with a high propensity to turn out.

To determine the extent to which campaigns might favour one party over another, we aim to determine whether voter mobilization campaigns affect certain demographic groups more than others. If they do, then parties who draw more support from those groups will benefit from the local campaign more than other parties. Equivalently those parties will also be more dependent on campaigns and activists to maintain a given vote share, while other parties will be free to focus solely on the persuasion aspects of campaigns.

This chapter seeks to resolve some of these complications by acknowledging the role of both persuasion and mobilization activities. In addition to regular campaign spending data the chapter draws on actual campaign mobilization data unique to the literature. The chapter takes advantage of one of the first examples of a centralized national database consisting of all contacts made by the Labour Party during the 2010 general election campaign. The Labour Party also offers a particularly interesting case study given the observed significance of their campaigns in surveys (Fisher, Cutts and Fieldhouse, 2011; Denver, McAllister and Hands, 2005).

Through pre-campaign election odds as determined by electoral markets we also control for the candidate’s exogenous chances of victory. Odds are also transformed to account for the well-known favourite-longshot bias in betting markets. Finally, to explore the potential partisan element of campaign effects we conduct an individual-

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24 The approach of accounting for the favourite-longshot bias was first highlighted in a very early edition of this paper in Wall, Sudulich, and Cunningham (2011).
level analysis of 2.3 million electors across the East Midlands to uncover whether campaigns affect some demographic groups but not others.

We find that canvassing activity has a significant effect on the Labour Party's constituency-level vote share, while campaign spending is slightly less influential. The relative importance of canvassing over campaign spending suggests that mobilizing activities are more influential than persuasion activities. The chapter also finds that once candidate quality is adequately accounted for, then, even in the UK, the differential between the effectiveness of incumbent and challenger spending disappears as Labour Party incumbent candidates are equally as effective with their campaign spending as Labour Party challenger candidates are, all things considered.

Contrary to previous assertions the chapter finds that voter mobilization campaigns are as effective for people from higher socioeconomic demographic groups with a high propensity to vote, as they are for people from lower socioeconomic demographic groups with a lower propensity to vote. The marginal effect of campaigns is thus not only affected by how many are open to mobilization, but also by how many within elector's prior propensity to vote. The magnitude of the effects of vote mobilization campaigns are influenced by a number of competing factors.

This chapter proceeds in six sections that follow. Section two discusses the literature in terms of both campaign effectiveness and the demographics of voter mobilization effects. Section three summarises the model of campaigns and the hypotheses to test. Section four explores the case study, the Labour Party campaign of 2010. Section five explores the data and measurements, outlining details in relation to the campaigns database and the odds data and how these different data sources are transformed. Section six gives details of the analysis and results. Section seven concludes.
2. Literature Review

Do Campaigns Matter?

'Minimal Effects'

Following on from the well-documented political ignorance of voters (Campbell et al. 1960), it is argued that campaign messaging face significant partisan resistance (Robertson, 1976). So, rather than campaign messages, electoral outcomes are largely a function of long-term structural variables—most notably, the state of the national economy and the level of the incumbent’s popularity—attributing minimal significance to campaign activity (Fiorina 1981; Abramowitz 1996, Gelman and King 1993, Campbell & Mann 1996; Tufte, 1978). At the constituency-level campaigns are thus regarded as unimportant (see Holbrook, 1996: 613).

At the individual-level, studies show that only a small proportion of voters are persuadable with the net effects limited to just a few percentage points (Kelley, 1983; Iyengar, 1991; Iyengar and Kinder, 1987). Finkel’s (1993) thorough analysis of the 1980 National Election Study panel survey finds pre-campaign attitudes and beliefs to account for almost 80 per cent of the variance in vote choice. When attitudes change, they invariably do so in accordance with voters’ longstanding partisanships. This is also observed in the UK, where the highly influential Nuffield studies of the 1970s and 1980s consistently reported a complete inefficacy of political campaigns in British elections (see e.g., Butler and Kavanagh 1984: 267; 1992: 245; Butler and Pinto-Duschinsky, 1971: 334). Thus, it is argued that if campaigns are to have any effect, ideological reinforcement is the most likely outcome – reinforcing a voter’s pre-existing partisan loyalties (see Campbell et al., 1960: 531).

It may be argued that polls reveal significant shifts in party support during a campaign. However, these shifts may be attributed to uneven sequences of partisan activation (Gelman and King 1993). Specifically, the theory of retrospective voting implies that voters base their vote decision on their perception of the economic performance of the incumbent (Fiorina, 1981; Lewis-Beck and Paldam, 2000: 114-115). Fluctuations in popularity may therefore be attributed to shifting alliances according to the pattern at which voters learn about the economic performance of the incumbent.

More pressing however is the large quantities of money spent on campaigns. However, it is argued that campaign finance is largely motivated by external actors seeking influence over likely winners (Gelman and King, 1993) and that for significant
campaigns such as the US presidential election, and other high information and relatively balanced campaigns, the impact of spending is largely 'ephemeral'. However, the assumption of 'relatively balanced' campaigns is somewhat problematic given the nature of party competition.

The idea that the final few weeks of a campaign are merely 'sound and fury signifying nothing' is perhaps far-fetched (In Hillygus 2010; see Holbrook 1996; Mendelberg 1997; Mutz, Sniderman, and Brody 1996; Petrocik 1996; Shaw 1999a and 1999b). However, while many attempts up until the present day have attempted to incorporate campaign variables into predictive models, evidence of substantial effects remains elusive. In recent attempts, Lewis-Beck and Tien (2002, 2008) used the change in a candidate's polling to assess the impact of their campaign but still found no evidence of a campaign effect. While Nadeau and Lewis-Beck (2012) applied the Vavreck's (2008) framework of what 'good' and 'bad' campaigns were, but found only a slightly decreased forecast error.

**Campaign Spending**

Much of the literature on campaign effects focuses on campaign spending as a surrogate for campaign intensity (see for e.g. Pattie, Johnston and Fieldhouse, 1995; Pattie and Johnston, 2003; Pinto-Duschinsky 1981, 1985). Indeed, for much of the literature, campaign spending is the *only* possible data source for the measurement of campaign intensity. While the literature on campaign spending and campaign advertising reveals evidence of a relationship between the amounts spent by a candidate and the vote share won by that candidate (Jacobson, 1978, 1990; Green and Krasno, 1988; Levitt, 1994; Abramowitz, 1988; Gerber 1998; and advertising: Finkel, 1993; Gelman and King, 1993; Shaw, 1999), significant doubts have correctly been raised over the reliability of spending as a guide to campaign effort (Gordon and Whiteley 1980).

Firstly, campaign effects are endogenous. Most research consists of regressing election outcomes on a measure of either campaign spending or a voters' exposure to advertising. However, because donors expect their money to buy political influence, they will contribute more generously to candidates with a high probability of winning. Thus, challengers with poor prospects will attract low levels of funding and will also consciously invest fewer resources of their own for their campaigns. Equivalently, comparatively 'safe' incumbents (i.e., those that are highly likely to win) will require fewer resources to win their particular contest, investing less urgently in their

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campaign if their prospects are relatively assured. This ‘endogeneity’ problem ensures that campaign finance models routinely overestimate the effect for challengers and overestimate the effect for incumbents leading some authors to investigate the ‘incumbency puzzle of campaign spending’.

In recognition of this problem some authors use instruments for campaign spending or electoral advertising (Gerber, 1998; Rekkas, 2007). However, finding adequate instruments is difficult. Gerber (1998) and Rekkas (2007) use lagged campaign spending at the district level as an instrument for current candidates’ spending. Yet, given that the marginality of a seat is a function of the relatively fixed demographics and indeed the high likelihood that the same candidate will run in consecutive years, then lagged campaign spending will be correlated with current election prospects, invalidating its use as an instrument. Other authors adopt the strategy of using indirect measures of the candidate’s ‘quality’ or relative prospects to mitigate the omitted variable problem (Green and Krasno, 1988). However, these measures have thus far fallen short of fully capturing the candidate’s chances through complex concepts such as the overall quality of a candidate or the preferences of an electorate.

The second problem is that, certainly in Britain, campaign spending is mostly concerned with direct mail, leaflets, posters and other non-personal forms of communication. These efforts are mostly concerned with the persuasion effects of campaigns, rather than voter mobilization effects which require less finance at a local level. Although research has shown strong correlations between spending and other aspects of a local campaign, the bulk of election activity does not involve financial transactions at all. A constituency party with little money to spend on campaign materials may still mobilize a relatively large number of volunteers. This is an important observation as British elections are run almost entirely on voluntary labor. Canvassing, delivering and calling on supporters on the day are vital activities with significant electoral impacts that may also be difficult to measure (Fisher, 2011). So, by only examining campaign spending we ignore the arguably stronger voter mobilization effects.

A third problem is that in the UK, as in many countries, there is a spending limit which restricts the observable campaign effort. Indeed, campaign resources may be spent effectively in one constituency but quite ineffectively in another. This effect is expected to be even more important in the context of spending limits. This is apparent from Figure 12, in which we observe the relationship between campaign spending and the extent of canvassing by the Labour Party during the 2010 general election. On the
x-axis is the number of door-knocking contacts made in that constituency and on the y-axis is the percentage of the maximum expenditure. The figure clearly points to a ceiling effect of the spending limit.

\[\text{Spend as a \% of Spending Limit (Short Campaign Only)}\]

\[\text{Contacts as a \% of the electorate (Short Campaign Only)}\]

\textit{Figure 12- The proportion of the electorate contacted versus the amount spent as a per cent of the short campaign limit in each constituency during the 2010 UK general election campaign}

\textbf{Field Experiments}

Substantial evidence highlights the impact of voter mobilization campaign activities. In the first of many field experiments Gerber and Green (2000) demonstrate how personal canvassing increases turnout by approximately 9.8 percent, while direct mailing increases turnout by 0.6 percent per mailing. These findings are replicated in a large number of studies (see Bedolla and Michelson, 2012) in a number of countries including the UK (John and Brannan, 2006, 2008; Cutts, Fieldhouse and John, 2009).

The comparative effectiveness of canvassing over leafleting here is evidence of the great importance of capturing canvassing effort in addition to campaign spending.

\[\text{\[25\text{ The analysis of the relationship between campaign spending and campaign activity as given here is based on data from the 2001, 2005, and 2010 UK general elections.}\]}

\[\text{\[26\text{ Other than in the United States, field experiments reveal the effectiveness of voter mobilization campaigns in the UK (John and Brannan, 2008; Cutts et al., 2009), France (Liegey et al., 2010), Japan (Gerber and Yamada, 2009), Canada (Loewen and Rubensen, 2010, 2011), Brazil (de Figueiredo et al., 2011), Mexico (Chong et al., 2011), Nigeria (Collier and Vicente, 2011), Ghana (Ichino and Schundeln, 2012), Georgia (Driscoll and Hidalgo, 2012), and Benin (Wanthekon, 2009)\]}

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The use of field experiments (see Gerber and Green 2000) and laboratory experiments (see Ansolabehere and Iyengar 1994) to explore voter mobilization effects dates back to studies by Gosnell (1927) and Eldersveld (1956). Field experiments on individuals are particularly useful for the measurement of voter mobilization campaigns as they can draw on marked register data to tell for certain whether the individual has indeed voted or otherwise.

Field experiments allow us to eliminate competing causal explanations to isolate the effect of a ‘treatment’ such as canvassing. However, they do so at a cost. Experiments take place in a sterile, sometimes unrealistic environment and as a consequence suffer from a lack of external validity due to their inability to account for the range of campaign stimuli. The overwhelming majority of these studies examine the effects of non-partisan campaigns in precincts or wards where very little else is going on. These are specifically rare elections that political parties are not interested in. The inability to account for effective targeting is also a serious shortcoming (Wielhouwer 2003). Indeed, one experimental study conducted by Nickerson (2005) found no evidence that phone calls made by Democratic Party volunteers influenced vote preferences, however the author also raised the point that the results may have been caused by the campaign’s failure to effectively target citizens that may be open to voting for the party.

Experimental studies can only identify potential effects of campaigns rather than the actual effects in an actual campaign. Experiments cannot take place in significant contests or realistic environments as parties tend to canvass the important areas, providing an external stimulus that cannot be accounted for. Thus while many studies illustrate the significance of canvassing efforts, none can conclude whether the effects are effective for a high-stakes campaign as conducted by an actual political party. Furthermore, it is unknown whether voter mobilization campaigns affect both voter mobilization and voter preferences.

