Abandon Ship?
A Preliminary Analysis of Strategic Voting Among Liberal Democrat Voters in the 2015 UK Election

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Abstract

The subject of strategic voting in single-member plurality elections has been extensively studied in political science. Strategic voting occurs when voters make vote choices using their ex ante expectations about the results of an election in addition to their sincere candidate preferences. While there is ample theoretical reason to believe strategic voting should occur under certain electoral conditions and institutional arrangements, the evidence for it in the literature has been mixed. I theorize that the polarization of the two main British political parties (in contrast to some previously studied cases) as well as the highly publicized predictions of defeat for Britain's primary third party, the Liberal Democrats, make the 2015 UK general election an ideal case for studying strategic voting. My preliminary analysis applies established methods of identifying strategic voting to the 2015 UK general election, and finds evidence that Liberal Democrat voters in the UK voted strategically for Labour and Conservative candidates under certain predictable conditions. These findings provide support for the theory that voters are averse to wasting their votes and under certain conditions will vote strategically in order to maximize their odds of affecting the outcome of an election.

Keywords: United Kingdom; elections; voting; strategic voting; tactical voting; electoral systems.

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The subject of strategic voting in single-member plurality elections has been extensively studied in political science (Tsebelis, 1986; Blais and Nadeau, 1996; Blais, Nadeau, Gidengil and Nevitte, 2001; Kim and Fording, 2001; Blais, 2002; Fisher, 2004; Blais and Turgeon, 2004; Alvarez, Boehmke and Nagler, 2006; Abramson, Aldrich, Blais, Diamond, Diskin, Indridason, Lee and Levine, 2009; Johnston and Pattie, 1991, 2011). The concept at its core is not difficult: voters may opt to cast their vote for a candidate who is not their first choice because they believe that their preferred candidate has no chance of victory (Cox, 1997). Tactical, or strategic voting (I will employ the two terms interchangeably) occurs when voters make choices use their ex ante expectations about the results of an election in addition to their sincere candidate preferences to make a vote choice.

The root causes of why voters sometimes use strategic voting have also been examined through the lens of political psychology. The impetus for this investigation comes from Duverger (1951), who argued that simple majority, single ballot systems tend to result in two-party systems. The causes for this sociological law are twofold. First, there is a "mechanical effect," wherein smaller parties are systematically underrepresented in the legislature by dint of the electoral system (Blais and Turgeon, 2004). The second cause is psychological, as voters will be averse to "wasting" their votes on parties who are unlikely to emerge victorious in the election (Cox, 1997; Blais and Turgeon, 2004). In a first-past-the-post (FPTP) system, the district-level victor emerges with all the spoils – there are no proportional mechanisms that could encourage voters to strategically stick with their sincerely preferred candidate. In such a system, we should then expect to see strategic voting among voters who sincerely prefer legislative candidates and parties that they perceive as not to be among the top two competitors in their district.

In his 2002 article "Why Is there So Little Strategic Voting in Canadian Plurality Rule Elections?," Blais (2002) applies these logics to the 1988 Canadian national parliamentary

election. Blais (2002) takes a novel approach, using the 1988 Canadian Election Study (CES) to measure individual voters' perceptions of each of the three major parties' chances in their "riding" (electoral district); as Cox (1997) suggests that these perceptions are a critical element in a voter's choice to tactically or sincerely vote. The 1988 Canadian election provides an ideal case for Blais (2002): the election was contested by the same three parties throughout Canada. Armed with the data on which party, the Liberals, the Progressive Conservatives (PC), or the New Democratic Party (NDP), each surveyed voter thought was weakest in each riding, Blais (2002) focuses on those voters who prefer the party that they perceive to be in third place in their riding. These voters, per Blais (2002), are precisely those who should be motivated to vote strategically.

Despite the strong theoretical underpinning for Blais' expected results, his research finds a paucity of strategic voting behavior by Canadian voters in the 1988 election. While fully 19% of Canadian voters preferred the party that finished third in their constituency, only one in eight of those voters actually strategically voted for one of the top-two finishers. Considering the expectations that we draw from Duverger (1951) and Cox (1997), these results are surprising. The reasons that Blais (2002) offers for this divergence are twofold. First, a large number of third party supporters preferred their party strongly and were more-or-less indifferent to their two alternatives. Second, a large number of these non-strategic voters overestimated their party's chance of winning, and thus did not predict that their vote would ultimately be wasted.

While the 1988 Canadian election was an ideal venue for the application of Blais' innovative methods, it is less clear whether his findings of weak strategic voting are widely generalizable. As Blais (2002) himself notes, the election was fought almost entirely on the Canada-US free trade agreement – an unusual policy axis for a national election. Furthermore, while the Liberal and Progressive Conservative parties may have differed in their stances towards the

trade agreement, there is extensive evidence that these two parties were relatively ideologically proximate in this era (Lambert, Curtis, Brown and Kay, 1986; Merolla, Stephenson and Zechmeister, 2008; Anderson and Stephenson, 2011). Like many major party systems around the world, Canada's parties have since polarized on a left-right axis (Johnson, 2014). It perhaps is no surprise then that NDP voters (who were supporting a more leftist party) in particular would be largely uninterested in strategic voting: their indifference between the two other parties may have, more-or-less, been ideologically rational. In short, here are compelling reasons to believe that the 1988 Canadian election is not emblematic of conditions for strategic voting across single-member plurality election contexts.

Since Blais' (2002) research approach is compelling, but his case is perhaps not generalizable, I propose a modified replication of his approach for the case of the 2015 UK general election. Unlike with Blais' case of the 1988 Canada election, the two largest parties in the UK, Labour and the Conservatives, are quite polarized, making voter indifference between them unlikely (Heath and Evans, 1994; Heath, 2013). Furthermore, previous studies on tactical voting in Britain have found evidence for strategic voting behavior in the 1987 and 1997 general elections (Galbraith and Rae, 1989; Alvarez, Boehmke and Nagler, 2006). The case of the 2015 British general election provides a unique set of circumstances not present in the 1987 and 1997 British general elections. Britain's long-time third party, the Liberal Democrats was in a coalition government with the Conservatives and controlled 57 out of the 650 seats in parliament. While high levels of public support netted the Liberal Democrats 22% of the national popular vote in 2010 (only seven points shy of Labour's vote share), public sentiment had turned sharply against the Liberal Democrats by 2015. In the 2015 general election, the Liberal Democrats won less than 8% of the popular vote nationwide, a downward swing of over 15%, and retained only eight out of their previous 57 seats.

