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## THE RELEGATION AND CHAMPIONS LEAGUE EFFECTS

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### **Abstract**

The purpose of this analysis is to study whether a football team's performance in the English Football League affects the re-election of the incumbent MP. To investigate the question "Are voters blind?". I.e., Do voters take events out of the hands of the incumbent politician into account when voting in an election? The main hypotheses investigated are (1) there is a negative effect of threat of relegation on incumbent vote share in the UK and (2) there is positive effect of other footballing outcomes such as Champions League qualification on incumbent vote. Using OLS regressions on football and election results between 1979-2019, this paper finds that there is a positive significant relationship between positive footballing outcomes on incumbent vote share. There is also a negative relationship between relegation and incumbent vote share. The results also find significant results in regards to turnout and The Labour Party specifically.

*Keywords:* Voter Behaviour, General Elections, Voter Blindness, UK, Re-election, Turnout, The Labour Party

*JEL Codes:* D02, D72, D91, Z29

## ***1. Introduction***

This analysis studies the research question, does a football team's performance in the English Football League affects the re-election of the incumbent MP? To investigate the topic "Are voters blind?". I.e., Do voters take events out of the hands of the incumbent politician into account when voting in an election? It has been established in the psychological literature that mood unconsciously affects evaluation, including political evaluation (Schwarz and Clore, 1983). A positive mood directly improves the favorability of whatever is on the mind. Does one's transient mood effect their salient voting preference and the election result?

Specifically, the main hypotheses that will be investigated are (1) there is a negative effect of threat of relegation on incumbent vote share in the UK and (2) there is positive effect of other footballing outcomes such as Champions League qualification on incumbent vote share in the UK. The effect of footballing outcomes on turnout and The Labour Party in particular, will also be investigated.

Previous research (Healy, Shortell, 2021) has provided us with some interesting statistics in regards to elections and relegation from the Premier League. Vote share for the MPs of the 3 teams relegated in 2019 went down for both Labour and Tory candidates. In 2017 one incumbent was not re-elected, another's winning margin went down, and one did not run again. In 2015, the same thing happened as in 2017. This circumstantial evidence provides motivation to use more rigorous analytical methods to determine if voters do indeed behave blindly in the wake of football relegation.

To test this hypothesis, the threat of relegation from the Premier League/First Division or the Championship/Second Division (PL or CS) from 1979-2019 is checked to see if it has an effect on the election result. The term "threat of relegation" is used, as both the general elections and the end of the season happen in May but often the elections take place first. However, when this is the case, there will not be more than 2 games remaining in the season out of a total of 38-46 and quite often the 1, 2 or even all 3 of the teams have already been relegated at this point, but we must note that it is possible that the team has not yet been

relegated. Nonetheless, the threat with a maximum of 2 games remaining in the season should be sufficient, so this is defined as the bottom 3 teams on the day of the election, as it will be the bottom 3 that are eventually relegated. This paper also checks whether a team is in position to qualify for Europe, has an effect on the outcome of the election.

The top two divisions of England are used in this study, as they are the most and 4<sup>th</sup> most attended leagues in Europe in 2019. Each football team was matched using the postcode of their stadium to a constituency. In three cases, two teams have their stadiums in the same constituency. All six teams were excluded from the regressions. This was done instead of using the clubs training ground, as often the stadium may be based in an urban dense city, more likely to vote left. However, often the training ground is based in the suburbs or more rural areas, more likely to vote right, which could be seen as more bias in the data.

The set of 40 years, 1979-2019, are used as 1979 was the first time 3 teams were relegated in an election year. Also, see 11 general elections held in May and June within this data set. This offers up to 66 teams in the relegation zone during the election. However, given that there are some cases where two teams share a constituency, the number marginally decreases. For example, both Craven Cottage and Stamford Bridge are the homes of Fulham and Chelsea respectively. Both these stadiums are in the 'Fulham and Chelsea constituency'. As it is possible that Chelsea have won the league and Fulham and been relegated in a given year, and suppose Chelsea is the more supported team, previous literature (Miller, 2013) suggests we could see a positive effect on the vote share of the incumbent and the more historically successful team should be used. However, in other constituencies, the lines are less clear. For example, Aston Villa and Birmingham share the same constituency. Hence, if there are two teams in one constituency, they have both been excluded from the dataset. Liverpool and Everton also share the same parliamentary constituency, however, neither team has been relegated during this time frame.

I have decided to use the parliamentary general elections in the UK. This is because not all local elections happen at the same time, hence it is possible to have 0 occasions where a team is relegated in the same month as an election. Furthermore, the relatively small

constituencies provide a high probability that the locals support the local team. Local elections are very much 'second order' elections in England. In common with elections to the European Parliament, they suffer from low turnout, typically 30-40%, whereas general elections in the period studied are between 60-76%. Moreover, it is possible that turnout will play a role in the study and often general elections are held at the same time as the local election, inflating the turnout and rendering it statistically unusable. Finally, general elections are held within a month of the end of the season, meaning supporters' emotions are at their highest. If elections took place 5 months after the end of the season, the motion would be less justified. However, this does not mean local elections would not add to the study, in a further study, this could also be done.