Owing to a lack of data it is difficult if not impossible to incorporate this information into a constituency-level study. There is however some evidence that national level effects may persist as historical analyses conducted by Rosenstone and Hansen (1993)

Gosnell’s 1924 GOTV experiment was conducted one year before Fisher’s work on randomized control trials and experimental design. As such, his terminology is nonstandard and leads to some uncertainty about exactly what is done. Indeed, Green and Gerber (2002) argue that he may not have actually used randomization (Green and Gerber 2002).

The study was conducted for the 2002 Michigan gubernatorial race.

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in the United States and Vowles (2002) in New Zealand point to a correspondence between declining turnout rates and declining voter mobilization activity.

To understand as the effects of campaigns a well-designed study must not only account for both persuasion and turnout effects, but the study must also be conducted in a partisan fashion, and include the full range of scenarios from ‘safe’ constituencies to ‘target’ constituencies in marginal contests to ‘no-hope’ seats where the party has little chance of winning. In short, an adequate study must be as close as possible to the actual thing. Such an analysis is important and represents the next step to understanding the effects of mobilization and spending campaigns.

**Election Surveys**

Panel surveys and rolling cross-section surveys attempt to address these issues by surveying voters (see Lazarsfeld, Berelson, and Gaudet 1948; Berelson, Lazarsfeld, McPhee, 1954; Bartels 1993; Finkel, 1993; Norris et al. 1999; Hillygus and Jackman 2003). Surveys such as the American National Election Study and the British Election Study ask respondents whether they were contacted by a political party and whether they voted in the actual election. This allows us to observe whether targeted partisan campaigns are actually having an effect on turnout ‘in the real world’.

Surveys therefore tell us whether or not campaigns are effective in real conditions, but they do so with a wide confidence interval as the self-reporting evidence is weak and both actual exposure and self-reported exposure are only weakly correlated (Price and Zaller 1993). In experiments conducted by Ansolabehere and Iyengar (1998) over 50% of the participants who were exposed to a political advertisement were unable – just 30 minutes later – to recall having seen the advertisement. Self-reported exposure to campaign messages is also endogenous to political attitudes and candidate preferences. That is, those who choose to tune in to the campaign differ systematically (in ways that matter to their vote choice) from those who do not. In particular, people who can recall an advertisement are likely to be more interested in politics, more attached to the candidates, more informed about the issues, and more likely to vote. Survey analysis is thus affected by a selection bias.

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29 The respondent’s exposure to campaign activities or electoral laws is measured by asking the respondent the following question (Rosenstone and Hansen 1993): “As you know, the political parties try to talk to as many people as they can to get them to vote for their candidates. Did anyone from one of the political parties call you up or come around and talk to you about the campaign?”

30 Occasionally voter surveys validate reported turnout by consulting official records.

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Given that the constituency-level impact of voter mobilization campaigns are not apparent from individual voter studies, research teams in Britain have looked to surveys of party members (see Whiteley and Seyd, 2003) and election agents (Denver, Hands and McAllister, 2004; Fisher, Cutts and Fieldhouse, 2011). From these surveys, the studies construct indices of party activism and campaign intensity from the reported numbers of campaign workers involved, the extent of canvassing on the doorstep and by telephone, the numbers of leaflets delivered etc. When compared to election results, these studies reveal constituency-level effects of campaign intensity in terms of both turnout and party performance. While member surveys account for actual campaign effects in actual campaigns the results may be somewhat limited through the within constituency sample size, the number of constituencies sampled, and the veracity of the survey responses. While election agent surveys do not suffer from the first problem here, they do suffer from the final two problems. Furthermore, election agent responses suffer from a selection bias as successful election agents who positively recall their efforts are more likely to respond and review their efforts in a positive manner.

Although agent and member surveys may be more reliable, researcher’s dependence on survey methods remains problematic. While the founding fathers of the field (i.e. Lazarsfeld, 1948) may have capitalized on survey research, like all scientific techniques survey methods have weaknesses. Most of all it is somewhat dubious to treat respondents’ self-reported’ exposure to campaign communications as a reliable surrogate for actual exposure. In this tradition, the standard test for campaign effects is that differences in voting behavior between respondents who self-report high or low levels of exposure to the campaign. The assumption that self-reported exposure converges with actual exposure is problematic on several grounds. Conclusive evidence demonstrates that people have weak memories for past events, especially when the ‘event’ concerns a political campaign (e.g. see Bradburn et al 1987, Pierce and Lovrich 1982). There are inherent selection and response biases in the responses from voters, party members and election agents. These problems are all exacerbated by relatively small sample sizes. It is difficult to infer conclusive evidence in respect of

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31 Using surveys, Whiteley and Seyd (2003) ask party members about the extent to which they are involved in campaign activities to calculate an activism score for each party respondent by simply adding up the number of activities in which they have engaged.

32 In 1992 the mean number for Labour respondents was ten and in a few constituencies there was only one respondent. The 1997 survey covered 200 constituencies with less than 30 respondents per constituency. In the 1999 survey of Liberal Democrats there were just 20 per constituency.
any issue of significant complexity. This in particular limits any significant inference of sub-populations. This is particularly limiting where we wish to understand responsiveness to mobilization appeals.

Observational Data

The fundamental obstacles to understanding the impact of political campaigns are the limitations on which effects are being studied and how they are being studied. While traditional research has looked at persuasion effects at a national-level (see Hillygus and Jackman, 2003), due to data limitations it tends to ignore the effects of voter mobilization activities (Iyengar and Simon, 2000) or analyse them at an individual level. Where exposure to campaigns merely activates voters’ prevailing partisan sentiments (see Iyengar & Petrocik, 1998) limiting research to persuasion effects will undoubtedly produce limited effects. Where mobilization effects have been studied, it has been in an experimental context and therefore their true effects at a constituency-level remains unobserved.

This first part of this chapter returns to what is perhaps the oldest form of investigation, an observational study of the constituency-level effects to examine the effects of campaigns (see Stoker and Bowers, 2002). In previous cases going back as far as Bochel and Denver (1972) this method has suffered from the inability to satisfactorily account for variability across constituencies due to inadequate or insufficient data. For the most recent example, Arceneaux (2005) studied the effects of canvassing on precinct-level outcomes, However the study lacked sufficient power to detect significant effects. Drawing on a unique dataset, we use actual campaign data across an entire election to determine whether campaigns affect election results. The study marks the first use of a complete campaign database for a national campaign to analyse the impact of the campaign.

While voter databases in a variety of forms have been around for at least a century (Duverger 1954, Harris 1929), only in recent years of widespread access to high-speed internet have parties been able to create a locally accessible centralized database. A key development for the 2010 UK General Election campaign was the ability for all local Labour parties to upload canvass returns and contact details in real time and for the party to produce daily reports on how each individual campaign was performing. Built by Experian, the ‘Contact Creator’ database contains an entire electoral register of electors voting records together with their MOSIAC demographic data. The database appears to have been the first extensively used incidence of a centralized database.
system for managing a voter mobilization campaign. Certainly, it was not until the 2012 Presidential campaign before the US Democratic Party had created such a unified database. Perhaps more significantly, the database allowed the party to plan and focus its target strategy more accurately and on specific people as target seats were continually assessed in respect of their work rate and contacts made.

Exploring partisan voter mobilization campaigns in an important election facilitates the analysis of a number of effects that field experiments tend to ignore. In the first case, the provision of a campaign by a party will produce different, and perhaps more relevant, outcomes that a non-partisan campaign would as is predominantly the focus of experiments. Substantial research indicates that partisan predispositions determine the extent to which an individual accepts information provided to them (Campbell et al. 1960; Zaller 1992), and whether they would act on this information even if it were to be accepted as valid (Fiorina 1976; Mutz 2006). The party’s branding and partisan campaigning thus facilitate the provision of information to align a voter, lowering their voting costs and increasing partisan turnout (Aldrich 1995, 2006; Snyder and Ting 2002; Schaffner et al. 2001; Schaffner and Streb 2002).

This chapter thus benefits from a wealth of data sources applying actual party activity data in conjunction with actual party spend, combining both campaign activity and campaign finance data to create a holistic interpretation of campaign effects incorporating both to examine the extent of persuasion and mobilization effects from campaign spending and campaign mobilization effort. The first hypothesis thus evaluates the effectiveness of campaigns from this holistic perspective. The first hypothesis is as follows:

Hypothesis 1: Campaign activities, in terms of the canvassing and spending efforts of local campaigns, have a significant and substantial impact on the vote share received by a party.

For the first part of this study we examine the effect of the 2.3 million doorstep contacts in conjunction with £3.5m campaign spending during the short campaign of just over three weeks before the election. The data provides a unique opportunity to evaluate the extent to which mobilization campaigns affect results at a national-level.

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Is there an Incumbency puzzle of campaign effects?

Endogeneity Bias

Much previous work on assessing campaign effort also needs to account for the strategic allocation of resources. This is the aforementioned ‘endogeneity problem’. For example, the campaign activity of an incumbent or indeed a challenger is dependent on the perceived likelihood that the incumbent will lose, or the challenger will win in the forthcoming election. As many studies have confirmed campaign spending is targeted to marginal constituencies (Johnston and Pattie 1995; Carty and Eagles 1999; Forrest 1997). Incumbents that face a substantial threat will tend to spend more and work more than incumbents who believe they are ‘safe’. Conversely challengers with a greater chance of winning will also absorb more resources from donors or from party headquarters than challengers who clearly have little hope of winning. Equally local parties in marginal contests will canvass much more extensively.

Thus, while studies indicate that challenger spending produces large gains (Jacobson, 1978; Abramowitz, 1988), some studies -- to varying degrees -- observe no, or even negative effects of campaign spending for incumbents (Erikson and Palfrey, 2000; Green and Krasno, 1988; Gerber, 1998; Levitt, 1994). Spending or indeed activity is thus conceived as being endogenous with respect to the incumbent’s vote share, making it appear in some instances that an incumbent’s spending actually decreases vote share (Green and Krasno 1988, 1990; Jacobson 1978, 1990). This problem of endogeneity that is familiar to the campaign spending literature is also highly relevant for any unbiased analysis of campaign effects.

A number of scholars have attempted to account for this endogeneity problem. While some authors estimate spending effects using ordinary least squares while using controls such as the vote share at the last election, the state’s ‘partisanship’ and ‘ideology’, or the challenger’s political experience (e.g., Abramowitz, 1988; Jacobson, 1978, 1985, 1990), the technique generates biased estimates where there is a correlation between observed spending levels and the regression error. Others propose instrumental variables for candidate spending levels and use two-stage least squares (e.g., Ansolabehere and Snyder, 1996; Gerber, 1998; Green and Krasno, 1988) to model the relationship. However, the two-stage least squares approach relies on assumptions about the quality and validity of the instrumental variables, and bad
instruments can sometimes do more harm than good, producing both bias and large standard errors.

Erikson and Palfrey (2000) use a theoretical model to deduce conditions (which tend to be very close elections) under which candidate spending levels can be treated as exogenous, partitioning U.S. House elections according to their expected closeness to perform separate OLS regressions for each subsample. In a similar study Levitt (1994) implemented a panel study approach limits the sample to pairs of races in which the same two candidates face each other in a 'repeat election.' Because the candidates and the district are the same both times the candidates compete, it is argued that once differences in national conditions across election years and incumbency status are controlled for, remaining changes in vote percentages can be attributed to changes in candidate spending levels. However, in both cases there is a risk that the results are not interpretable outside their limited area of study. Levitt focuses on a nonrandom subset of election contests and so there is a risk these elections are atypical. It is also possible that restricting the sample to repeat elections reduces, but does not eliminate, the biases due to omitted variables

**Candidate Odds**

It is not entirely true that the problem is insoluble as campaign activity is not reciprocally caused by the observed vote share as actual vote share is not determined until after all of the campaign spending has taken place, well after spending and activity decisions are made. Following Bonneau and Cann (2012), the literature on campaign spending in judicial elections (especially Bonneau 2007a) and state-level elections more generally (Gierzynski and Breaux 1991), we maintain that the effect of expectations on spending (which in turn affects election outcomes) can be controlled for, that a reasonable measure of the candidate’s chances is required to avoid this omitted variable bias (Stratmann 2005). Indeed, several studies have called for such a measure of ‘candidate quality’ (Moon 2006, Cox and Thies, 2000). In two prior attempts, Abramowitz (1991) utilizes a measure of elite expectations and Green and Krasno (1988) use an eight point scale to measure challenger quality. This chapter accounts for expectations of election outcomes based on candidate odds as determined by prediction markets at the start of the short campaign. By doing so, we not only account for the relative marginality of the contest, but also the expected swing, the presence of a quality challenger and any other relevant features as determined by the market
Candidate odds in prediction markets offer a pre-campaign measure of candidate-level marginality at the start of the formal campaign period. The probability of a candidate winning at the outset of the campaign may be derived by converting the pre-campaign odds into implied probabilities. This is a particularly useful measure to control for the candidate's perceived chance of being re-elected. Constituency-level electoral betting markets therefore ameliorate the problem of extrapolating national-level seat shares from national-level vote forecasts, because they provide data at the constituency level rather than the national level. The markets also respond very quickly to campaign news, whereas polls must be grouped in order to obtain realistic estimates. Thus, campaign odds provide a unique opportunity to identify changes from a specific point in time.