Because of the dramatic negative shift in fortunes for the Liberal Democrats, which was

widely publicized during the lead-up to the election, the behavior of Liberal Democrat voters in the 2015 British general election is an ideal case study for strategic voting. There is evidence that the British public was well aware of the doomed fate of the Liberal Democrats in the then upcoming 2015 election, and understood that the following government would likely consist of one party: either the Conservatives or Labour (Cowley and Kavanagh, 2015; Fisher, 2015) More than Labour or Conservative voters, I hypothesize that Liberal Democrat voters were the most likely to doubt the chances of their party in their district, and thus vote strategically.

Strategic Voting and the 2015 UK Election

Though Blais (2002) does not find evidence for tactical voting in his study of the 1988 Canadian general election, the variables and methods he employs in his model provide a useful template for my own analysis of Liberal Democrat voter behavior in the 2015 British General election.[1] As defined by Blais (2002), there are two primary independent variables around which he centers his analysis, both of which I have adapted and utilized. These variables are both derived from each voter's perceptions of the likelihood of each party winning in his/her own constituency. The first of these variables, "No Chance," indicates how far behind voters perceive the Liberal Democrats to be relative to the party they perceive to be most likely to win. If those voters perceive the Liberal Democrat candidate to be the most likely victor in their constituency, the value for this variable decreases to 0. As "No chance" increases, I expect that tactical voting will likewise increase.

The second independent variable that my analysis centers on can be thought of as "Closeness" (Blais, 2002). This variable indicates how close the race between the Labour and Conservative candidates is in the constituency of the voter. As the race between those two candidates gets tighter, voters should be more likely to vote tactically for one of them, con-

[1] See appendix for a full coding and description of the variables.

tingent on the Liberal Democrat having a sufficiently high "No Chance" score.

I predict however that The effects of these two variables are unlikely to manifest independently from one another. When a Liberal Democrat voter perceives her own party's candidate to have a good chance of winning (low "No Chance"), her belief that the race between the Conservative and Labour candidates is close (a high "Closeness" score) is likely inconsequential. Similarly, if the Liberal Democrat voter perceives that the race between the Conservative and Labour candidates is not at all close (a low "Closeness" score), she is likely to vote sincerely for the Liberal Democrat candidate, even if she thinks the Liberal Democrat has no shot at winning (a high "No Chance" score). Thus, I hypothesize that strategic voting will be more likely when a Liberal Democrat voter believes the race between the Labour and Conservative candidates is close *and* the voter believes the Liberal Democrat candidate stands no chance of winning the constituency (district).

H_1: Liberal Democrat voters who believe that the Liberal Democrat candidate has little chance of winning their constituency *and* who believe that the Conservative and Labour candidates have similar odds of winning their constituency will be more likely to vote strategically for the Labour or the Conservative candidate.

To summarize the logic of the hypotheses presented above, Liberal Democrat voters will be less likely to vote sincerely for the Liberal Democrat candidate in their district when that candidate is believed to have a low chance of victory and when the race between the Labour and Conservative parties is perceived to be close.[2]

In addition to these key "expectation" variables, I also incorporate Liberal Democrat voters' evaluations of the leaders of the Labour, Conservative, and Liberal Democrat parties into

[2]Provided that they do not vastly prefer the Liberal Democrats to either the Labour or Conservative parties.

my model. The presumption I am making here is that when Liberal Democrats strongly favor their party's leader Nick Clegg *relative to* either David Cameron and Ed Miliband, the Conservative and Labour Party leaders, they will be less likely to vote strategically. In other words, if Liberal Democrat voters find one of the other major party leaders to be nearly as palatable (or even more so) than their own party's leader, they will be more likely to vote strategically for a party other than the Liberal Democrats (with whom they self-identify).

H_2: Liberal Democrat voters who favor the Liberal Democrat party leader relatively less than the Conservative or Labour party leader will be more likely to vote strategically.

Data and Methods

Much as Blais (2002) utilizes the 1988 Canadian Election Study as his source because of its questions regarding voter perceptions of each party's chance of winning the riding (district), I draw from the 2015 British Election Study (BES) for similar reasons. The British Election Study rolling daily panel data, which I utilize in my models here, is collected in waves throughout the general election campaign, including one post-election wave. The surveys are conducted online by YouGov and are weighted cross-sectionally.

For the purposes of this project, I utilize data from the fifth survey wave, which was conducted between 31st March 2015 and 6th May 2015. This wave immediately preceded the election, which was held on May 7th. 30,725 respondents participated in this wave, but I restrict my sample to the fifth wave's "core" sample, consisting of roughly 21,000 respondents which make up a cross-sectional group which is more representative than the full sample (and is recommended for use by the BES for research purposes). In addition, I further restrict my sample to residents of England, excluding voters in Wales, Scotland, and Northern Ireland, whose party choices create significantly diverging options for voters behaving tactically. Fi-

nally, I restrict my sample to self-identified Liberal Democrat voters, as I believe they are an ideal case study for strategic voting in this election (the rationale for this is explored in the preceding section). After restricting my sample to "core" Liberal Democrats in England, I am left with a sample of 1,092 voters.[3]

With this data I seek to adapt the "Strategic Voting among Third Party Supporters" model designed by Blais in his 2002 article to the context of Liberal Democrat voters in the 2015 election. Because, unlike with Blais (2002), my model is restricted to voters from one predetermined party, the "Party Rating" and "Party Identification" measures he utilizes are no longer suitable. Furthermore, the regional restriction I have placed on my sample eliminates the need to use regional dummy variables, as Blais (2002) does in his Canadian model. Instead, I rely primarily on the "No Chance," "Closeness" and "Leader Rating" (which I will refer to as "Relative Leader Favorability" for clarity) variables from Blais' model and apply them to the decision to strategically or sincerely vote by Liberal Democrat voters.