The final reason to study English and Welsh constituencies is the Single-member electoral divisions i.e., first past the post (FPTP), meaning only one member from each constituency gets elected and can be seen as the representative. In other words, we will not have the situation where 2 of 3 MPs get reelected and 1 does not.

To further check the hypothesis, the effect of English football on UK elections in general, promotion play-off, automatic promotion to the Premier League, winning any domestic or international cup will also be included in the model.

I believe relegation should be the main focus of the paper for the following four reasons. Firstly, previous studies have looked at the effect of positive shocks on vote share, however, to the best of my knowledge, the effect of a negative uncontrollable shock is yet to be explored. Secondly, people are loss averse, the average sports fan is no different, relegation of one's football team brings more pain than promotion brings joy. Hence, I would expect a bigger effect from relegation than any other treatment group. Thirdly, relegation could lead to someone not just feeling worse and hence worse about their area but it could also lead them to just not being bothered to vote, decreasing turnout which could lead to an indirect effect on the result. Finally, relegation also gives us more treatment group data points than any other. However, none of this should take away from the relevance of European qualification.

The paper is structured in the following way. Section 2 provides context behind the study. In the Section 3, gives an overview of the existing literature in the field of random and sporting events on political outcomes. Section 4 provides a description of the data used and shows how the dataset was prepared for the estimations along with some basic statistics. Section 5 presents the empirical strategy and goes into further detail on the dependent and independent variables. Section 6 reports and discusses the preliminary results. Finally, Section 7 concludes.

## **2. Context**

Football has long been intertwined with British life and culture. In England, football has a significant effect on the lives of the public as it's the most played and viewed sport in the country. The Premier League is the world's most attended league with the aggregate attendance of over 14 million, an average of 40,000 per game and more than 600 million viewers in 2019. We also must include England's reputation for a more distributed level of support across teams, this can go down to even lower levels. E.g., Sunderland in the 3rd division averaged an attendance of 30,000 people in 2019 at home games. Astonishingly, The Championship, the English second division was the third most attended league in European football during the 2016-17 season, higher than La Liga, Serie A and Ligue 1. Hence, I believe the assumption that the most supported team in each constituency is the local one, is justified by the high levels of attendances of the smaller teams and the near sell-out crowds of all teams at Premier League/First Division and Championship/Second Division level.

Football has been seen as the sport of the working-class, while The Labour Party has also been historically the favoured party of the working-class. The link can be seen as 35 of the 44 teams in the top 2 divisions were in Labour constituencies in 2019, despite only having 32 percent of the popular nationwide vote and losing the majority of the elections in the sample data. Hence, we may see a larger effect as a result of the football results on the Labour

Party.

Anecdotal evidence of showing the effect football has on an election and in particular, The Labour Party, comes from when Labour Prime Minister Harold Wilson decided to hold the 1970 general election during the World Cup. Only 4 days before the election, in a repeat of the 1966 World Cup final, England were knocked out. On Sunday June 14, England had lost against West Germany 3-2, despite being favourites to win and leading 2-0 with 68 minutes played. One article from The Times wrote following the election that “could it have been that Harold Wilson is 2-0 up with 20 minutes to play?”. All but one of the final opinion polls put Labour ahead, but a 5% swing meant the Tories surprisingly stopped Wilson’s six-year reign as Prime Minister. Labour lost 76 seats. Wilson himself believed that England losing had played its part. “People get fed up with their government, like supporters get fed up with a team. And that’s what happened. When I heard we lost 3-2, I thought there’d be an effect. And I did hear a lot of voters saying ‘Oh, I can’t stand anything after this.’ It had some effect on the election. Not decisive, of course.” Generally, and statistically supported in the appendix (Table 12), a higher voter turnout on a nationwide bases, tends to favour Labour and in 1970 only 72 per cent of the electorate voted, down from 76 per cent in 1966, so it’s possible many Labour supporters simply stayed at home. The following election, held in February 1974, the turnout went up to 79%, Labour had retaken the majority. Further supporting the effect of mood and football results on election results and further justifying the research of effect of football results on electoral turnout.

The relationship between an increase in turnout and Labour vote share needs to be justified. If a constituency has a consistently high turnout, it tends to favour conservative. However, if there is an increase in turnout, it tends to be in favour of Labour, I believe this is because conservatives are more likely to vote. Also, the group of people who might vote tend to be more left wing, hence we see, on a constituency level, a positive relationship between turnout and the conservative vote share but also a positive relationship between change in Labour vote share and turnout. Hence, the Labour vote is more affected by mood.