A cross-national comparison of campaign spending effects indicates that the incumbency puzzle may solely be the result of an inability to adequately control for cross-district pre-campaign chances. While incumbency effects are evident in a variety of national, local, and multiparty settings, the magnitude of the effect varies. For majoritarian systems in the US and Britain the evidence indicates that the difference is large (Erickson and Palfrey 1996; Green and Krasno 1988; Jacobson 1980, 1985, 1990). In both jurisdictions there are great differences in the extent to which an incumbent's seat is 'safe'. In France, there are fewer safe seats owing to the nature of the two-round system. There, Palda and Palda (1998) demonstrate a slightly smaller difference between the effects of incumbent and challenger spending with challengers twice as efficient as incumbents. In Ireland, the electoral system is more proportional with 3-5 seats per constituency. There are even fewer 'safe' seats owing also to intra-party competition. Equivalently, campaign expenditure is just two-thirds as effective for incumbents compared to challengers (Benoit and Marsh 2008). In Flanders, Belgium, under PR there is little difference between the re-election chances of incumbents. There, the difference between incumbent and challenger expenditure is very small (Maddens, 2006). Similarly in Brazil, where the median district magnitude is 11 seats per district there is no appreciable difference between challenger and incumbent spending (Samuels, 2001).

PR-STV is commonly referred to as a 'quasi-proportional' system (Katz 1984; Taagepera and Shugart 1989)
It is argued that the apparent difference between incumbent and challenger campaign spending in the US and the UK is due to the existence of large numbers of ‘safe seats’. However, if we accurately control for a candidate’s chances then the apparent incumbency effect of campaign expenditure should disappear. The second hypothesis that we test is as follows:

Hypothesis 2: While controlling for a candidate’s pre-campaign chances, there is no difference in the effectiveness of incumbent and challenger spending in the U.K.

After exploring whether campaigns are effective a number of outstanding issues remain. In the first place, the causal mechanism between contacts and vote share requires further evidence in the causal chain. Drawing conclusions on individual behavior from evidence at a constituency-level is something of an ecological fallacy. To reinforce the view that electoral success is driven by voter mobilization campaigns we also examine whether those effects are present at the individual-level. In doing so, we are afforded the opportunity to explore whether individual responsiveness is dependent on the individual’s demography.
Are campaigns universally effective?

Partisan Differences

A series of studies indicate that while campaigns are effective for the Labour Party, they are ineffective for the Conservative Party (see Fisher, Cutts and Fieldhouse 2011; Denver and Hands 1997; Denver et al. 2002a, 2003; Fisher et al 2005; Fisher et al 2011). Thus far this chapter explored whether campaigns are effective for the Labour Party, however it remains unexplored whether the observed effects are exclusive to the Labour Party.

The explanation explored here is that the demography of a party’s support plays a role in the effectiveness of the mobilization aspect of campaigns. If certain demographic groups are more responsive to voter mobilization campaigns then this may explain why campaigns conducted by some parties are more effective than the campaigns conducted by others. One strong theory for the Labour Party’s relative success follows the conventional wisdom that parties with a larger support share among low-turnout demographic groups do better when turnout is higher (Abramson et al., 1982: 90; Flanigan and Zingale, 1994: 44). Given that the Labour Party’s support is strongest among people from a lower socio-economic background who also tend not to vote, it follows that as all parties work to increase turnout the Labour Party with greater support among non-voters will be the one to benefit most from those efforts.

Significant evidence reveals a substantial relationship between turnout and vote share for left-wing parties. Regressing vote share of left-of-centre parties on aggregate turnout has produced some positive effects in the US (Radcliff, 1994, 1995), Britain (McAllister and Mughan, 1986), Australia (McAllister, 1986), New Zealand (Nagel, 1988), Central and Eastern Europe (Bohrer et al., 2000), in developing countries (Aguilar and Pacek, 2000) and in cross-national analyses (Pacek and Radcliff 1995).

This conclusion has significant consequences for political competition and political science more generally. The relationship between demography, the likelihood of voting, and vote choice is an almost universal paradigm; those from a lower socio-economic demographic groups are the least likely to participate and also exhibit a tendency to vote for non-conservative, left wing socialist or social democratic parties (see Verba, Nie, and Kim 1978; Wolfinger and Rosenstone 1980; Verba, Schlozman, and Brady 1995; Franklin, 2002; Norris, 2002: 8).
It follows that if left-wing parties are the sole beneficiaries of voter mobilization campaigns then they will have greater incentives to spend a larger proportion of their resources on voter mobilization campaigns, while fiscally conservative parties have the inverse incentives to spend a greater proportion of their resources on albeit less effective ‘persuasion’ techniques, aiming to win over the median voter. This conclusion further suggests that the left-wing parties will also be more dependent on campaign finance and activists as they are more dependent on these resources to maintain a given level of support. Left-wing parties will therefore be slightly more anchored to specific positions, while fiscally conservative parties will be more maneuverable, better equipped to take advantage of shifts in public opinion.

However, recent evidence in the UK suggests that this assertion doesn’t always hold. For the four consecutive electoral victories of the Conservative Party, between 1979 and 1992, the average turnout was 75 per cent, while for the three subsequent Labour Party victories the turnout averaged at 64 per cent. Indeed, there is some skepticism about the veracity of this evidence. In the first place, there is an ecological inference problem inherent in the multiple-election regression approach to estimating turnout effects. Studies conducted at an individual-level estimate the impact of differential turnout through analyzing the support of non-voters. These studies suggest that such increases in turnout do not matter. At every presidential election in the USA since 1980, ANES studies have estimated the effect of increased participation among non-voters. The conclusion drawn is that aside from the 2000 campaign, increased turnout would not affect results significantly.34 Further evidence conducted by Bernhagen and Marsh (2010) take into account different probabilities of voting by way of the stepwise addition of ever less likely voters, coming to the same conclusion. Furthermore, using 11 field experiments Arceneaux and Nickerson (2009) show that canvassing increases turnout by enticing those who are on the ‘cusp’ of voting. Thus, higher turnout, via mobilization or otherwise, could alternatively mean that additional supporters of the already ‘overrepresented’ party will vote and that potential supporters of the ‘underrepresented’ party will still remain at home (Lutz and Marsh, 2007: 540).

34 ‘If strong Democrats had been as likely to vote as strong Republicans, and if independents who leaned Democratic had been as likely to vote as independents who leaned Republican, and if Democrats in these two groups had been as likely to vote for Gore as strong Democrats and independents whole aned democratic and did vote, Gore’s overall share of the vote would have increased by 1.8 percentage points. Depending upon in which states these increased votes were cast, even this small increase could have provided Gore with an electoral vote majority” (Abramson et al., 2002, 93).

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However, in examining the voting intention of non-voters the studies make a premature assessment of how non-voters would vote. An important feature of voter mobilization campaigns is their interaction with persuasion effects. Arguably, non-voters also tend to be less politically informed and their observed voting intention and will therefore be more randomly distributed than that of a politically informed voter from the same demographic. This follows well-cited research indicating that the primary outcome of political campaigns is in informing and reinforcing likely partisans (see Holbrook 1996: 613).

Therefore, if non-voters were to be mobilized to vote, we cannot immediately conclude that their voting intention would be as they had indicated as an uninformed, unmobilized non-voter. Recent evidence from Lutz (2007) supports these concerns revealing the seemingly peculiar conclusion that the more information an elector has, while controlling for their demography, the more likely that elector will vote for a left-wing party. This conclusion makes sense in the context of lower turnout and lower political knowledge among people from a lower socio-economic background who are likely to vote for the left if informed to do so. As both parties’ campaigns intensify the electorate in that constituency becomes better informed and increases their support for an incumbent, left-wing government.

**Demographic Differences**

For these reasons there are two competing arguments on individual responsiveness to mobilization. The first argument suggests that demographic groups with larger numbers of non-voters provide a greater opportunity for mobilization campaigns as there is a lower likelihood that the individual intends to vote in any case. The individual, typically from a lower socio-economic group, is more likely to be ‘available to turn out’. However, this argument assumes that all non-voters are equally persuadable to turn out and vote. The alternative is that voter mobilization campaigns work by persuading the next most likely voters in accordance with the likelihood of voting as per the voter’s demography. What this suggests is that the demographic groups with a greater propensity to turn out will also have a greater propensity to be persuaded to turn out.

These two conclusions yield different consequences for our understanding of voter mobilization and campaign effects more generally. Where the first argument is correct, then voter mobilization campaigns and election campaigns more generally are more important for left-wing parties where those parties have greater support than other
parties among non-voters. The strength of campaigns will therefore provide benefits for left-wing parties, or at least the party with greater levels of support among non-voters. Alternatively, where the second argument is true, then campaigns effectiveness is somewhat more independent of the demographics of party support and any party is able to benefit from voter mobilization tactics.

To determine whether campaign effects are exclusively the remit of social democrat parties and their likely voters, or otherwise, we must fully examine the relative effectiveness of GOTV campaigns across different demographic groups. The third hypothesis assesses the responsiveness of voter mobilization campaigns:

**Hypothesis 3:** *Voter mobilization activities are more effective with people from a lower socio-economic background.*

The great majority of the voter mobilization research focuses on whether mobilization campaigns are effective or not, and what methods and techniques are more effective than others. However, an emphasis on the effects for different demographic groups is almost entirely absent from the literature. The main reason for this is that the existing research relies on either survey evidence or experimental evidence, neither of which lends itself to the large sample sizes required for a detailed analysis of subpopulations.

Using the individual-level contact data from the Labour Party’s 2010 election campaign in conjunction with official turnout data, we can analyse the extent to which partisan voter mobilization campaigns affect the likelihood that an individual elector will vote. Using propensity score matching\textsuperscript{35} we can control for the selection bias inherent in a targeted campaign to elicit whether certain demographic groups, as defined by the Mosaic classification, are more responsive to voter mobilization campaigns than others.

\textsuperscript{35} To control for this selection bias, we follow recent developments to apply a procedure known as nearest-neighbour propensity score matching (Imai, 2005; Imai, King, and Stuart 2008; Bowers and Hansen, 2005; Hansen and Bowers, 2009).

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3. Theoretical Model of Campaign Activity

**Persuasion and Turnout Effects**

To support the assertion that voter mobilization campaigns produce benefits for a party’s vote share, we present the following theoretical model of campaign activity. The model illustrates how parties must target their canvassing efforts on mobilizing voters who either already support them or are leaning toward them, ignoring individuals who support other parties.

Existing voter mobilization models as proposed by Kramer (1966) and Hersch (2010) do not account for the latent persuasive effects of campaigns regardless of whether their purpose is to merely the mobilization voters. Campaigns revolve around the communication of information to voters (Bartels 1993; Gelman and King 1993; Holbrook 1996; Popkin 1991) to shape the voter’s perspectives on the candidate’s character, positions and the importance of various issues. While this is often the focus of how campaigns can influence vote choice (i.e. Casey 2000), it also influences the likelihood that a prospective voter will turn out.

Following the findings of Ansolabehere and Iyengar (1996) and Lau and Redlawsk (1995) highlighting how campaign information affects a voter’s issue preferences, candidate evaluations, and the likelihood of voting all at once, the chapter seeks to create a model of party campaigns that encompasses the effects of persuasion and voter mobilization effects in the same model.