Let us now consider my simple model of strategic voting by Liberal Democrat voters. I employ a logit model to capture the probability of a voter voting strategically for a Labour or Conservative candidate instead of sincerely for the Liberal Democrat candidate:

$$\text{Strategic Vote} = \alpha + \beta_1(\text{No Chance}) + \beta_2(\text{Closeness}) + \beta_3(\text{No Chance*Closeness}) + \beta_5(\text{Relative Leader Favorability}) + \epsilon$$

My dependent variable, strategic voting, is a simple dichotomous measure. Voting strategically for a Labour or Conservative candidate is coded as a "1," whereas voting sincerely for a Liberal Democrat is coded as a "0." My "Relative Leader Favorability" independent

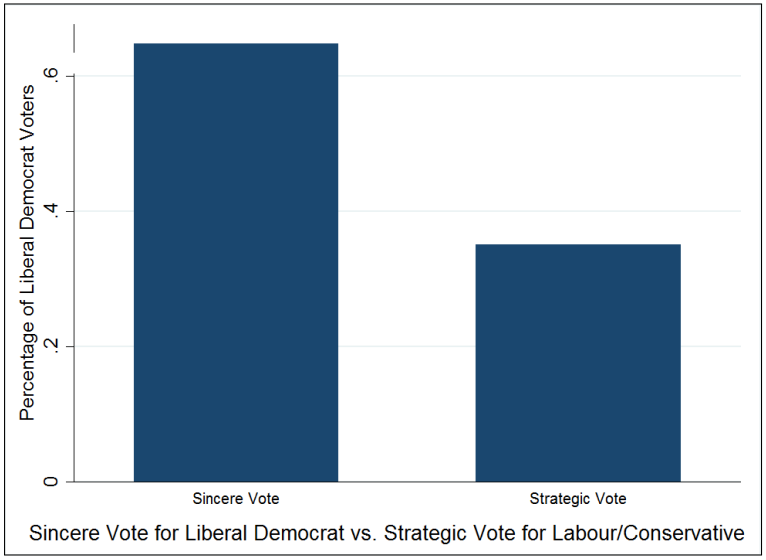
[3]I also run a robustness check which, in lieu of restricting the sample to self-identified Liberal Democrat voters, instead restricts the sample to voters who view the Liberal Democrats more favorably than all the other major parties. See the appendix for a more detailed description and visuals.

variable is a continuous scale, with higher values indicating a greater preference for Liberal Democrat leader Nick Clegg relative to the voter's second most liked leader. My "No Chance" variable is a continuous scale that measures the difference in perceived likelihood of victory between the party perceived to be winning and the Liberal Democrats in the voter's district. Higher ratings indicate lower perceived odds of a Liberal Democrat victory. The "Closeness" variable is generated by constructing a 1-100 scale that measures the absolute difference in perceived chance of victory between the Labour and Conservative parties in the district. Higher values indicate a closer perceived race between those two parties. I then divide this scale into terciles that can be treated as win likelihood gaps between the Labour and Conservative candidates that are perceived by the voters to be "not close," "somewhat close," and "very close." The "Closeness" variable used in the analyses in this paper uses these terciles rather than the original 1-100 values baseline "Closeness" values.[4]

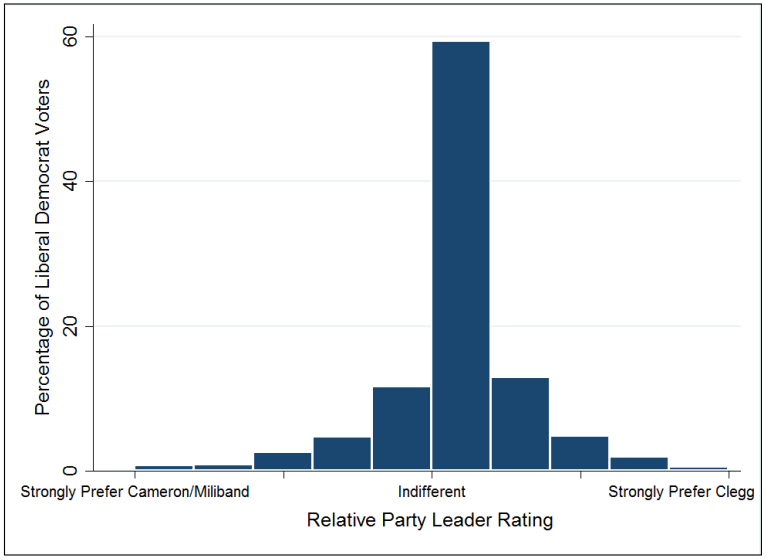
Unlike Blais (2002), I choose to interact the variables of "No Chance" and "Closeness." Blais (2002) chooses not to include this interaction in his models as he does not find it to be significant in his models. I include it though, as Alvarez and Nagler (2000) argue that there is strong theoretical reason to do so – "Closeness" and "No Chance" perceptions should logically have differing effects based on the value of the other (as explained in the preceding Theory section).

The distributions of the variables in my model are shown in the histograms displayed in Figure 1.

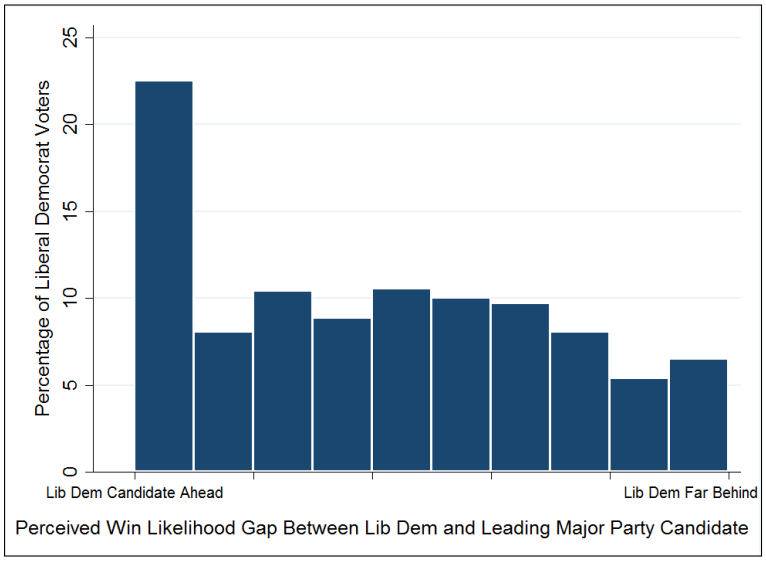
[4]See the appendix for a full summary of the "Closeness" terciles as well as the corresponding Labour vs. Conservative gap in perceived likelihood of winning the voter's constituency.