### 3. *Literature Review*

There are a number of papers that focus on the influence nonpolitically determined events have on voting behaviour. Perhaps most notably Achen and Bartel's 2002 paper. This paper finds that voters regularly punish governments for "acts of God", as long as responsibility for the event itself can somehow be attributed to the government in a persuasive story within folk culture. The electorate will take out its frustrations on the incumbents and vote for other parties. One of the topics studied was the effect of shark attacks on the U.S. 1916 presidential election. Where they found the evidence for the "shark effect" to be quite strong, using election results at the New Jersey County level. Where beach counties, whose economies are heavily reliant on tourism, had lower than expected vote rates for incumbent President Woodrow Wilson, after a series of unexpected shark attacks that year. These are counties that have high levels of immigration, which meant there was the need for controls such as the "hyphen effect", as German-Americans and Irish-Americans were considered less likely to vote for Wilson because of his potential entry into World War 1 on the side of the British. However, it could be considered justified to hold the government accountable for the responsibility of general public safety, as their preparation for and reaction to these events could be considered insufficient, hence legitimising a change of one's vote.

However, there are also other papers, such as Bagues, M., & Esteve-Volart, B. (2016) that measure the effect of random, inconsequential events on voting behaviour. This paper studies the correlation between the re-election of incumbents and winning the national Christmas lottery (el Gordo) in Spain. Due to the lottery design, and given that a part of the number is based on which lottery outlet you buy the ticket from, el Gordo ends up awarding many of the smaller prizes to several thousand individuals living in the same area. Spaniards spend approximately €3 billion on the Christmas Lottery, amounting to about 0.3% of the Spanish GDP. Given the size of the Lottery, this could end up having a relatively large effect on the local economy, despite the fact the incumbent has nothing to do with whether the lottery is won in a given constituency, but they could still be reaping the rewards of a

marginal economic upturn that was out of their hands, or of the increase in general happiness the public received from winning. The authors exploit el Gordo and survey data to deal with the endogeneity problem of whether good politicians both create policy encouraging economic growth leading to re-election, or random economic growth leads voters to favour the incumbent. They find that despite the fact that it is understood that the lottery outcome is completely random, the incumbent party tends to obtain relatively more votes in winning provinces. They conclude that perhaps when voters are happier, they become more lenient with the incumbent.

Although there is existing literature on the influence of random, inconsequential events on voting behavior, the number of papers that focus specifically on the effect of sporting outcomes is relatively small. This is puzzling, given that sporting events seem to be a perfect way to test the question “are voter’s blind?” In most places, a sizable proportion of the population is emotionally invested in the success of their local team and politicians have little to no influence on the success of these teams. Nevertheless, few papers have explored this subject and it is from these papers, that the model design of this paper draws heavily from.

The first of these studies looked at how vote shares of the incumbent presidential, gubernatorial, and senate candidates (from 1964 to 2008) in a given U.S. County were affected by the success of the local college football team in the two weeks preceding the election (Healy and Malhotra, 2010). The model that the authors estimated was OLS and used vote share of the incumbent party in a given county as the dependent variable. The dependent variables included: the number of wins in the two weeks preceding the election, a vector of demographic and control variables, as well as county and year fixed effects. They found that a win 10 days before the election increased the incumbent party candidate’s vote share by a significant margin, while a win immediately preceding the election increased the same vote share by a smaller but still significant margin. They also included a dummy variable for teams with high attendance and interacted it with the number of wins in the two weeks preceding the election. This produced the result that wins by high-attendance teams boosted votes of the incumbent party even more than in the general case.



Another study linking sports outcomes to elections found that the vote share of mayoral candidates was significantly affected by the winning percentages of their city's sports franchises (Miller, 2013). The study looked at data from 39 U.S. cities in the time period 1948 to 2009. The dependent variable used was the incumbents vote share as a fraction of the sum of the top 2 candidates vote shares. The independent variables used were: log of the average winning percentage of the city's major sports franchises, log of prior vote share, the number of terms the mayor had previously served, dummies for if a team had entered or exited the city in the last three years, and the unemployment rate. The average winning percentage of a city's sports franchises was found to have a significant positive effect on the vote share of the incumbent mayoral candidate, so much so that in some cases the authors estimated that 7 out of 18 mayoral races were determined by sports performance.

A third study found that losses in international soccer competitions had a significant negative effect on the stock market in the country of the defeated team (Edmans, Garcia, and Norli, 2007). This effect was also found to be significant for losses in international cricket, rugby, and basketball games. The authors first ran a standard regression, motivated by previous studies of the time series variability of stock returns, of the returns regressed on predictors like continuously compounded daily local currency return. They then regressed the residuals of the first regression on dummy variables for wins and losses from the first match preceding that trading day. The negative effect of a loss was significantly greater for elimination games.

To determine if relegation in the English Premier League and the English Football League is quasi-random, we look to the literature on predictors of relegation. It has been found that certain regional characteristics (per-capita GDP, education, etc.) have a small but significant effect on the probability of relegation in European football leagues (Dherbecourt & Drut, 2009). However, the R-Squared value of these analyses is usually very small, indicating that much of the probability of relegation is left in the error term (likely because it is random). Furthermore, the model suited the Premier League significantly less than other leagues. It predicted Newcastle had a 0.01 probability of relegation. Newcastle was relegated that season.