We present a simple model to explain the relationship between campaign activity through changes in vote share \((\theta_A - \theta_{A0})\) and changes in turnout \((T_1 - T_0)\) on the portion of the population \((\alpha)\) that receive the canvassing effect. The likelihood of an elector voting is \(T_1\) if contacted and \(T_0\) otherwise; the likelihood of supporting party \(a\) over any other party having been contacted is \(\theta_{A1}\), and without contact \(\theta_{A0}\); and the percentage of electors that are contacted is denoted by \(\alpha\). Rather than plurality, as in previous studies, the model examines the effects on party vote share. The vote share \(V^*_A\) for party \(A\) is the vote share among contacted and uncontacted, divided by the modified turnout. Thus, if there were no effect on turnout, as in the null model, \(V_A\) would be as follows:

\[
V_A = \frac{(1 - \alpha)T_0\theta_{A0} + \alpha T_1 \theta_{A1}}{(1 - \alpha)T_0 + \alpha T_1}
\]

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If $\theta_{A1} = \theta_{A0}$ then the equation 1 reduces to equation 2 and the share of those mobilized will be no different to those that are not mobilized:

$$v_A = \frac{\theta_{A0}(1 - \alpha)T_0 + \alpha T_1}{(1 - \alpha)T_0 + \alpha T_1} = \theta_{A0}$$

Alternatively, if $\theta_{A1} < \theta_{A0}$ then the campaign will have a negative effect as it will tend to turn out voters who do not support the party. For the campaign effort to have a positive effect on vote share then $\theta_{A1} > \theta_{A0}$ is a pre-condition. So, if the increase in turnout does not focus on a subpopulation with a greater propensity to vote for the party, then there will be no benefit to the voter mobilization campaign.

On the one hand these conclusions clearly indicate that targeting is crucial to campaign effects. Certainly if voter persuasion has no effect, then a party’s ability to convert a voter mobilization campaigns into vote share will rest entirely on their given capacity for targeting and the raw number of doors that they knock up. However on the other hand, it is also likely that $\theta_{A1}$ will be larger than $\theta_{A0}$ even if targeting is minimal as $\theta_{A1}$ is likely to be an improvement on $\theta_{A0}$ due to the persuasion or at least reinforcement effects of canvassing. In this way, the model may seamlessly account for persuasion effects. For example if we take an exceptionally well targeted campaign where a party contacts the 25% of the electorate which support the party with an 90% likelihood (through targeting and persuasion) and we assume that this mobilization effort increases the likelihood that the individuals in the target group will vote by a factor of 10% from a baseline of a 50% turnout rate then we may calculate that the party’s vote share will increase by 3% from 27% to 30%. This is an ambitious though not impossible example that reflects the range of effects that are possible.

Vote share is therefore a function of five variables: $v_A^* = f(\alpha, T_0, T_1, \theta_{A0}, \theta_{A1})$. However, if we assume that from one constituency to the next the effect of voter mobilization on a given elector is the same (i.e. $T_1 = T_0$ and $\theta_{A1} = \theta_{A0}$ is the same), then we may regard vote share to be primarily a function of the expected baseline vote share $\theta_{A0}$ and the campaign effort $\alpha$, controlling for the party vote share from 2005 and campaign odds to control for the baseline factor $\theta_{A0}$. We expect that as $\alpha$ increases, vote share will also increase. Our fundamental model, before including additional control variables is therefore:

$$VoteShare2010 = \alpha + \beta_1 Spending + \beta_2 Contact Rate + \epsilon$$

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We treat the effects of the collective group of opposition parties as random effects. While this may appear to be somewhat crude, there are a multitude of reasons as to why we may be free to make this assumption. In the first case, it is certainly true that the marginal effects Conservative and Liberal Democrat campaigns are somewhat modest. Secondly, if opposition parties do have an effect (although recent observations indicate they do not), then their effect is likely only to decrease the Labour Party’s campaign effects where the opposition campaign effects correlate with the Labour Party’s campaign effects. They would therefore increase any observed significance of the Labour Party’s campaigns. Thirdly, campaign effects are also relatively random as they are heavily reliant on the intuitions of the sitting MP, whether that MP regards canvassing as a worthwhile activity and whether they are able to recruit teams of local volunteers to do the canvassing work for them.

The limitations of central campaign resources ensure that the local party is overwhelmingly responsible for the level of work on the ground. In many cases, ‘safe’ constituencies (such as Slough) may do far more work than any other marginal constituencies. Finally, the desire to control for opposition party effects is unclear. To control for such effects is also analogous to trying to learn about Labour Party effects in the absence of an opposition. However, because we wish to understand the effectiveness of a party’s campaign in the world in which it operates, then real conditions set against a real opposition is perhaps a more useful exercise.
4. Case Study: The 2010 Labour Party Campaign

The Case Study

The 2010 UK general election was significant in a number of ways. The election led to the end of thirteen years of Labour rule. Previous Labour governments had never lasted two full terms, so the party’s achievement in serving three was a notable achievement. Although the Conservatives ended up as the largest party by some margin, they were still 20 seats short of a majority of just one. Not since the election of February 1974 (and before that 1929) had the result failed to produce a majority government. What was perhaps most surprising was that in spite of achieving the second lowest vote share of either of the two major parties since the second-world war, the Labour Party was still at the negotiating table. Famously it was the party’s own lack of enthusiasm that sunk any potential rainbow-coalition or Lib-Lab minority government.

Indeed, although the polls were cited as being reasonably accurate the number of seats won by the Labour Party in the 2010 election was a surprise to many, confounding many previous forecasts. In the absence of short term constituency-level polling data, psephologists relied on structural variables and national-level polling data to predict the election. For example, Nate Silver, a prominent poll tracker (fivethirtyeight.com), approached the UK election by constructing a complete matrix of interparty vote shifts between 2005 and 2010, customizing the effects of the swing to each constituency by assuming tactical voting so that vote shifts will go disproportionately towards parties that can potentially win in each constituency. Having projected 204 seats for the Labour Party as opposed to the 256, Silver’s retrospective conclusion was that his model performed “underwhelmingly”. However, this was not the fault of errors by the national-level polling agencies (Curtice, Fisher, and Kuha, 2010), on whom forecasters rely heavily as the median polling figure on the final day was for a Labour Party vote share that was within 1% of their eventual vote share36.

36 Although it is sometimes documented that the polling agencies were incorrect for the 2010 General Election the median vote shares for the parties on the final day were relatively close to the actual figures. Whereas the median polling figures were given as Con 36%, Lab 28%, LibDem 27% compared with Con 36%, Lab 29%, Lib Dem 23%. While the final Lib Dem figure makes only a small difference to their overall vote share.

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Uniqueness of Elections

Invariably, questions arise as to whether a case is representative, or whether the lessons that are learned are also generalizable. Although these concerns have merit, there are also significant drawbacks to alternatives. While one could — if the data were available — compare several campaigns with an eye toward developing a broad conceptualization of campaigns, however, it is not entirely clear that this would be an adequate strategy.

Furthermore we may acknowledge that campaigning takes place in a dynamic, multiparty context, and that by concentrating on one party the chapter necessarily omits relevant data on competing campaigns. However, if one were able to include data from the Conservatives, or the Liberal Democrats either of these then the dynamic of the model changes and further data is therefore required to account for the SNP, Plaid Cymru, Respect, and the Green Party where they apply. Indeed, the logic extends to capturing any stimulus that might encourage a prospective voter to turn out.

Certainly, with respect to US and UK campaigns, the technical innovations in recent campaigns mean that campaigns before the year 2000 are not comparable. Campaigning is very different today to what it was ten years ago. The ability to centrally collect data in real-time means that centralized voter targeting can be much more accurate. Evidence assembled by Beck and Heidemann (2010) suggests that in US Presidential contests canvassing by political parties increased dramatically since the 2000. They also show how campaigns have increasingly targeted partisan voters, identifying this as a consequence of how campaigns are increasingly driven by the national strategies of presidential campaigns rather than local party organizations as occurred in an earlier era. Similarly in the UK, the new style of campaigning has been apparent in many studies. It was however, developed first and went furthest in the Labour Party (Denver, Hands, and McAllister 2004) exemplified by the party’s ‘Operation Victory’ in 1997 and ‘Operation Turnout’ in 2001.

The 2010 General Election

There is however, a strong case for studying the UK Labour Party’s 2010 general election campaign. In the first place, the UK also provided an ideal case. The centralized party-centered model of British politics gave individual candidates a limited role and expanded the importance and impact of voter targeting. Being the most recent election, the 2010 UK general election provides the best evidence as to
how we may expect campaigns to evolve. With 632 constituencies, the UK general election provides sufficient variance to account for a range of different situations.

The Labour Party was --at the time-- one of very few parties with a centralized database, complete with demographic indicators and marked register data. The party also provided enough incentives to ensure that all constituencies fully engaged with the software. Comparatively, before the 2012 presidential election, no US campaign had such a system. While there were database systems for elections in 2004 and 2008, these remained siloed. By 2008 both the UK Labour Party and the UK Conservative Party had developed systems known as Contact Creator and Merlin respectively. Between the two, the Labour Party, as a mass-movement party, was better equipped to take advantage of the system.

There are further reasons to use the Labour Party as the key example. Significant prior evidence suggests that campaigns conducted by the Labour Party (and, interestingly, not the Conservative Party) have a positive effect on the party’s vote share. Given that the prevailing wisdom is that campaigns have ‘minimal effects’ , focusing on a party for which it is suggested has effective campaigns is a suitable strategy for testing whether campaigns have an effect or not.

37 The ‘Marked Register’ is a copy of the register used for the election with a mark by each elector that has voted.

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5. Data and Measurements

Campaign Data

Observational Data
The empirical work uses data from the Labour Party’s Contact Creator voter database for the 2010 UK general election. For the first and second hypotheses we utilize the percentage of the electorate in each constituency that was contacted during the short campaign. There are 650 constituencies in the UK. If we exclude the 18 constituencies in Northern Ireland, Buckingham constituency which the Labour Party did not contest, and Thirsk and Malton constituency which was rescheduled, we have 630 cases, providing enough variation in the observations.

While voter databases in a variety of forms have been around for the best part of a century (Duverger 1954, Harris 1929), only in the internet age has it been possible to efficiently collate this data at a central location. Indeed, for only a handful of parties and only for a handful of elections does this data exist in this form. By few, if any parties had a full centralized database equipped with full demographic classifications. The Labour Party’s national database known as ‘Contact Creator’ enables organizers to collect and record information from contacts made during the election campaign. Figure 13 describes the distribution of the proportion of the electorate in each constituency that was contacted in the final three weeks.

The dataset consists of the number of voter identification contacts made by local activists. The local campaign teams print off a sheet of electors from the ‘Contact Creator’ system and begin to knock on the doors of the people from that sheet. On the sheet they record whether the person whom they attempted to speak to was identified as supporting the Labour Party. The responses are submitted back into the online database with the date of the session also recorded. Local campaign teams are rewarded for their efforts through the allocation of further resources. It is also well understood by local teams and councilors of the importance of the quality of the data, given that inadvertently mobilizing a Conservative voter to vote has negative consequences for their campaign prospects.

While some constituencies had a huge number of contacts most had less than 2,500. Indeed although the party certainly encouraged canvassing in the most marginal constituencies at the end of the day the party often has little effective control over the enthusiasm of volunteers, local party members and MPs. As such, the constituencies

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which received the highest number of contacts included Slough and Oxford East, both of which are very safe Labour seats.

![Number of Contacts](image)

**Figure 13- The number of constituencies versus the number of contacts made in that constituency by the Labour Party in the final three weeks of the 2010 general election campaign**

For the individual-level analysis, we use individual-level data of 2.3 million electors in a number of constituencies in the East Midlands Region. The East Midlands region of England was chosen as it includes a variety of safe seats such as those in Birmingham City, marginal seats on the outskirts or around towns such as Stafford and Tamworth and plenty of rural seats where the party has little chance of winning such as those in Herefordshire and Shropshire.

**Campaign Spending Data**

We include constituency-level campaign spending figures to account for the ‘persuasion’ component of the campaign. Although arguably the persuasion component is not entirely distinguished from the voter mobilization component, its inclusion means that the complementary components are at least adequately accounted for.

Campaign spending figures for the UK are split into the ‘long campaign’ between January 1st and ends on April 12th and the ‘short campaign’ which begins following the dissolution of the parliament on April 13th and continues through until the day of
the election on May 6th, 2010. It is the short campaign that is the focus of this research. The short campaign is commonly regarded to be 'the campaign' and to incorporate 'long campaign' spending would represent a slight distortion of the interpretation, which might also be a representation of the voter's interpretation of the incumbent’s time in office. Secondly, this is primarily the period when voters decide. BES data indicates that in the 2005 election 34 per cent of voters decided during the 'campaign' compared to 14 per cent during the 'rest of the year'. Indeed, the importance of this particular period is increasing. The 34 per cent also represents an increase of 22 per cent of the electorate deciding since the 1964 election.

Admittedly the campaign begins prior to the 13th of April. However, it is an appropriate point from which we can not only measure the candidate’s spending but also the candidate’s electoral prospects as the reliability of market predictions depends on market activity which tends only to build up closer to the start of the official campaign period.