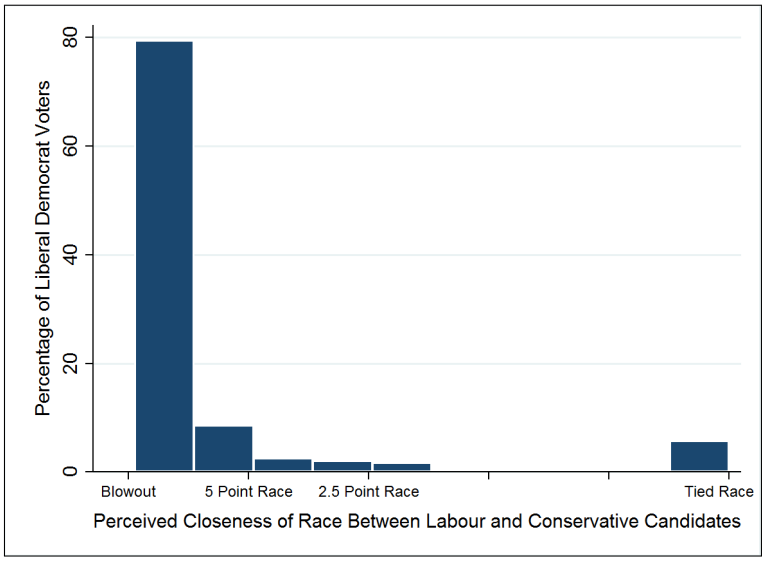
(a) Distribution of "Strategic Vote" Variable



(b) Distribution of "Relative Leader Rating" Variable



(c) Distribution of "No Chance" Variable



(d) Distribution of Baseline "Closeness" Scale

Figure 1: Distributions of Variables in the Strategic Vote Model

As we can see, there are a large number of cases for both sincere and strategic voting across the sample. Whereas Blais only finds that 13% of the voters in his study behaved strategically, voting for their second choice, over 35% of Liberal Democrat voters in my sample appear to have voted strategically. The leader ratings are distributed more or less normally around zero. The "No Chance" variable is fairly evenly distributed, though there are a large number of cases at the bottom end of the distribution, indicating the voters who perceive the Liberal Democrats to be ahead in their district. Finally, the "Closeness" scale demonstrates a significant rightward skew, but this is to be expected considering the exponential nature of the coding. Subdividing this scale into terciles (which I then use for "Closeness" in all of my subsequent analyses) partially addresses problems that could potentially arise from the skew of this variable.[5]

Findings

The figure below displays the coefficient plot for my logit model of strategic voting for Liberal Democrat voters in the 2015 British general election.[6] The x-axis on the plot corresponds to log odds coefficients for the independent variables, so values greater than zero (as indicated by a dotted line) indicate greater odds of strategic voting whereas values below zero indicate decreased odds of strategic voting.

[5]See the appendix for a full breakdown of variable coding and tercile summary statistics.
[6]For full model output, refer to the appendix.

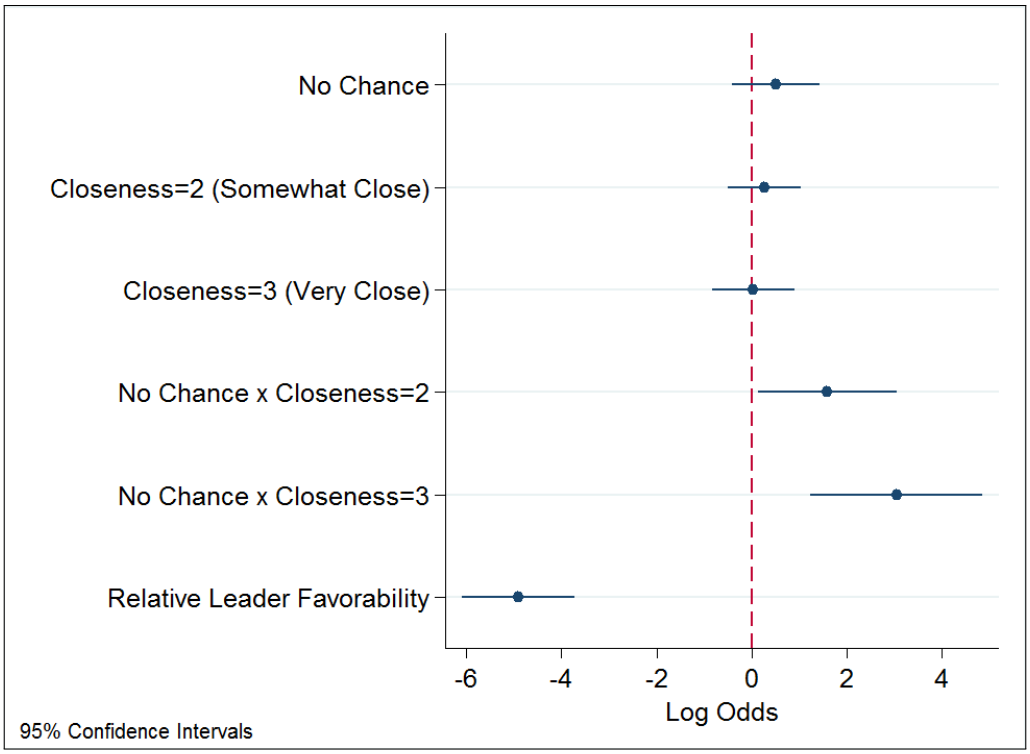


Figure 2: Logit Coefficient Plot for Strategic Voting Among Liberal Democrats in the 2015 British Election

In the strategic vote model displayed above, the predictive variables function mostly as expected, though neither of the constituent terms of the interaction are significant when the other is held at their minimum. The perception of the Liberal Democrat candidate having no chance of victory in the constituency ("No Chance") has no statistically significant effect on strategic voting likelihood when the perceived the race between the Labour and Conservative candidates is perceived to be not very close.[7] The perceived closeness of the race between the Labour and Conservative candidates ("Closeness") is also insignificant as a variable at all levels when the Liberal Democrat candidate is perceived as having a chance. As we can see in the interaction term however, strategic voting is significantly more likely when a voter believes the race between the Labour and Conservative candidates is somewhat or very close *and* the voter believes the Liberal Democrat candidate stands no chance of winning the constituency. Finally, as expected, as the voter's relative favorability of the Liberal Democrat

[7]The coefficient for "No Chance" is when Closeness=1, which is the baseline (omitted) level of "Closeness."

party leader Nick Clegg increases relative to the leader of either the Conservative or Labour parties[8], the likelihood of voting strategically decreases. These findings would appear to confirm my hypotheses H_1 and H_2.