Studies into the effect of turnout have also revealed some interesting results. (Fowler, 2015) finds both exogenous factors such as weather and election timing affect marginal voters' (defined as those whose decisions to turn out are sensitive to exogenous factors) decision to turn out. The paper also finds that those who are sensitive to exogenous factors, are over 20 percentage points more supportive of the Democratic Party in the US than regular voters. This implies a higher turnout would lead to a higher vote share for the more left wing party, while also showing that exogenous factors that could affect mood, affect the turnout of the marginal voter. The paper supports the work of previous findings, (McAllister, 1983) finds that the Labour Party makes gains over the Conservative Party when the turnout is high, supporting the argument that there may be a larger effect on the Labour Party in this study.

#### **4. Data**

The emphasis of this paper lies on the 11 general elections in between the years 1979 and 2019, in English and Welsh constituencies. The 1979 election has been used as a starting point for the following three reasons. Firstly, this is the first election where there were also three teams relegated per league, previously only two. Secondly, it keeps the data in a modern timeframe, and most importantly it is the first election from when the UK starts to have elections in May/June consistently, the previous election was in October 1974 and the one before that was in February of the same year. The data on elections was taken from commonslibrary.parliament.uk, where it gives each general election divided by constituency, along with the vote share of each party running in a given constituency and the size of the electorate.

Data on football records comes from the website of [www.11v11.com](http://www.11v11.com) which has archived league tables for the period in question. The data was collected by season and division, with the team's name, games won, lost, drawn and goal difference. Dummy variables were then assigned to the teams in a given year if they were relegated from the Premier League

or from the Championship, involved in the promotion playoffs, were automatically promoted, qualified for the Champions League or qualified for a different European competition. There have been 75 different teams in the top 2 divisions in this time, allowing us to look at 75 different constituencies in total. The number of total observations, being the sum of the number of teams in the top 2 divisions in every year there has been a general election is 484, in this time 66 teams have been relegated.

The club's postcode was then used to match each team to the constituency, using find my constituency feature on the UK parliament website along with the address of the teams' home stadium, the data was then amended and reshaped allowing us to see the results in a team's given constituency in each year.

There may be elements of bias based on the constituencies. In the given timeframe, the Conservatives have won more seats and general elections as a whole, however, in my sample labour make up 71% of the seats won, this could be due to the urban/rural divide as many of the team's stadiums are in big cities. Furthermore, sports can often be divided on socioeconomic grounds. Cities that have achieved highly in football may have a different socioeconomic makeup to those that succeed in Rugby. Additionally, in a divided city, one could be more likely to see a larger effect with one party relative to the other.

Demographic controls such as unemployment, GDP, percentage of people working in a given industry, educational attainment, density and age structure were taken from the Commons Parliament online library, the Office for National Statistics' website, Nomis, the official census and labour market statistics in the UK and the OCED.

Table 1 reports the average vote share and also the average change in vote share i.e.,  $\sum(\text{vote share}_{it} - \text{vote share}_{it-1}) / 10$ , where  $i$  is the party,  $t$  is the election and 10 is the number of elections. It also reports the number of seats won, number of seats a party had in a constituency where a team was relegated and number of seats lost in a constituency where a team was relegated.

Table 2 reports the mean value of all the dummies. It also shows the correlation coefficient between the dummies and the incumbent vote share. All of the dummies have the

expected sign except for automatic promotion, which is also the closest number to 0. Although admittedly, Other European Qualification and Playoff are difficult to interpret. This is as it may be that a team has underachieved and missed out on Champions League qualification/automatic promotion or has overachieved and qualified for Europe/playoffs.

#### 4.1 Statistical Data

**Table 1**

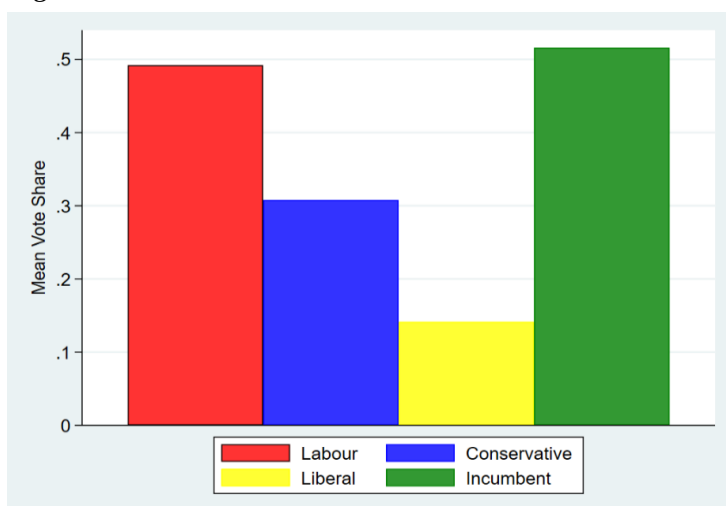
	Tory	Labour	Liberal	Incumbent
Mean $\Delta$ Vote Share	-0.006	0.003	-0.003	-0.007
Seats Won	87	293	6	390
Seats Held While Team Was Relegated	11	38	1	50
Seats Lost While Team Was Relegated	4	4	1	9

\*Note: only Conservative, Labour & Liberal included in the above data as they are the only parties to win seats in the given constituencies.