Campaign spending data is collected from the UK Electoral Commission website. Spending limits for the short campaign were £7,150 plus 7p for every elector registered in a county constituency, and 5p for every elector registered in a borough constituency. The average Labour Party candidate spent roughly 50% of this limit, although the distribution was heavily skewed with a large proportion spending close to the limit and many other candidates spending very little.

Labour Party candidates spent £3.6m in the short campaign. The vast majority of this expenditure focused predominantly on persuasion techniques with 74 per cent on unsolicited mailings and 11 per cent on advertising. Of the remainder, 12 per cent went on accommodation, 2.5 per cent on agents and staff, 1 per cent on transport, 0.5% on public meetings.
Marginality Data

Candidate Odds

The veracity and relative accuracy of electoral markets is well known (Erikson and Wlezien, 2008; Arrow et al., 2008; Wolfers and Zitzewitz, 2008). Their use follows Surowiecki's (2004: 35) assertion that aggregated predictions of voting outcomes, which ask individuals to evaluate likely electoral outcomes, can be "better" than polls, which ask voters how they themselves will vote. In a study of prediction markets in the lead up to the 2004 Australian election Leigh and Wolfers (2006) demonstrate how the improvement in fit over the ensuing three weeks reflects how the markets aggregate new information about voter preferences and the quality of campaigns. They also show how by the eve of the election the prediction markets give a relatively accurate prediction, better than the economic models and two out of the four polling firms. Given the relative volatility of the polling firms the prediction markets are more favourable again when compared three months and twelve months in advance of the election.

The conventional bookmaker uses expert knowledge to derive the probability of a given outcome, and then offers customers the odds at which they may back that outcome. A betting exchange does not offer odds directly; rather, it facilitates bookmaking between customers. Customers on a betting exchange are free to either "back" a certain outcome (bet on it happening) or "lay" it (bet on it not happening). The betting exchange facilitates these negotiations by publishing offers to either back or lay an event at a certain price, which can be accepted or declined/ignored. If an offer is accepted, it is said to be "matched", meaning that the offer to back at certain odds has been accepted by someone willing to lay at that price, or vice versa. The odds that determine the payoff should an event come to pass are therefore driven by the market of potential customers.

As likelihoods change, new amounts will be tendered for matching by the exchange’s customers. The Betfair.com site opened up markets for all 650 of the UK’s 2010 general election constituencies. At any given time, the site displays the “best” price (that is, the price that will yield the highest payout, should the backed outcome come to pass) for each possible outcome that can be instantly matched to another customer, and the amount that would be instantly matched at that price. The implied probabilities and the market adjusted implied probabilities, accounting for the market overround, are calculated as follows:

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Implied Probability_i = 1/odds

Market Adjusted Implied Probability_i \frac{\text{Implied probability}_i}{\sum \text{Implied probability}_i}

Implied probabilities range from just under 100% (which indicates certainty that a candidate will win) to just over 0%, which indicates a candidate’s victory being all but impossible. For each market, however, these percentages must be adjusted to account for the extent of the market over-round. The over-round is the extent to which the sum of implied probabilities for all possible outcomes in a market exceed 100%.

**Favourite-Longshot Bias**

Recent work by Erikson and Wlezien (2008) reveals that in recent elections prices have consistently overvalued underdog candidates. Erikson and Wlezien suggest that this is a result of the bettors believe that electoral preferences are more volatile than they are in reality and overestimate the likelihood that a candidate who is behind can ‘pull it out’ between the timing of the bet and the election campaign. However, the paper fails to identify a more significant and consistent bias in all betting markets. The bias known as the ‘favourite-longshot bias’.

Following the analysis in Wall, Sudulich and Cunningham (2011), the market odds must also be modified to adjust for the ‘favourite-longshot bias’ a well-known distortion in betting markets first identified by Griffith (1949). Collectively, bettors tend to overvalue the probability of highly unlikely outcomes (“long shots”) and undervalue the probability of highly likely outcomes (“favourites”). Snowberg and Wolfers (2010) provide some insights into the mechanisms that underlie this observed bias, arguing that the field of cognitive psychology and particularly studies of risk perception offer the most convincing accounts.

This distortion is discussed in Kahneman and Tversky’s (1979) seminal work following the assertion that people are risk prone in the context of potential gains and risk averse in the context of potential losses. With favourites, people need to stake far more up front for the same gain that would be made out of a long-shot bet, where a small stake can bring a large return. Thus, gamblers will tend to be more risk averse in relation to favourites and risk prone in relation to long-shots and the odds therefore, particularly for long-shots will tend to overestimate the chances of the event occurring. Rothschild (2009) further argues that transaction costs amplify the bias in electoral market data. Investors, he argues, tend undervalue favourites because the return has to
be greater than the transaction cost involved in making the bet (which may not be the case for heavy favourites in some instances).

We look for the presence of this type of bias in candidates’ odds by grouping all candidates according to the probability decile that they fall into and by then examining the relationship between the proportion of candidates in each group that actually won their seat. This relationship is mapped graphically in Figure 14 revealing the expected logistic relationship. At the long shot end, we can see that candidates who had implied likelihoods of 10% or less were far less likely to win their seats than their probabilities implied. For instance, of those scoring between 5% and 10%, less than half of 1% actually won their seat. Although implied probabilities of between 10% and 50% appear to slightly overestimate candidates’ chances of winning, the difference is far less pronounced than for the extreme outsiders. However, at the other end of the distribution, the relationship is the opposite – the odds offered on candidates appear to underestimate their likelihood of winning – for instance, 97% of candidates with implied probabilities of between 80% and 90% won their seats. As such, the relationship between implied probabilities and the actual election results is shaped roughly as a logistic curve (the s-shaped curve mapped in Figure 3), with no-hopers over-predicted by the markets, frontrunners under-predicted and marginal candidates given a rather accurate description of their actual chances.

![Figure 14](image)

*Figure 14- The predicted proportion of those expected to win in each probability decile versus the actual proportion of candidates (with loess smoothed line).*
Previous Election Results

The election odds data is also supplemented by election data for the 2005 general election. In some cases where the outcome is a foregone conclusion there will be little if any betting activity and as a consequence the market odds will be somewhat less capable of differentiating between the marginality relatively safe and relatively unlikely gains.

To differentiate between seats that are relatively safe and between seats that are relatively unlikely the candidate odds data is supplemented with notional election results from the 2005 general election. Between 2005 and 2010 there were minor boundary changes and the notional figures for those constituencies were calculated using the demographics of party support for those constituencies.
Demographic Data

Experimental Studies vs. Propensity Score Matching

Much of the research on voter mobilization has made extensive use of randomized field experiments (e.g., Gerber and Green 2000; Gerber, Green, and Nickerson 2003; Green and Gerber 2008). These studies are said to have an advantage over observational studies, for which researchers do not know the process that cause an individual to be contacted. It is argued that some portion of the observable difference may be an artifact of an unknown selection process. This of course only remains a problem where the probability that an individual is contacted is also systematically related to the likelihood that they will turn out. A secondary concern of equal importance is that voters may simply be more likely than nonvoters to be home and available to receive contact from campaigns. However, once the targeting process is adequately accounted for, then these problems disappear.

The experimental studies reveal that non-partisan door-knocking campaigns increase the likelihood that an elector will vote by as much as ten per cent. However while observational studies are sometimes criticized for failing to control for a party’s selection bias, there are also more concerning biases present in experimental studies. The external validity of experiments are highly questionable. If the interesting question is whether mobilization campaigns affect political outcomes, then an examination of the work that is conducted by a political party is surely more relevant than any attempt to replicate specific objectives of this activity. Indeed, field experiments are often conducted during smaller local elections, by non-partisans and in areas where there is no campaign – a sterile, perhaps unrealistic environment. While the intention may be to draw conclusions for more significant campaigns the environment in which they are conducted are too specific unusual. In an experimental study Jackson (2002, 839) finds mobilization efforts to be less effective when competitive gubernatorial or U.S. Senate races are on the ballot and completely ineffective in presidential years. He argues that when the base turnout is 15 to 20 percent, as it is for several of the GOTV experiments, that it may be relatively easy to find people who can be coaxed into voting. However, in a presidential election year there may be relatively few of these individuals. The study not only highlights the inability to apply experimental research to major campaigns, but it also offers further evidence of an assumption that the ability to
persuade voters to turn out is solely dependent on the number of non-voters in that subgroup.\textsuperscript{38}

Despite the received wisdom that campaigns mobilize partisans, systematic studies of partisan turnout have been rare. The most relevant study is Holbrook and McClurg’s (2005), which identifies the ‘mobilization of core supporters as a central contribution to the 1992, 1996, and 2000 presidential campaigns. This chapter draws on actual data collected by the Labour Party in the 2010 General election to examine how the marginal effect of canvassing can differs according to the demography of the respondent. The size of the dataset and the ability to identify the determinants of selection bias able us to uncover the how the effectiveness of mobilization campaigns may vary by demographic group.

An alternative explanation to increased turnout in areas with significant campaigns is the self-recognition of the elector that they reside in a marginal constituency where their vote matters significantly more. However, as rich as the theoretical insight supporting the elite response hypothesis is, the vast majority of studies when controlling for campaign intensity find minimal, mostly insignificant effects for marginality (Berch, 1993; Cox and Munger, 1989; Ragsdale and Rusk, 1995; Cann and Cole 2011).

\textbf{Propensity Score Matching}

To control for selection bias (or, the ‘Intention to Treat’), this chapter follows recent developments in matching (Imai, 2005; Imai, King, and Stuart 2008; Bowers and Hansen, 2005; Hansen and Bowers, 2009) applying a procedure known as nearest-neighbor propensity score matching. For this procedure, the goal is to select a group of electors in the control group (uncontacted electors) such that the distribution of covariates for this subgroup is similar to that for the treatment group (contacted electors). The algorithm then proceeds to calculate for the effect of the treatment using the subsample comprised of the treatment group and the matched group. Although propensity score matching only uses a subset of the control group, the comparison of treated units with a matched control group gives a more reliable estimate of treatment effects after controlling for the selection bias.

\textsuperscript{38}By ‘logistic assumption’ we mean the assumption that concludes the logistic relationship between likelihood to vote and the mobilization treatment. In other words, that an overriding feature of mobilization campaigns are that voters less likely to vote in the first place are easier to persuade to vote.
The propensity model from which the matched group is created is based on a logistic regression on the treatment, that is, whether or not the voter was contacted (on the Doorstep) in the final month of the campaign. Coinciding with party strategy, independent variables are: an identifier determining the number of times the voter was previously contacted (0, 1, 2-3, over 4 times), whether or not they had previously been identified as a Labour supporter (1 or 0), and their Mosaic demographic classification. The logistic regression equation is as follows:

\[
\text{Canvass} = \alpha + \beta_1 \text{LabourID} + \beta_2 \text{CanvassedBefore} + \beta_3 \text{MosaicGroup} + \epsilon
\]

The propensity score matching successfully modified the set of people that were non-contacts such that they are similar to those that were contacted. Figure 15 shows how the distribution of propensity scores differ for the raw and the matched groups. There is a clear improvement between the raw and matched control groups through the propensity model. The Raw control group has a distribution of electors with lower propensity scores than the matched control group.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure15.png}
\caption{Propensity scores for unmatched and matched treatment and control groups. The effects of propensity score matching are clear from the difference between the raw and matched control groups.}
\end{figure}
Mosaic Demographic Classification

To explore the relationship between canvassing, demography and turnout we must adopt a demographic classification system. This chapter takes advantage of an advanced socio-demographic classification system known as ‘Mosaic Groups’ used in diverse applications in public policy to environmental research (Webber 1985, Farr and Webber 2001, Williamson et al. 2005, Booth Gaston and Armsworth, 2010).

The application of Mosaic Groups provides a number of advantages over traditional demographic groups, particularly where it is a means to an entirely separate end. Whereas traditional socio-economic classifications such as ABC1 and C2DE are based on a set of subjective assertions, such static groups are out-dated and as such may no longer define relevant homogenous groups. The Mosaic classification uses hierarchical cluster analysis to classify people into 15 different groups according to data from over 400 variables from a range of sources (Webber 2004). Over half of the data comes from the national census with the remainder from a number of other sources, including the edited electoral roll, consumer credit activity, supermarket loyalty card activity, and house price data. The classification also accounts for well-known ‘neighborhood effects’ by incorporating the geographic location of the elector.