To get a better visualization of how these variables affect strategic voting with regards to one another, we can examine the following series of predicted probability plots. The first of these plots is displayed below in Figure 3:

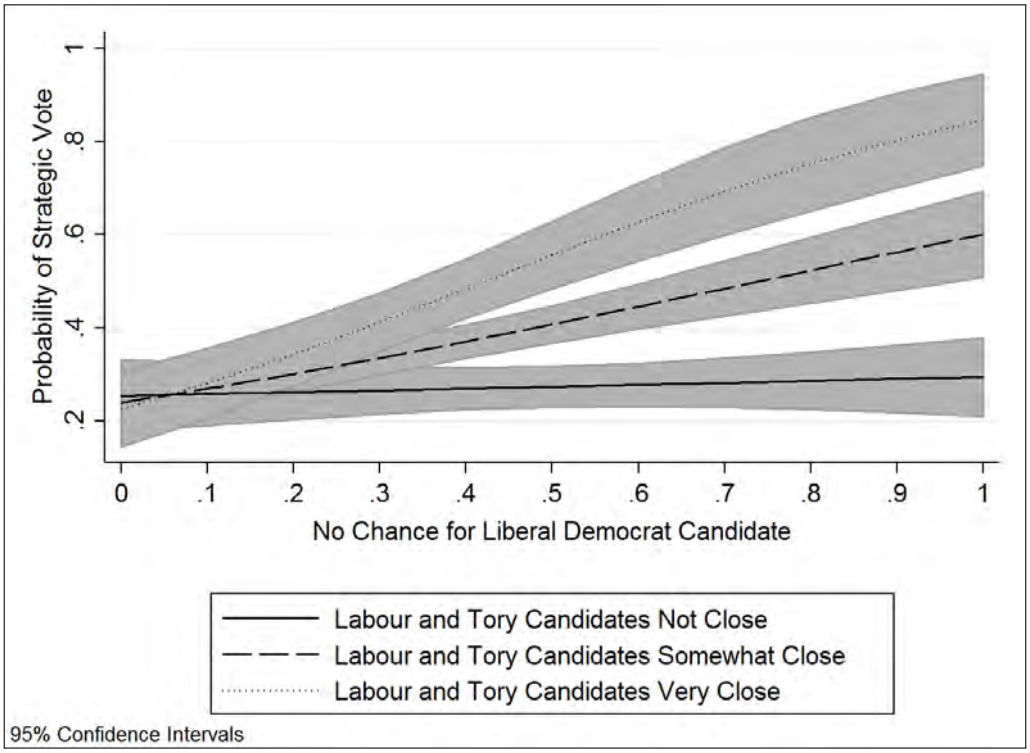


Figure 3: Strategic Vote Probability by "No Chance" and "Closeness"

Figure 3 shows the effect of perceptions of the likelihood of the Liberal Democrat winning in the voter's constituency ("No Chance") on her probability of voting strategically for a Labour or Conservative candidate. These effects are shown for three different levels of perceived closeness of the race between the Labour and Conservative candidates ("Closeness")[9]

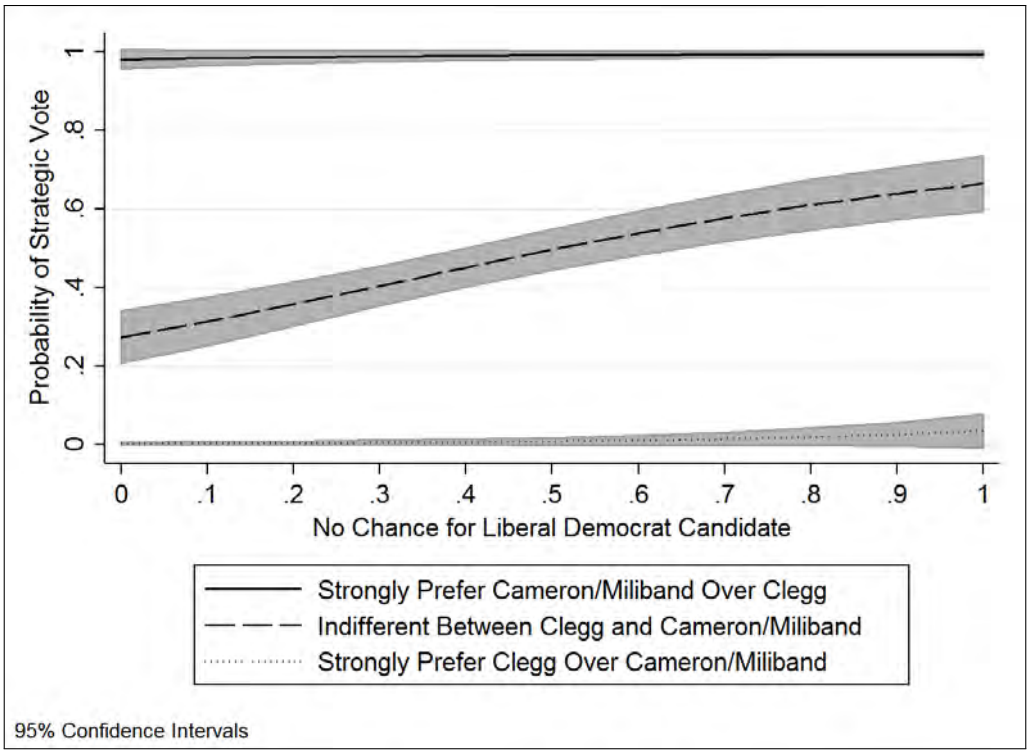
[8]Whichever of the two the Liberal Democrat voter likes more.

[9]See the appendix for a full summary of the "Closeness" terciles as well as the corresponding Labour vs. Conservative gap in perceived likelihood of winning the voter's constituency.