**Table 2**

Dummy	Relegation	UCL Qual	Cup/EPL winner	Other Euro Qual	Automatic Promotion	Playoff
Mean	0.15	0.05	0.04	0.07	0.07	0.08
Correlation Co-ef with incumbent vote share	-0.06	0.21	0.11	0.1	-0.01	-0.08

**Figure 1**



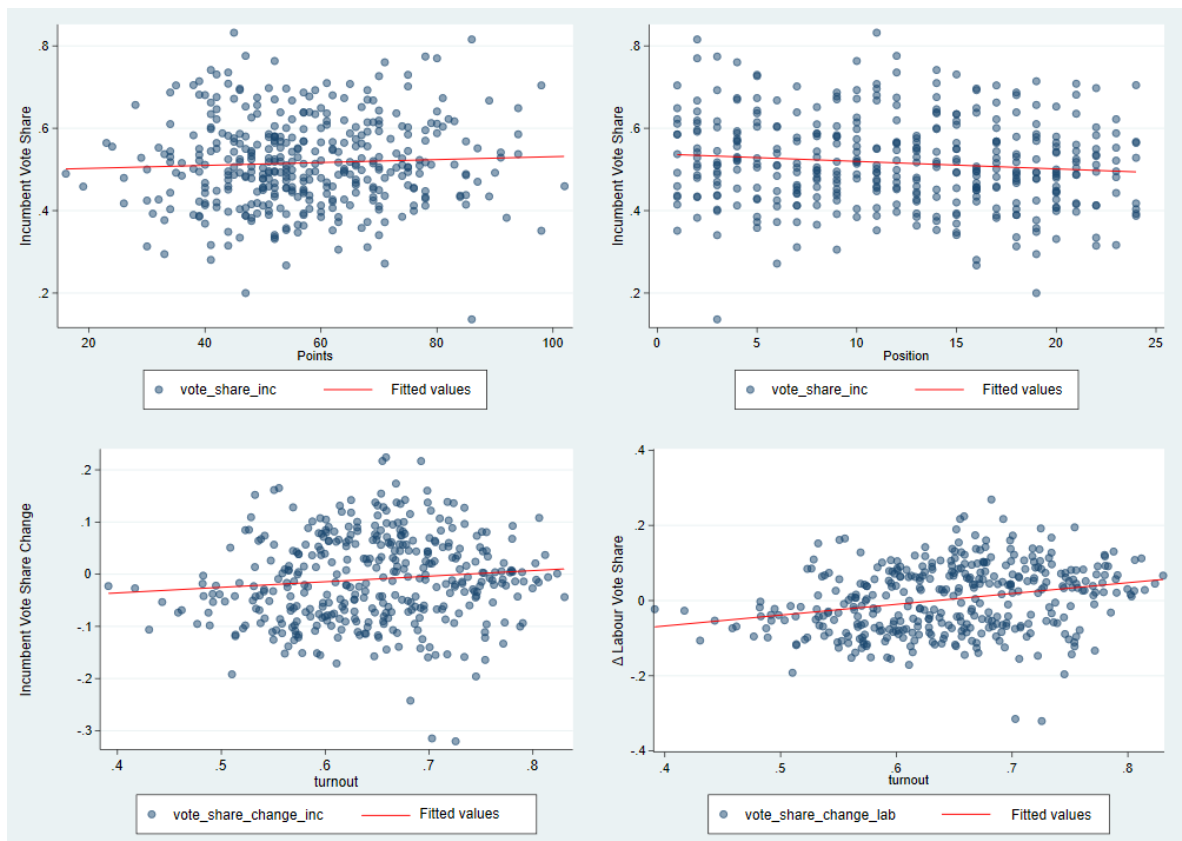
**Figure 2**

Figure 1 shows the average vote share in a given constituency, showing the bias towards Labour in the dataset.

In figure 2, the top left graph shows the positive correlation between points scored and the vote share of the incumbent. The top right shows the negative correlation between the vote share of the incumbent and the number associated with the position in the league. Some clarity is needed in regards how to interpret the relationship, as it is slightly counter intuitive. Position is a number, the lower the number of your position, the better you did. 1 is the best a team can do and 24 is the worst. Hence, as expected we see a negative relationship between incumbent vote share and the number associated with league position. i.e., there is a positive correlation between teams doing well and the vote share of the incumbent.