Figure 16 gives the level of support for each Mosaic Group broken down by party (YouGov, April 2010). The fifteen Mosaic Groups labeled are A to O with descriptions that describe the typical individual classified into each group. They are as follows: A - Alpha Territory; B - Professional Rewards; C - Rural Solitude; D - Small Town Diversity; E - Active Retirement; F - Suburban Mindsets; G - Careers and Kids; H - New Homemakers; I - Ex-Council Communities; J - Claimant Cultures; K - Upper Floor Living; L - Elderly Needs; M - Industrial Heritage; N - Terraced Melting Pot; and O - Liberal Opinions. We can use these groups both as a control for the individual-level targeting strategies conducted by the party, but also to identify differences between the rates of turnout and mobilization responsiveness.

For instance, a model to predict voting based solely on attributes of the voter such as age, income, education, car ownership and ethnic group, will perform less well than a model which also has access to data at the neighbourhood level, even if this classification is based solely on existing data variables added up by geography.

Kevin Cunningham
Figure 16- Party Support broken down by Mosaic Group according to an extensive poll conducted by YouGov in April 2010
6. Model and Results

Campaign Activity

With the availability of individual-level data across the entire country we can model the effect of campaigns on election results. There have been several dozen studies performing regressions of candidate vote totals on candidate spending with the basic model as follows:

\[ VS = \alpha + \beta_1 \text{Spend} + \beta_2 X + \epsilon \]

Where \( VS \) the incumbent’s share of the two-party vote \( \text{Spend} \) is total campaign spending, and \( X \) represents a set of variables other than campaign spending that are thought to influence candidate vote totals. We control for candidate quality and baseline support using candidate prediction market odds as at the start of the short campaign and the party’s vote share at the previous general election. We also include whether the candidate was an incumbent or not. The updated model is as follows:

\[ VS_{10} = \alpha + \beta_1 \text{Spend} + \beta_2 \text{Contact} + \beta_3 \text{Incum} + \beta_4 \text{Odds} + \beta_5 VS_{05} + \epsilon \]

Where \( VS_{10} \) is candidate’s vote share in 2010, \( \text{Spend} \) is total campaign spending, \( \text{Contact} \) is the proportion of the electorate that is contacted, \( \text{Incum} \) is whether the candidate is an incumbent or otherwise, \( \text{Odds} \) is the candidates estimated probability of winning based on the market odds offered, and \( VS_{05} \) is the constituency vote share in the 2005 election. The results for Hypothesis 1 are given in Table 20:

Table 20 - Modelling the effects of contact rate and campaign spend on party vote share; with and without variables controlling for the candidate’s prospects as through pre-campaign betting odds and the 2005 constituency vote share

<table>
<thead>
<tr>
<th></th>
<th>Model Without Vote Share</th>
<th>Model With Vote Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.123 ***</td>
<td>-0.014 .</td>
</tr>
<tr>
<td>Contact Rate</td>
<td>0.140 **</td>
<td>0.172 ***</td>
</tr>
<tr>
<td>Campaign Spend</td>
<td>0.104 ***</td>
<td>0.046 ***</td>
</tr>
<tr>
<td>Incumbent</td>
<td>0.091 ***</td>
<td>0.014 .</td>
</tr>
<tr>
<td>Betting Odds (Probability)</td>
<td>0.230 ***</td>
<td>0.108 ***</td>
</tr>
<tr>
<td>Vote Share 2005</td>
<td>0.661 ***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.834</td>
<td>0.912</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.065</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Kevin Cunningham
We model the relationship with and without the Vote Share 2005 variable. The reason for this variable is to account for inadequacies in the market odds variable. However, its relative strength when introduced causes it to dominate the model. As such, we wish to also explore the effects without that variable. Without the vote share 2005 variable the effects are largely the same. While the intercept may not be necessary in the second model it is necessary in the first.

The second model explains 91% of the variance in Labour Party Vote Share in 2010. The Contact Rate variable is statistically significant and in the expected direction. The Campaign Spending is also statistically significant and in the expected direction suggesting that both persuasion and mobilization components of the campaign yield significant improvements on the expected vote share of a given candidate. The Market Probability (Campaign Odds) variable and Vote Share 2005 are both significant. The Incumbency-Spend interaction term, which usually highlights the ineffective spending on behalf of the incumbent, is statistically insignificant suggesting that much of the apparent incumbency puzzle may be an artifact of a previous inability to sufficiently account for all components of the likelihood of a candidate winning at the outset of a campaign.

While the effects of canvassing at an individual-level are well known, their effects at a constituency level were not previously observed. Our analysis here concludes that voter mobilization campaigns have a considerable impact on the vote share of the party.

While some studies have found canvassing to have an effect on turnout, though not on voting intention (Caldeira et al., 1985, 1990; Cox, 1999; Jackson, 1996, 1997; Rosenstone and Hansen, 1993; Wielhouwer and Lockerbie, 1994), and others have found a smaller effect on turnout and a large effect on the voting intention (Huckfeld and Sprague, 1992; Whitely and Seyd, 1994), no study has evaluated both effects in the context of a general election. Here, we find that canvassing significantly improves the vote share of the candidate, regardless of whether the mechanism is turnout-based or persuasion-based.

Table 21 gives details the substantive impact of increases Campaign Spending and increases in Contact Rates. Given that campaign spending tends to vary only slightly across marginal seats, the effect of campaign spending on election results may be even less significant than the table suggests. On the other hand, the variance of contact rates is much greater in marginal seats and can often extend to the full range of contact rates.
While most campaigns manage to achieve a short campaign spend of 100%, few campaigns manage to exceed contact rates of 30% of the electorate in the short campaign. Thus, marginal gains can be made by campaign teams that manage to achieve these contact rates.

Table 21 – Effects of campaign spend and contact rate on the Labour Party’s vote share at the 2010 General Election

<table>
<thead>
<tr>
<th>Campaign Spend</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% of Limit</td>
<td>0 %</td>
</tr>
<tr>
<td>30% of Limit</td>
<td>+ 1.3%</td>
</tr>
<tr>
<td>50% of Limit</td>
<td>+ 2.3%</td>
</tr>
<tr>
<td>100% of Limit</td>
<td>+ 4.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Rate</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% Contact Rate</td>
<td>0 %</td>
</tr>
<tr>
<td>10% Contact Rate</td>
<td>+ 1.7%</td>
</tr>
<tr>
<td>20% Contact Rate</td>
<td>+ 3.4%</td>
</tr>
<tr>
<td>30% Contact Rate</td>
<td>+ 5.2%</td>
</tr>
</tbody>
</table>

Campaign Mobilization and Structural Variables

The significance of the mobilization variable is interesting here. While a marginal seat is still unlikely to spend less than the ceiling, there is significant variation in the contact rates among marginal seats. It is therefore clear that the extent of the voter mobilization effort is a key determinant of the relative success of Labour Party candidates in the 2010 election. This is a powerful finding and is perhaps a clue to the relative efficacy of Labour Party campaigns. While persuasion campaigns may cancel one another out, mobilization campaigns may be greater for parties with greater support among non-voters.

The reason for this powerful finding, absent in other literature, may be that the campaign effects in other party systems may offset one another. However, for the Labour Party, given that much of their work and much of the effect of the variable involves mobilizing electors that would not otherwise vote. The relative extent of mobilization campaigns in party performance is indicative. As it is argued here, the demographics of Labour support suggests that a larger proportion of non-voters would support the Labour Party if they voted and therefore campaigning by the party may be expected to have a greater effect.

The results contradict the view that campaigns have no effect on electoral outcomes, contravening well known assertions that structural explanations are the sole observable determinants of electoral outcomes. However, this chapter does not contravene structural explanations. Indeed it highlights the erroneous assumption that campaigns and structural explanations are mutually exclusive. While the success of forecasting
models based on objective factors, such as party identification or variations in the macroeconomy, has been taken as evidence that campaigns do not matter, studies by Bartels (1997), Gelman and King (1993), and Iyengar and Petrocik (1998), and this one conclusively point to the impact of campaign activity.

The results do not contradict Campbell et al.'s (1960) compelling socio-psychological theory of voting on the stability of voters' preferences, nor Key's (1966) study noting the lack of movement in response to presidential campaigns, or more recent studies which find little reason to question the validity of the 'minimal effect' (Bartels 1992, 1993, 1997; Finkel 1993; Markus, 1992). This is because these papers are somewhat preoccupied with relatively minimal changes in voting intention. However, it may be argued that the 'minimal' aspect of the claim is questionable where up to up to 6 per cent of vote share in some constituencies would appear to be due to campaign activity. Although this is a small amount, given the relative marginality of contests it is quite likely that such a difference can affect the outcome of a given contest.

That campaigns have an effect is positive development. If mobilization campaigns produce significant gains, then parties are incentivized to ensure that citizens engage in the democratic process. Campaigns are the time when candidates and electors interact the most. If electors are, as per Converse (1964), woefully uninformed, then the incentives for political parties to engage electors and persuade them can be a positive mechanism for an informed democratic process.

**The Incumbency Puzzle**

The regression results in Table 22 detail the results for Hypothesis 2. In each model the 'Spend:Incumbency' interaction term gives the difference between incumbent and challenger spending. In the 'Basic Model' there is an observable difference between an incumbent and a challenger’s return on their amount spent. For the incumbent the effect is negative, whereas for the challenger the effect is highly significant. The inclusion of adequate control variables in the 'Full Model' have the effect of diminishing the difference between incumbent and challenger spending as observed in the 'Basic Model'. From the 'Full model' an incumbent's chances of campaign spending is no less effective than challenger spending. These results align evidence in the UK with those of PR systems where there is little or no observable difference between an incumbent and a challenger. The term is only significant when the controls for the candidate's chances are omitted.
Table 22- Modelling the marginal effect of incumbent spending over challenger campaign spending on party vote share; with and without variables controlling for the effects of contact rate and the candidate’s prospects through pre-campaign odds and their 2005 vote share

<table>
<thead>
<tr>
<th></th>
<th>Model without control variables</th>
<th>Model with control variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Std Error</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.102</td>
<td>0.007</td>
</tr>
<tr>
<td>Campaign Spend</td>
<td>0.228</td>
<td>0.021</td>
</tr>
<tr>
<td>Spend : Incumbent</td>
<td>-0.298</td>
<td>0.029</td>
</tr>
<tr>
<td>Incumbent</td>
<td>0.377</td>
<td>0.016</td>
</tr>
<tr>
<td>Contact Rate</td>
<td>0.175</td>
<td>0.039</td>
</tr>
<tr>
<td>Betting Odds (Probability)</td>
<td>0.109</td>
<td>0.010</td>
</tr>
<tr>
<td>Vote Share 2005</td>
<td>0.644</td>
<td>0.031</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.757</td>
<td>0.912</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.079</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Figure 18 highlights these differences graphically, showing the challenger-incumbent differential, ‘Spend : Incumbent’, to be highly significant in the basic model when control variables (‘Lab05g’, the Labour 2005 vote share; ‘Odds’, the market odds; and ‘Crate’, the contact rate) are not accounted for. The basic model also shows a highly significant effect for the campaign spending of a challenger (the variable ‘Spend’ in Figure 17) which is less significant for the full model. This difference is the result of an overestimation of challenger effects due to the correlation between a challenger’s spending and his or her prospects.
While these results do not entirely refute the difference between incumbent and challenger spending (there may still be a small insignificant impact), however they help to identify the mechanism through which majority of that difference appears. The results run counter the prior assertion that incumbent candidates are ‘saturated’ with the sort of recognition brought about by campaigning during their term in office (Jacobson 1978; Pattie, Johnston, and Fieldhouse 1995) and that that past success makes it more difficult to generate new votes (Denver and Hands, 1997). Not only do these results reaffirm the significance of incumbent spending as identified by Gerber (1998) and Green and Krasno (1988, 1990), but they go further to suggest that there is almost no difference between an incumbent and a challenger spending even in majoritarian systems once the relative chances of success is the same. That said, long-campaign spending may still be effective if it can be demonstrated to improve the candidate’s observable chances at the beginning of the short campaign. Contravening earlier assertions, incumbents may have an advantage during the campaign as they have an observable 3% advantage over challengers in the full model, ceteris paribus.