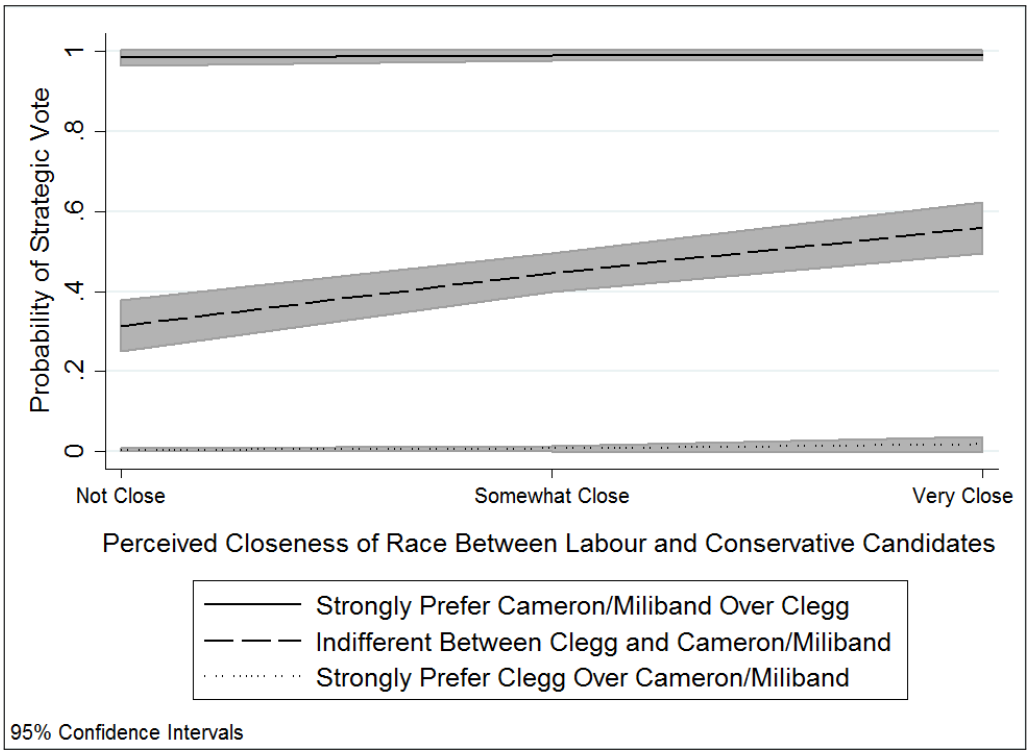
The results of this plot demonstrate the effects of the "No Chance" and "Closeness" variables at different levels. The overlapping 95% confidence intervals at the lower levels of "No Chance" indicate that there is no significant effect from "Closeness" until the odds of a Liberal Democrat defeat are perceived to be somewhat high (.4 on the "No Chance" scale). This is a logical finding: the effect of the closeness in the race between the Labour and Conservative candidates should not affect strategic voting if the voter believes strongly that the Liberal Democrat candidate (whose party they self-identify with!) will win.

While the probability of strategically voting barely increases as "No Chance" increases when either the Labour or Conservative candidate is perceived to have no shot at victory (a "not close" race between the Liberal and Conservative candidates, represented by the solid line in Figure 3), the odds increase more noticeably when the two-party Labour-Conservative likelihood of victory margin is perceived to be close (the "somewhat close" dashed line in Figure 3), and the odds of strategic voting exceed 80% when the Labour and Conservative candidates are perceived to have similar odds of winning the constituency (the dotted "very close" line in Figure 3). This finding is consistent with the psychological motivation for tactical voting predicted by Duverger (1951) and Cox (1997): voters will be averse to "wasting" their votes on parties who are unlikely to emerge victorious in the election. When Liberal Democrat voters' own party is perceived to have no chance and their other two options are both perceived to be viable, Liberal Democrat voters are most likely to strategically cast their vote for their second choice.

The following two predicted probability plots show the conditional probabilities of strategic voting when Liberal Democrat voters express different levels of favorability between the party leaders.



(a) Strategic Vote Probability by "No Chance" and "Relative Leader Favorability"



(b) Strategic Vote Probability by "Closeness" and "Relative Leader Favorability"

Figure 4: Predicted Probabilities for Strategic Vote by Relative Leader Favorability

The plots in Figure 4 show the marginal effects of "No Chance" and "Closeness" at three different levels of voters' relative preference for Liberal Democrat leader Nick Clegg:

1. When the voter strongly prefers either Cameron or Miliband to Clegg (solid lines)
2. When the voter is indifferent between Cameron/Miliband and Clegg (dashed lines)
3. When the voter strongly prefers Clegg to either Cameron or Miliband (dotted lines)

The results in these two predicted probability plots are in line with H_3. Liberal Democrat voters who strongly prefer Cameron and Miliband to Clegg (their own party's leader) are nearly certain to vote for another party no matter the level of "Closeness" or "No Chance." For Liberal Democrat voters who strongly prefer Clegg to both Cameron and Miliband, the odds of voting for another party are near zero regardless of the level of "Closeness" or "No Chance." When voters like either Cameron or Miliband as much as Clegg however, the voters perceptions of the closeness of the Labour-Conservative race and the odds of victory of the Liberal Democrat candidate *do* affect their probability of voting strategically.

Conclusion & Future Research

While there may be additional variables that contribute to strategic voting beyond the ones I outline here, it is clear from the model I have utilized here that the "Closeness," "No Chance" and "Relative Leader Favorability" variables have a significant impact on voter's decision to strategically vote. Unlike Blais (2002), whose study I use as a template for my own, I do find evidence that, under certain conditions, voters in the 2015 UK general election behaved strategically. Specifically, Liberal Democrat voters were more likely to vote strategically when they believed the Liberal Democrat candidate in their constituency had no chance of victory *and* when they perceived the gap in win likelihood between the Labour and Conservative candidates to be narrow (H_1). Liberal Democrat voters were also more likely to vote strategically when their preference for their party leader, Nick Clegg, was small

(or negative) relative to either the Conservative or Labour Party leader (H_2).