The bottom left graph shows the positive correlation between turnout and change in incumbent vote share. The vote share of the incumbent tends to increase compared to the last election if the turnout is high. The final graph in figure 2, bottom right, shows the strong

relationship between change in Labour vote share and turnout. When the turnout is higher, the Labour vote share tends to increase. This supports the idea that the marginal voters tend to vote for the more left wing party. Note that this graph includes two outliers, both from 1983 where in Newcastle Upton Tyne, the Labour incumbent had left the party the year before and ran as independent. The other, in Briggs & Cleethorpes, there was a significant boundary change.

## 5. Methodology

### 5.1 Randomness Check Model

First, I propose a model estimating the following logit model to test if relegation (and the other footballing outcomes) is a quasi-random event.

$$(1) \Pr(FO_{it}) = \beta_0 + \beta_1 GDP_{it} + \beta_2 AG_{it} + \beta_3 IND_{it} + \beta_4 ED2_{it} + \beta_5 ED3_{it} + \beta_6 U_{it} + \beta_7 DEN_{it} + \beta_8 65_{it} + \beta_9 POP_{it} + \epsilon_{it}$$

FO = Footballing Outcome

GDP = Per Capita GDP

AG = Percent Employment in Agriculture

IND = Percent Employment in Industry

ED2 = Percent of the Labour Force with only Secondary Education

ED3 = Percent of the Labour Force with Tertiary Education

U = Unemployment Rate of the Constituency

DEN = Density of the Constituency

65 = Percent of People Over 65 years Old

POP = Size of the Electorate

I borrow part of the model of Miller, M. K. (2013) to determine if the likelihood of Footballing Outcomes is due to systematic differences between each team's constituency. The independent variables included are all economic indicators and could potentially influence voting behaviour. If they are found to exert a significant effect on probability in a footballing outcome, then there is a need control for them in the main regression.

The footballing outcomes that will be regressed are relegation, Champions League qualification, other European cup qualification, automatic promotion, involvement in the playoffs, cup/league winners and league position.

The primary model (2) that I propose, along with multiple variations, to estimate for this study is as follows (the above controls are included in the vector X) :

### 5.2 Main Model

$$(2) Y_{it} = \alpha_i + \mu_t + \beta_1 TR_{it} + \beta_2 UCL_{it} + \beta_3 AP_{it} + \beta_4 EQ_{it} + \beta_5 PO_{it} + \beta_6 X_{it} + \varepsilon_{it}$$

$$(3) Y_{it} = \alpha_i + \mu_t + \beta_1 CW_{it} + \beta_2 X_{it} + \varepsilon_{it}$$

$$(4) Y_{it} = \alpha_i + \mu_t + \beta_1 POS_{it} + \beta_2 X_{it} + \varepsilon_{it}$$

The dependent variable ( $Y_{it}$ ), refers to the first three variables:

$V_{it}$  = Vote Share of Incumbent MP in Constituency  $i$  during period  $t$

$LV_{it}$  = Labour Vote Share in Constituency  $i$  during period  $t$

$CT_{it}$  = Change in Turnout in Constituency  $i$  during period  $t$

$\alpha_i$  = Constituency/Regional Fixed-Effects

$\mu_t$  = Time Fixed-Effects

$TR_{it}$  = Dummy Variable indicating if the Football Team in Constituency  $i$  was facing relegation in period  $t$

$UCL_{it}$  = Dummy Variable indicating if the Football Team in Constituency  $i$  was in Position to qualify for the UEFA Champions League in period  $t$

$EQ_{it}$  = Dummy Variable indicating if the Football Team in Constituency  $i$  was in Position to qualify for a different European Tournament in period  $t$

$AP_{it}$  = Dummy Variable indicating if the Football Team in Constituency  $i$  was in Position to attain Automatic Promotion to the Premier League the following Season in period  $t$

$PO_{it}$  = Dummy Variable indicating if the Football Team in Constituency  $i$  was in Position have to play for a Playoff for Promotion in period  $t$

$X_{it}$  = Vector of Demographic Controls of Constituency  $i$  during period  $t$

$CW_{it}$  = Dummy Variable indicating whether the Football Team in Constituency won the League or a Cup during period  $t$

$POS_{it}$  = Indicating the Position of the Football Team in Constituency  $i$  in period  $t$ , at the time of the Election

### ***5.3 Dependent Variable***

The incumbent candidates vote share is used as the dependent variable. It was created in Stata using the vote share of each party for each constituency in every general election. If the previous MP chooses not to run again, then the value of this variable will be the vote share of the new candidate from the same party. Each constituency was then matched to a football club using the postcode of their stadium.

Additional regressions with Labour vote share as the dependent variable will be run, to see if the Labour bias in the constituencies along with the potential Labour bias with marginal voters, leads to a larger effect for the party. Change in turnout will also be regressed as a dependent variable to see if the football results have a direct effect on turnout, leading to an indirect effect on the election.