**Demographics of Voter Mobilization Campaigns**

**Individual-Level Effects of Campaigns**

Using the matched dataset, we regress a voter’s turnout – whether the elector voted or not – on the interaction between whether they were contacted in April, ‘Canvass’, and the demographic classification, ‘Mosaic’. The regression analysis controls for whether...
the turnout in the constituency in 2005 to account for the relative salience of campaigns in that constituency and either (1) the number of previous contacts, ‘Contacts’, or (2) the number of previous occasions where the respondent was identified as a Labour voter ‘LabourIDs’, for two different models. This second model accounts for both the likelihood that the elector will be contacted and the relative favourability of the elector towards the Labour Party. The differences between the two models are small and in both cases they confirm the assumption of the first hypothesis, that Labour party activity mobilizes voters to turn out and vote.

**Model 1:**

\[ Voted = \alpha + \beta_1 \text{Contacts} + \beta_2 \text{Turnout05} + \beta_3 \text{Canvass} + \beta_4 \text{Mosaic} + \beta_3 \text{Canvass: Mosaic} + \varepsilon \]

**Model 2:**

\[ Voted = \alpha + \beta_1 \text{LabourID} + \beta_2 \text{Turnout05} + \beta_3 \text{Canvass} + \beta_3 \text{DemGroup} + \varepsilon \]

The results for this regression are given in Table 23. With only marginal differences between the two models, Model 2 is chosen as the model to proceed with as it more closely reflects the mechanism with which campaigns operate.
Table 23: Modelling the effect of canvassing on turnout for different demographic groups; controlling for 2005 turnout, incumbent spending over challenger campaign spending on party vote share; with and without variables controlling for the effects of contact rate and the candidate’s prospects through pre-campaign odds and their 2005 vote share

<table>
<thead>
<tr>
<th></th>
<th>Model with Contacts</th>
<th>Model with Voter ID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>S.E.</td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.016</td>
<td>0.386</td>
</tr>
<tr>
<td>Canvass</td>
<td>-0.096</td>
<td>0.480</td>
</tr>
<tr>
<td>Group A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>0.161</td>
<td>0.374</td>
</tr>
<tr>
<td>Group C</td>
<td>0.646</td>
<td>0.721</td>
</tr>
<tr>
<td>Group D</td>
<td>-0.258</td>
<td>0.364</td>
</tr>
<tr>
<td>Group E</td>
<td>-0.266</td>
<td>0.381</td>
</tr>
<tr>
<td>Group F</td>
<td>0.353</td>
<td>0.358</td>
</tr>
<tr>
<td>Group G</td>
<td>-0.108</td>
<td>0.361</td>
</tr>
<tr>
<td>Group H</td>
<td>-0.413</td>
<td>0.366</td>
</tr>
<tr>
<td>Group I</td>
<td>-0.739</td>
<td>0.357</td>
</tr>
<tr>
<td>Group J</td>
<td>-0.839</td>
<td>0.359</td>
</tr>
<tr>
<td>Group K</td>
<td>-0.713</td>
<td>0.374</td>
</tr>
<tr>
<td>Group L</td>
<td>-0.477</td>
<td>0.362</td>
</tr>
<tr>
<td>Group M</td>
<td>-0.352</td>
<td>0.358</td>
</tr>
<tr>
<td>Group N</td>
<td>-0.278</td>
<td>0.358</td>
</tr>
<tr>
<td>Group O</td>
<td>-0.038</td>
<td>0.372</td>
</tr>
<tr>
<td>Canvass: Group A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canvass: Group B</td>
<td>0.439</td>
<td>0.510</td>
</tr>
<tr>
<td>Canvass: Group C</td>
<td>-0.407</td>
<td>0.969</td>
</tr>
<tr>
<td>Canvass: Group D</td>
<td>0.669</td>
<td>0.495</td>
</tr>
<tr>
<td>Canvass: Group E</td>
<td>0.649</td>
<td>0.522</td>
</tr>
<tr>
<td>Canvass: Group F</td>
<td>0.827</td>
<td>0.486</td>
</tr>
<tr>
<td>Canvass: Group G</td>
<td>0.937</td>
<td>0.491</td>
</tr>
<tr>
<td>Canvass: Group H</td>
<td>0.727</td>
<td>0.497</td>
</tr>
<tr>
<td>Canvass: Group I</td>
<td>0.475</td>
<td>0.483</td>
</tr>
<tr>
<td>Canvass: Group J</td>
<td>0.347</td>
<td>0.485</td>
</tr>
<tr>
<td>Canvass: Group K</td>
<td>0.524</td>
<td>0.508</td>
</tr>
<tr>
<td>Canvass: Group L</td>
<td>0.464</td>
<td>0.491</td>
</tr>
<tr>
<td>Canvass: Group M</td>
<td>0.392</td>
<td>0.485</td>
</tr>
<tr>
<td>Canvass: Group N</td>
<td>0.604</td>
<td>0.485</td>
</tr>
<tr>
<td>Canvass: Group O</td>
<td>0.253</td>
<td>0.504</td>
</tr>
<tr>
<td>Constituency Turnout 2005</td>
<td>4.866</td>
<td>0.245</td>
</tr>
<tr>
<td>Contacted Before - Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacted Before - Once</td>
<td>0.534</td>
<td>0.031</td>
</tr>
<tr>
<td>Contacted Before - 2 or 3 times</td>
<td>-0.083</td>
<td>0.057</td>
</tr>
<tr>
<td>Contacted Before - Over 3 times</td>
<td>-0.332</td>
<td>0.113</td>
</tr>
<tr>
<td>Labour ID – Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour ID – Once</td>
<td>0.914</td>
<td>0.039</td>
</tr>
<tr>
<td>Labour ID – 2 or 3 times</td>
<td>0.007</td>
<td>0.163</td>
</tr>
</tbody>
</table>

Kevin Cunningham

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The Demographics of Individual-Level Effects

To understand the marginal effects of mobilization campaigns for each demographic group we estimate the effects from Model 2. Our example as given in Figure 18 represents the marginal effect of canvassing on the likelihood of turnout for an elector has not been identified as a Labour voter before and resides in a constituency which had a 65 per cent turnout in 2005.

Across the Mosaic groups there is a clear, significant, and reasonably consistent observable effect of canvassing on the likelihood that the elector will turn out and vote. Apart from Mosaic Groups A and C, the marginal effect is positive. Both Mosaic groups A ('Alpha Territory') and C ('Rural Solitude') are very small in number and in the number of contacts they would have received from the Labour Party. So, it may be the case that we were merely unable to define the effects for each of these groups.

The two mosaic groups with the highest response to campaign activity are G ('Careers and Kids') and H ('New Homemakers'). These groups are very similar and represent groups who may have recently started a family, moved into a larger home, perhaps in a new area. They are perhaps yet to engage with the local party and this may be one of their first elections with which the consequences will have a significant impact. Assuming that as a student or young person one is not entirely independent.

The effect of the mobilization campaign broadly reflects the likelihood that the likelihood that the person will vote as opposed to the likelihood that they will not vote. The level of responsiveness is less dependent on the number of people that do not turn out within the group. Mosaic Groups which tend to support the Labour Party with lower rates of turnout are no more persuadable to turn out and vote than those groups with a higher propensity to turn out. This set of Labour Party Mosaic Groups are: I ('Ex-Council Communities'), J ('Claimant Cultures'), K ('Upper Floor Living'), L ('Elderly Needs'), M ('Industrial Heritage'), and N ('Terraced Melting Pot'). Furthermore, while the effects are dependent on the overall levels of turnout, the marginal responsiveness of Mosaic Groups F, G and H increase compared to I, J, and K where turnout is lower than what is revealed here.
The results would therefore suggest that mobilization campaigns are potentially just as effective for each of the major parties with support from across the range of demographics. Figure 8 represents the relationship between responsiveness to vote and the portion of non-voters in the demographic group. It reveals a relationship between non-voting and responsiveness that is weak and largely dependent on the inconclusive results from Mosaic Groups A and C. These results follow the assertion of Lutz and Marsh (2007: 540) who claim that increased turnout can often involve increases among demographic groups that already turn out in higher numbers.

This seems sensible as citizens may decide not to vote for a variety of reasons other than not being mobilized to do so. While it is certainly arguable that much nonvoting appears to stem from a lack of interest in, indifference towards or ignorance of elections and politics (Ragsdale and Rusk, 1993; Plane and Gershtenson, 2004), people also do not vote because they cannot, through a lack of resources or capacity, or because they do not want to (Verba et al., 1995, 3). This second set of conditions may be more significant among people from lower socio-economic groups and they therefore may override mobilization efforts.

While many studies have found that socio-economic status (SES) to be strongly correlated to participation (Franklin, 2002; Norris, 2002: 83). However, as per the weak relationship in Figure 19, it appears from our results that the success of voter mobilization efforts are not entirely dependent on turning out people from demographic groups more with larger numbers of people who currently do not vote.

Figure 18 – Turnout with and without canvassing broken down by demographic group to illustrate the marginal effect of canvassing

Kevin Cunningham
With this evidence we may reject the null hypothesis that campaigns are only effective for parties whose demographics hail from lower turnout, lower socioeconomic groups. Furthermore, the relative success of the Labour Party’s campaigns does not appear to be dependent on their relative support among non-voters.

![Figure 19](image1.jpg)

**Figure 19 - The relationship between propensity to turn out and the marginal effect of door-knocking taken as per cent non-voting versus marginal effect.**

Validating these results we may compare the modeled turnout rates with those observed from a YouGov poll in April 2010 as given in Figure 20. The results from the poll appear to be confirmatory showing the turnout rates to be very similar to those in the model, with Mosaic Groups I, J, and K having the lowest propensity to vote while Mosaic Groups A to G have significantly higher rates of turnout.

![Figure 20](image2.jpg)

**Figure 20 – The probability of turning out broken down by demographic group as determined by the YouGov Poll April 2010**

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7. Conclusions

Aims and Innovations

This chapter is concerned with the impact of election campaigns and the potential partisan effects of those campaigns. The campaign is the central moment in which the political class and the electorate interact. As Goldstein and Ridout (2004) have stated: ‘For the vast subfield of voting behavior and elections, determining whether political campaigns influence individual vote choice and election outcomes has become a Holy Grail.’ Certainly, understanding how campaigns affect the behavior of voters is a central issue in the study of political science.

Recent evidence of campaign effects have been observed in British elections (Clarke et al., 2004, 2009; Whiteley and Seyd, 1994; Pattie et al., 1995; Denver et al., 2003). However, these effects tend to rely on retrospective survey evidence of campaign organisers and members, which, in the light of the election result and the attachment to that result may not be the most reliable.

In 2010, in spite of receiving its lowest vote share since 1983, the Labour Party was successful in denying the Conservative Party an overall majority. Through attempting to forecast the election, many academics (e.g., Rallings et al., 2010) underestimated the number of seats that the Labour Party would win. This was in spite of relatively accurate polling figures on the percentage of the popular vote that the party would win. It has been acknowledged that the Labour Party’s campaign played a significant role in over-reaching its vote share (Fisher et al., 2011); however the conclusion of relatively accurate targeting (Fisher et al., 2006) is perhaps underdeveloped. A thorough analysis of the Labour Party’s campaign using actual data was therefore merited.

The study marks the first use of a complete campaign database from a national campaign, providing significant insights into campaign effects that field experiments, because of their lack of external validity, and campaign surveys, because of the potential for bias, could not. We can therefore observe that to a great extent the campaign activity of the Labour Party had a significant effect on its ability to prevent a Conservative majority.

The paper bridges the gap between the effectiveness of voter mobilization campaigns and their impact on election results. While significant evidence previously shows that mobilization campaigns are effective, the direct relationship between campaign mobilization and electoral results remains unobserved, meaning that the relationship

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between campaigns and election results also remains contested (Campbell, 2000; Finkel, 1993; Holbrook, 1996; Lodge et al., 1995; Wlezien and Erikson, 2001). The chapter presents a simple model of campaign activity incorporating both voter mobilization and persuasion effects. From this model we may observe how targeted voter mobilization campaigns can provide significant advantages to political parties.

While endogenous nature of campaign activity is a feature well-known to the campaign spending literature (see for e.g. Gerber 1998; Erikson and Palfrey, 1998) it is somewhat unaccounted for in the brief literature on campaign activity. Because a challenger candidate's campaign activity and campaign spending is broadly based on their expectations of winning, it is therefore likely that campaign activity will be positively correlated with the likelihood that they will win. Equivalently for an incumbent, the extent of their campaign effort is dependent on the likely risk of them losing. This campaign activity and campaign spending are likely to be negatively correlated with that incumbent's prospects. This reciprocal relationship makes it difficult to ascertain the true effects of campaign spending. To account for this potential endogeneity bias, we use pre-campaign odds for each candidate to derive the implied probability that a candidate will be elected prior to the short-campaign – the period when the money is spent and the recorded canvassing occurs.