Figures 3 and 4 in the preceding section demonstrate that the effects of the variables in my model on the probability of strategic voting are as I predicted in my hypotheses. Figure 3 shows that how close the election between the Labour and Conservative candidates is perceived to be affects the probability of Liberal Democrat voters voting strategically in their constituency, but is contingent on the Liberal Democrat candidate being perceived as not having a high chance of victory. Furthermore, the voters whose strategic vote probability is affected by these "Closeness" and "No Chance" variables are those for whom the Liberal Democrat party leader Nick Clegg is neither loved nor reviled (see: Figure 4), but rather someone whom they have mixed feelings towards compared to the party leaders of Labour or the Conservatives, who might reasonably be their second choice.

To place this study in the context of the larger political science literature on strategic voting, it is clear that the models proposed by Blais (2002) and Alvarez and Nagler (2000) serve as useful tools for assessing strategic voting. Examining voter perceptions of the state of the district-level electoral contests logically comports with the theory of psychological aversion to vote wasting that Cox (1997) advances. While Blais (2002) may not have found much evidence of strategic voting in the case of the 1988 Canadian general election, my investigation into Liberal Democrats in the 2015 UK general election suggests that strategic voting occurred, and for predictable reasons. I theorize that the polarization of the two main British political parties (in contrast to Canada's Liberal and Progressive Conservative parties in 1988) as well as the highly publicized public predictions of the Liberal Democrats' defeat leading up to the 2015 UK election may account for this difference. Further research is needed however to examine why this difference exists across cases.

While the model of Liberal Democrat voters' strategic voting presented here is a signif-

icant first step in my study of tactical voting in the 2015 UK general election, additional research would greatly benefit the strength of my claims. My model currently chooses to only examine the behavior of Liberal Democrat voters, who I propose are an ideal case study for strategic voting in the election. Though this may be true, there is ample theoretical reason to believe voters in other parties may have voted strategically as well. For example, United Kingdom Independence Party (UKIP) voters may have voted strategically in districts where they thought their candidate stood little chance and the Conservative candidate needed a boost to overcome his/her Labour or Liberal Democrat opponent (or vice versa). Similarly, we might imagine Labour voters strategically voting for Liberal Democrat candidates if they believe Labour stands no chance in their constituency but the Liberal Democrat candidate does. While my model can be defended on the grounds that it is highly unlikely that many Liberal Democrat voters would vote strategically for parties other than Labour or the Conservatives in all but a few districts (where they might conceivably vote for the Green Party), a more comprehensive approach, perhaps using a multinomial model, would nevertheless account for voters in other parties.

Further research might also attempt to include variables in addition to the ones used in this model. It might be useful, for instance, to incorporate some measure of voter political knowledge into the model, which may in fact be correlated with the electoral marginality of the constituency as well. Indeed, there is evidence that British voters in the most competitive constituencies pay closer attention to elections and are generally more politically aware (Milazzo, 2014), which may affect their propensity to vote strategically.

It would also be worth considering the concept of "district embededness" put forth by Shugart and Taagepera in their forthcoming book *Seats From Votes*. This concept of "embededness" poses a challenge to Duverger's Law, which suggests that first-past-the-post contests, such as those in the UK or Canada, will result in two dominant parties. Shugart and Taagepera

argue that national level politics affect district-level races, which inflates the effective number of vote-earning parties at the district-level above two in these first-past-the-post-systems. In the context of this forthcoming publication, it may be worth reevaluating the underlying psychological motivation for tactical voting in future analyses.

In conclusion, while there is certainly room to expand upon the analysis presented in this paper, it does provide preliminary evidence that additional research into strategic voting in the 2015 UK election is a worthwhile endeavor. Since the variables drawn from the Blais (2002) model appear to serve as useful predictors of strategic voting for Liberal Democrat voters, the clear next step is to see whether this is the case with voters of other partisan affiliations as well. If I find in future research that strategic voting in the 2015 UK general election was a behavior exhibited across partisan categories in the voting public, then the often-debated theory of strategic voting will have by a new and useful case study.

Appendix

Survey Question Wording

- *Strategic Voting*: "And if there were a UK General Election tomorrow, which party would you vote for?"
- *No Chance*: "How likely is it that each of these parties will win the General Election in your local constituency? Please drag and drop each item either onto the scale or into the 'Not sure' box..."
- *Closeness*: "How likely is it that each of these parties will win the General Election in your local constituency? Please drag and drop each item either onto the scale or into the 'Not sure' box..."
- *Relative Leader Favorability*: "How much do you like or dislike each of the following party leaders?"
- *Party ID*: "Generally speaking, do you think of yourself as Labour, Conservative, Liberal Democrat or what?"
- *Party ID, Thermometer-based (used in appendix robustness check only)*: How much do you like or dislike each of the following parties?

Variable Coding

For all analyses presented in this paper, the variables were coded as follows:

- *Strategic Vote*: (0) sincere vote for Liberal Democrats, (1) strategic vote for Labour or the Conservatives
- *No Chance*: (0-1 semi-continuous scale) Difference between expected win chance of party perceived to be winning in the constituency and the Liberal Democrats, (0) Liberal Democrat candidate perceived to be ahead in the constituency

- *Closeness, Baseline Scale*: (1-100 semi-continuous scale) 1/(absolute value of perceived Conservative candidate win chance - perceived Labour candidate win chance), (100) No difference between Conservative and Labour candidates' perceived odds of victory in the constituency.

- *Closeness, Terciles (created from previous variable)*: (1) race between Labour and Conservative candidates not perceived to be close, (2) race between Labour and Conservative candidates perceived to be somewhat close, (3) race between Labour and Conservative candidates not perceived to be very close

- *Relative Leader Favorability*: (-1 to 1 semi-continuous scale) Reported like of Liberal Democrat party leader (Nick Clegg) - the reported like of either the Conservative party leader (David Cameron) or the Labour party leader (Ed Miliband), whichever is liked better

- *Party ID, Thermometer-based (used in appendix robustness check only)*: (0) strongly dislike, (1-9) increasing gradations of party favorability, (10) strongly like

Summary Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Strategic Vote	871	0.35	0.48	0	1
No Chance	969	0.41	0.30	0	1
Closeness Scale	1,022	8.65	17.73	1	100
Closeness Terciles	1,022	2.00	0.83	1	3
Relative Leader Favorability	1,068	0.07	0.25	-1	1

Table 1: Summary Statistics of Dependent and Independent Variables

Full Output of Logit Model

Table 2 below shows the full output for the logit model utilized in this paper (the "Full Model"). It also reports a "Clean Model" that omits the leader favorability control variable. As we can see, the substantive interpretation of the interaction effect holds across these two models.