#### ***5.4 Independent Variables***

The model will contain both constituency/regional fixed-effects and time fixed-effects. These terms account for unobservable differences across geographic regions and time periods. For example, the size of the electorate attachment to their local football team might be larger in certain council districts, or it might have been larger 20 years earlier.

I use the threat of relegation from the Premier League/First Division or the Championship/Second Division (PL or CS) from 1979-2019 as a binary independent variable. The dummy variable *TR* indicates if the team, in a given constituency, in a given year, was one of the bottom three teams in the league at the time of the election. Each year, there will always be 6 teams for which the value of *TR* is equal to one. The same logic applies to UCL, indicating the team was in position to qualify for the Champions League at the time of the election. Furthermore, the models with dummies relating Other European Cup qualification, Automatic Promotion, involvement in the Playoffs, Cup/League Winners and League Position will also be run. It is important to note in many years, the season is not over yet, hence the estimation is the effect of being in relegation zone and thus, is likely have a higher probability to be relegated rather than a confirmed relegation.

The vector of demographic controls accounts for the age, education, employment status, constituency size, density and income. These are all characteristics that voters take into account when casting their vote and controlling for them is essential in order to avoid biasing the estimates.

The model also includes the unemployment rate in each council district in each year. This is very common in the political economics literature as it has been found in numerous studies that voters reward incumbent candidates for positive economic performance.

These controls were available at constituency level for elections after 2001, but beforehand they were only available at regional level. Percentage of people working in a given industry is only available after 2001 and is at constituency level. Hence, the number of observations halves when AG and IND are included in the model.

## 6. Results

### 6.1 Randomness Check

*Table 3 Logit Model*

VARIABLES	(1) Relegation	(2) Relegation	(3) UCL Qual	(4) UCL Qual
GDP	-0.00003 (0.00011)	0.00001 (0.00003)	-0.00010 (0.00010)	0.00004 (0.00005)
ED2	-0.14173 (0.12757)	-0.05654 (0.05220)	0.00536 (0.10968)	0.00868 (0.06287)
ED3	-0.14219 (0.10696)	-0.08030 (0.05429)	0.00669 (0.07020)	0.00940 (0.04678)
DEN	0.00001 (0.00015)	-0.00003 (0.00009)	0.00024* (0.00013)	0.00009 (0.00010)
65+	0.12820 (0.09249)	0.04213 (0.05294)	-0.12173 (0.11321)	-0.16601* (0.08651)
U	-0.04228 (0.06174)	-0.00170 (0.04113)	-0.09969 (0.11772)	-0.10501 (0.09898)
POP	-0.00005 (0.00004)	-0.00000 (0.00002)	0.00003 (0.00003)	0.00001 (0.00003)
AG	-0.93416 (0.91109)		-1.59624 (0.98111)	
IND	0.29551 (0.43198)		-0.29658 (0.35968)	
Constant	6.38816 (6.67577)	1.40194 (3.38047)	1.28123 (6.68165)	-2.09298 (3.91621)
Observations	190	386	190	386

Robust standard errors in parentheses, (\*\*\*)  $p < 0.01$ , (\*\*)  $p < 0.05$ , (\*)  $p < 0.1$

Data on percentage of people working in each industry and agriculture was not available before 2004, so the model was run with and without AG and IND. None of the controls appear to be significant in relation to relegation. However, the number of people over the age of 65 and density are statistically significant to Champions League qualification. All further logits (Tables 10 & 11), relegated to the appendix, show percentage of the labour force with only secondary education, percent of people working in industry and GDP were significant to Automatic Promotion, signalling that some footballing outcomes may have elements of bias, supporting the inclusion of the controls in the main models. However, none of the other values were significant. This along with the evidence from Dherbecourt & Drut (2009) support the idea that the footballing outcomes may be quasi-random. However, there may be other variables that have not been included in the model that may affect relegation.