To determine whether campaign effects are the result of voter mobilization activities we must analyse the effects of the party's door-knocking campaign at an individual-level. By doing so, we may also determine the extent to which the apparent effectiveness of campaigns conducted by the Labour Party (and not those conducted by the Conservative Party) may be a consequence of the demographics of the Labour Party's support. Given that support for the Labour Party's draws from demographic groups with a lower propensity to vote, it may be argued that the marginal effect of Labour Party campaigns will be a key driver of their campaign effects. While current analyses on the effectiveness of campaigns employ an implicit, seemingly implausible, assumption that all voters are equally open to influence, this chapter analyses the effectiveness of voter mobilization campaigns with respect to the demographic profile of voters.

To derive these individual-level effects we draw on a very large dataset of Labour Party contacts within 2.3 million electors in the East Midlands region. To account for the nature of political campaigning we use propensity score matching to match the group of contacted electors with a group of uncontacted electors with the same

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demographics and contact history. By doing this, we account for the extent to which voter mobilization campaigns target specific voters that they wish to turn out.

Findings

These conclusions reinforce the emerging consensus that campaigns matter and particularly that the voter mobilization aspect of campaigns matter. It is abundantly clear that the extent of the voter mobilization campaign is a critical conclusion as campaigns that contact a larger proportion of the electorate benefit significantly.

The magnitude of the gains made through canvassing and the relative importance of campaign spending are indications that campaigns are not merely about reinforcement (Holbrook, 1996: 613) or indeed voter mobilization, but underlining recent observations made by Osborn, McClurg, and Knoll (2010) campaigns also play a significant role in the persuasion of an elector's voting intention.

The results contravene Vavreck’s (2008) assertion that successful campaigns are limited to those where the incumbent can make a positive case of economic performance during their term in office. However, for this case, there is significant evidence that in spite of a poor economic outlook the incumbent Labour Government was able to manufacture campaign effects through campaign activity.

By adequately accounting for a candidate’s electoral prospects the difference between the effectiveness of incumbent spending and the effectiveness of challenger spending disappears. The result is notable as the previously observed inefficacy of incumbent campaign spending is often called a ‘major puzzle’ in political science (Moon 2002). The chapter therefore confirms that this ‘puzzle’ is a consequence of an omitted variable bias and that campaign spending has the same effect for both incumbents and challengers where they have the same chances of getting elected. Additionally, we also find a positive and significant ‘incumbency’ effect that is independent of the candidate’s pre-campaign chances, campaign spending and campaign activity. This advantage may be a consequence of an incumbent’s use of their office during their term in office, as per Benoit and Marsh (2007) and explains relatively high reelection rates of incumbents.

The result brings campaign effectiveness under the British majoritarian system in line with PR systems such as Belgium (Maddens et al. 2009) or Brazil (Samuels 2001) where the impact of incumbent spending is small or no different from challenger spending. A significant reason for the previous disparity was that there are many ‘safe’
seats under majoritarian electoral systems as in Britain (or the US). As such, campaign spending becomes a strong determinant of differences within incumbents or within challengers. On the other hand, under PR systems, particularly those with a larger district magnitude, there are very few if any ‘safe’ seats and the set of incumbents will each have relatively similar expectations of winning.

The individual-level analysis canvassing data first confirms the positive effect voter mobilization campaigns have on the likelihood that an elector will vote. The chapter finds and effect of roughly five to ten per cent on average. These findings are similar to previous findings in experimental studies.

However, contravening previous assertions in relation to the effectiveness of mobilization campaigns for people from lower socio-economic groups, voter mobilization campaigns are no more effective for people in demographic groups with a lower propensity to turn out than they are for people in groups with a higher propensity to turn out. The existence of a larger proportion of non-voters ‘available to mobilize’ in lower socio-demographic groups is nullified by the greater rate of mobilization of non-voters in higher turnout propensity groups.

The assertion that voter mobilization campaigns are the remit of parties with larger support among non-voters is therefore false. It would be incorrect to conclude that the Labour Party, with greater support among non-voters, is the only party (or indeed type of party) that can benefit from a voter mobilization campaign. Indeed, evidence from the 2005 election indicates that the technological developments by the Conservatives have yielded evidence of somewhat effective campaigning (Pattie and Johnston 2009).

For perhaps entirely different reasons, the most responsive groups to mobilization campaigns include Mosaic Group H, which includes a larger number of undecided voters than any other Mosaic Group. The results corroborate with the recent assertions made by Pattie and Johnston (2012) that campaigns which reach out to the moderately partisan supporters are most effective.

Implications

The effect of targeting is clearly important and may explain the observable differences in the effectiveness of Labour and Conservative strategies (e.g. Denver, Hands, and

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40 For certain demographic Groups, here noted A and C, electors are not responsive to voter mobilization campaigns.
Henig 1998; Pattie and Johnston 2003). For logistical reasons the partisan supporters of the Conservative Party may be more difficult to efficiently target. In a typical constituency partisan supporters of the Conservative Party tend to reside on the outskirts, in more rural settings, whereas partisan supporters of the Labour Party reside in the urban areas. The greater density of Labour Party supporters makes it significantly easier to conduct a mass mobilization operation.

The importance of targeting is not necessarily a new concept. Earlier Nuffield studies reported in 1959 ‘the ruthless emphasis on target seats’ (Butler and Rose, 1960: 135) and in 1964 ‘an explicit concentration on marginal seats’ (Butler and King, 1965: 216). However, the ability to coordinate an effective targeting strategy has been subdued by organizational difficulties. Indeed, of the 1983 election Butler and Kavanagh reported that ‘while parties have always had target seats, this has meant little in practical terms’ (Butler and Kavanagh, 1984: 212-3). Since then there has been rapid improvements in the professionalization of campaigning and application of results from academic work (Denver Hands and Henig, 1998). In the 1992 election, Denver and Hands (1997) showed how the Conservative’s very strong constituency campaigns in 1992 were concentrated in their safest seats while Labour Party campaigns were concentrated in marginal seats.

Campaign effects as a modern phenomenon

The campaign effects observed here are highly significant and are distinguished from earlier research from the Nuffield election studies, which consistently identify local campaigns to be ineffective (e.g., Curtice and Steed, 1997; Crewe, 1997).

The growing evidence of campaign effects which this paper supports may be a recent development, perhaps the result a partisan de-alignment of the electorate which began in the 1970s. Research by McAllister (in Farrell and Schmitt-Beck, 2002) shows that the proportion of voters who decide during a campaign has steadily increased in Australia, Britain, and the US. As voters have weaker commitments to their party it may be argued that they are increasingly responsive to campaign effects.

This upsurge in party activity may be beneficial for the democratic process through increased turnout and increased engagement among the electorate with the democratic process as parties seek to engage members of the electorate at a personal level that they would not that they would not have otherwise. They a way for candidates to reach out and be influenced by their constituents. Candidates will quickly learn if their policy proposals do not resonate with electors.

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Alternatively, new technologies and increasingly professionalized party staff may have opened up new opportunities for parties to more effectively target voters for persuasion and voter mobilization. Research tracking similar developments in the United States shows that in the context of significant improvements in campaign technology, voter targeting has become significantly more effective (Beck and Heidemann, 2010). The study reveals how US Presidential Elections since 2000 display a much stronger association between an elector’s partisan alignment and the likelihood that they will have been contacted by a party.

**Adverse effects of professional campaigning**

The magnitude of the gains made by campaigns has consequences for the nature of political competition. Campaign strategists in both the US and Britain may make the simple calculation that for many safe constituencies there is little reason to campaign or even to try to mobilize voters. They may instead focus all persuasion and mobilization resources on marginal constituencies that hold the balance of power. While the fact that some votes have always been important than others has been known for some time, until the digital age the ability of political parties to act on these differences has been relatively limited. Political Parties may now target ‘important’ voters with increasing accuracy, potentially leading to a sort of effective disenfranchisement of large portions of the electorate. On the other hand, the demonstration of incentives to improve communication channels between parties and electors is to be welcomed.

Given the relative success of targeting, one can only expect that use of ‘voter-surveillance’ techniques will expand to other countries with similar implications for each. Under majoritarian systems the effect of voter mobilization campaigns will be stronger as marginal shifts in party support can lead to significantly greater differences in the proportion of representation. While the effects in multi-party parliamentary systems may be smaller in that regard, they may still lead to comparative advantages for larger, better financed parties, making it more difficult for smaller parties.

**Campaign Finance Reform**

The findings in this chapter have implications for the debate on campaign finance reform. Some studies (for example those by Jacobson [1978] and Palda [1993]) find that incumbent spending is ineffective and that spending limits hinder the relative chances of challengers. Other studies find that incumbent spending can be more effective than challenger spending (see Gerber 2004) and therefore that a limit is
necessary to reduce this advantage. The results here indicate that no matter what limit is set the incumbent will have a significant advantage. Further work may explore an 'equilibrium' amount where the difference between challenger and incumbent spending is minimized. However, such a limit also depends on the level of expenditure that a challenger or the state will reasonably be able to contribute. Of course, these conclusions are drawn from spending during the short campaign. While the majority of activity occurs during the short campaign, there are clearly spending effects that occur prior to the short campaign.

**Activists and Party Positioning**

The final implications we may draw from this research the effect that it has on a party's policy positioning. While campaigns produce votes for a party that party's reliance on its activist base ensures that its policies must not alienate that base. Furthermore, if a party's campaigns operation has a significant advantage over its opposition in terms of its ability to mobilize voters, then all things being equal, it will be less reliant on the persuasion element of the campaign and as a consequence it will not be as incentivized to converge on the median voter as Downsian logic (Downs 1957) might otherwise dictate.
Appendix A

In recognition of the impact of the financial crisis on news media particularly in 2009, regressions were re-calculated excluding this period. The following regression tables reveal the relationship between immigration and integration policies and the volume of demands for the period from January 1995 to September 2008. The data therefore excludes the period following the collapse of the financial markets, bank guarantees and general collapse of the world economy.

Table A.1. Regression Results: Determinants of increases in the incidence of Anti-Migrant Immigration Claims, January 1995 to September 2008

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-2.354</td>
<td>0.301</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Anti-migrant policies</td>
<td>-0.078</td>
<td>0.037</td>
<td>0.037 *</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>1.336</td>
<td>0.675</td>
<td>0.048 *</td>
</tr>
<tr>
<td>Government position (Anti)</td>
<td>0.010</td>
<td>0.026</td>
<td>0.711</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>0.024</td>
<td>0.013</td>
<td>0.063</td>
</tr>
</tbody>
</table>

Table A.2. Regression Results: Determinants of increases in the incidence of Pro-Migrant Immigration Claims, January 1995 to September 2008

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.999</td>
<td>0.253</td>
<td>0.000 ***</td>
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<tr>
<td>Pro-migrant policies</td>
<td>-0.155</td>
<td>0.050</td>
<td>0.002 **</td>
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<tr>
<td>Foreign nationals per capita</td>
<td>0.315</td>
<td>0.475</td>
<td>0.507</td>
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<tr>
<td>Government position (Anti)</td>
<td>0.109</td>
<td>0.017</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.020</td>
<td>0.008</td>
<td>0.016 *</td>
</tr>
</tbody>
</table>

Table A.3. Regression Results: Determinants of increases in the incidence of Pro-Migrant Integration Claims, January 1995 to September 2008

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.504</td>
<td>0.252</td>
<td>0.045 *</td>
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<tr>
<td>Pro-migrant policies</td>
<td>-0.036</td>
<td>0.021</td>
<td>0.078</td>
</tr>
<tr>
<td>Foreign nationals per capita</td>
<td>-1.521</td>
<td>0.400</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Government position (Anti)</td>
<td>-0.093</td>
<td>0.016</td>
<td>0.000 ***</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-0.020</td>
<td>0.007</td>
<td>0.006 **</td>
</tr>
</tbody>
</table>
Table A.4. Regression Results: Determinants of increases in the incidence of Anti-Migrant Integration Claims, January 1995 to September 2008

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.927</td>
<td>0.324</td>
<td>0.000</td>
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<tr>
<td>Anti-migrant policies</td>
<td>0.280</td>
<td>0.046</td>
<td>0.000</td>
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<tr>
<td>Foreign nationals per capita</td>
<td>-1.717</td>
<td>0.671</td>
<td>0.010</td>
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<tr>
<td>Government position (Anti)</td>
<td>-0.085</td>
<td>0.029</td>
<td>0.003</td>
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<tr>
<td>Unemployment rate</td>
<td>-0.033</td>
<td>0.012</td>
<td>0.009</td>
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</tbody>
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