Variable	**Full Model**	**Clean Model**
No Chance	0.51	0.61
	(0.47)	(0.46)
Closeness=1 (Not Close) (baseline)	—	—
Closeness=2 (Somewhat Close)	0.26	0.33
	(0.39)	(0.38)
Closeness=3 (Very Close)	0.03	0.17
	(0.44)	(0.42)
No Chance X Closeness=1 (Not Close) (baseline)	—	—
No Chance X Closeness=2 (Somewhat Close)	1.59*	1.28
	(0.74)	(0.69)
No Chance X Closeness=3 (Very Close)	3.04**	2.51**
	(0.93)	(0.82)
Relative Leader Favorability	−4.91****	n/a
	(0.61)	
Constant	−1.14***	−1.46***
	(0.29)	(.31)
N	765	772
Log pseudolikelihood	−569.95	−689.14
Pseudo R^2	0.22	0.07

Logit coefficients & robust standard errors reported.

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

Table 2: Logit Model of Strategic Voting among Liberal Democrats in the 2015 British Election

"Closeness" Variable Tercile Summary Statistics

The table below summarizes how the original 1-100 values of the baseline "Closeness" scale are sorted once partitioned into terciles. Recall that baseline "Closeness" measure refers to the absolute difference in perceived win likelihood between the Labour and Conservative candidates in the district. The "Closeness" variable used in the analyses in this paper uses the terciles summarized below rather than the raw 1-100 values. To provide an example, a 30% value in the "Win Likelihood Gap" column could mean that the voter perceives the Labour candidate having a 55% chance of winning and the Conservative candidate 25% chance of winning (or vice versa).

Perceived Closeness	Min Scale Value	Max Scale Value	Win Likelihood Gap
Not Close	1	1.75	57%-100%
Somewhat Close	1.79	5	20%-57%
Very Close	5.26	100	0%-20%

Table 3: Terciles for Perceived Difference in Win Likelihood Between Labour and Conservative Candidates

Robustness Check: Party ID Using Feeling Thermometers

In this paper, I restrict my analysis to British voters who self-identify with the Liberal Democrats. Though this decision to use self-identification as the basis for declaring these voters to be Liberal Democrats is in line with the strategic voting literature, I also take an alternate approach that instead restricts the sample to voters who like the Liberal Democrats more than the other national British parties.[10] The predicted probability graph below shows the effect of perceptions of the likelihood of the Liberal Democrat winning in the voter's constituency ("No Chance") on his/her probability of voting strategically for a Labour or Conservative candidate. This graph is a replication of Figure 3 from this essay, but with the sample restricted using this alternate Party ID approach based on expressed feelings towards the parties in the 2015 BES.

[10]The Conservatives, Labour, UKIP, the Greens, and the BNP

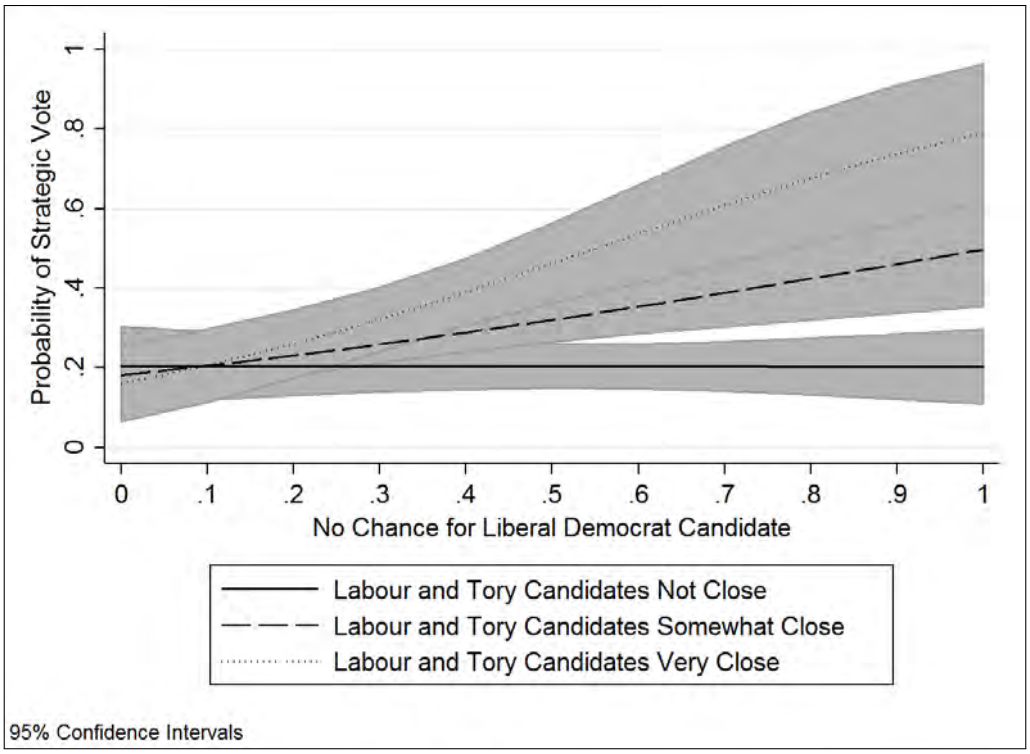


Figure 5: Strategic Vote Probability by "No Chance" and "Closeness" (Using Feeling Thermometer PID)

As we can see in Figure 5, the effects of my key variables, "Closeness" and "No Chance," on strategic voting are in line with those presented in the body of this paper. The statistical significance of the effects at different levels of perceived closeness between the Labour and Conservative candidates is reduced, as the N-size of the sample has been diminished from 1,092 to 514 voters by using this thermometer-based measure of Party ID. As before, when Liberal Democrat voters' own party is perceived to have no chance and their other two options are both perceived to be viable, Liberal Democrat voters are most likely to strategically cast their vote for their second choice.

The similarity of these results to those presented in the paper suggests that my findings are robust to alternate coding schemes for partisanship.

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