## 6.2 Main Results

**Table 4 OLS (Eq2)**

Variables	(1) VS Inc	(2) VS Inc	(3) VS Inc	(4) VS Inc	(5) VS Inc	(6) VS Inc	(7) VS Inc
Relegation	-0.01178 (0.01570)	-0.00656 (0.01392)	-0.01415 (0.01816)	-0.00921 (0.01717)	-0.00880 (0.01262)	-0.00305 (0.01295)	0.00289 (0.01686)
UCL Qual	0.11290*** (0.02876)	0.07021*** (0.02160)	0.05759** (0.02314)	0.05480*** (0.01256)	0.05873*** (0.01096)	0.02553 (0.01811)	0.00353 (0.02461)
OtherEcup	0.04837** (0.02299)	0.03152 (0.02276)	0.00569 (0.02544)	0.02684 (0.02578)	0.00636 (0.02865)	0.01981 (0.01640)	-0.01214 (0.01801)
Automatic	-0.00109 (0.02492)	0.00638 (0.02255)	0.02362 (0.02789)	0.00964 (0.02539)	0.04899** (0.01550)	0.02255 (0.01560)	0.03778* (0.02086)
Playoff	-0.02272 (0.01985)	-0.03266* (0.01871)	-0.02671 (0.02693)	-0.03346 (0.02360)	-0.01327 (0.02182)	-0.03130 (0.02164)	-0.02306 (0.02675)
GDP		0.00001*** (0.00000)	0.00002*** (0.00000)	0.00000 (0.00000)	0.00001*** (0.00000)	0.00001*** (0.00000)	0.00002*** (0.00000)
ED2		0.00635*** (0.00144)	0.00462* (0.00243)	0.00183 (0.00162)	-0.00227 (0.00393)	-0.00196 (0.00312)	-
ED3		0.00067 (0.00126)	-0.00101 (0.00180)	-0.00238 (0.00221)	-0.00572 (0.00355)	-0.01608*** (0.00389)	-
DEN		0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00001 (0.00000)	-	-
65+		-0.00759*** (0.00162)	-0.01088*** (0.00222)	-0.00671* (0.00313)	-0.00770** (0.00329)	-	-
U		-0.00338** (0.00148)	-0.00446** (0.00196)	-0.00633*** (0.00162)	-0.00376* (0.00180)	-0.00546*** (0.00152)	-0.00484** (0.00221)
POP		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000*** (0.00000)	0.00000 (0.00000)	-0.00000 (0.00000)
AG			-0.07139*** (0.01894)		-0.12145* (0.06329)		-0.12086** (0.05739)
IND			-0.04740*** (0.00959)		0.01230 (0.03400)		0.00589 (0.02387)
Constant	0.51199*** (0.00677)	0.38379*** (0.09138)	0.63144*** (0.14844)	0.59055*** (0.09072)	0.46791 (0.29452)	0.84766*** (0.17364)	0.37703** (0.14683)
# of Obs	386	386	190	386	190	386	190
R-squared	0.06169	0.27543	0.47138	0.23544	0.43310	0.29216	0.40914
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*)  $p < 0.01$ , (\*\*)  $p < 0.05$ , (\*)  $p < 0.1$ )

The main results consist of the regressions of equations (2), (3) and (4) with incumbent vote share as the dependant variable.

Column (1) shows that without the use of fixed effects and controls, qualification for Europe at any level has a significant effect on the incumbent's vote share. The results support the theory that positive football results lead to positive election outcomes for the incumbent. It also shows a negative relationship between relegation and the incumbent's vote share but the value is statistically insignificant.

Column (2) adds demographic controls alone, without percentage of employment in agriculture and business (type of employment) and column (3) adds type of employment, but reduces the observations. Both show the expected sign for all outcomes and reaffirms the significance of UEFA Champions League qualification on incumbent vote share, while Column (2) also shows significances for the playoff dummy.

Column (4) adds regional fixed effects without type of employment and Column (5) includes type of employment. Column (5) could be considered the most relevant column as it includes all the controls and the majority of the data was regional. Note that it consistently has the highest R-squared value of all columns consisting of fixed effects. Both show similar results to the previous columns, that UEFA Champions League qualification has a strong positive effect on incumbent vote share. Column (5) also shows positive significance for automatic promotion to the Premier League. This is despite the unexpected negative correlation between the two shown in the data section.

Column (6) and Column (7) are without regional fixed effects and add constituency and time fixed effects, Column (7) includes type of employment. The significance for UEFA Champions League qualification disappears, however, this may be as a result of many of the controls before 2001 being at a regional level. Automatic promotion again becomes positively significant. DEN, 65+, ED2 and ED3 were omitted by Stata due to collinearity (this is noted by – in all of the results).

Of the 63 teams to qualify for Europe in the dataset, only twice has one of their constituencies changed its MP, Wolverhampton in 2019, a Brexit related vote, and Manchester United's constituency in 1983, in Labours worst election since 1935. Both times, the team qualified for the UEFA Cup. A constituency has never voted out their MP when the local team qualified for the Champions League. Chelsea, Liverpool, Everton and Aston Villa are all included in that statistic but excluded from the regressions. Their inclusion would lead to even stronger results on UEFA Champions League qualification. This supports the argument that when the local team is doing well, they are more likely to vote for their current MP.

**Table 5 OLS (Eq 3)**

VAR	(1) VS Inc	(2) VS Inc	(3) VS Inc	(4) VS Inc	(5) VS Inc	(6) VS Inc	(7) VS Inc
POS	-0.00182** (0.00085)	-0.00096 (0.00077)	-0.00094 (0.00108)	-0.00087 (0.00097)	-0.00143* (0.00064)	-0.00037 (0.00070)	0.00008 (0.00100)
GDP		0.00001*** (0.00000)	0.00002*** (0.00000)	0.00000 (0.00000)	0.00001*** (0.00000)	0.00001*** (0.00000)	0.00002*** (0.00000)
ED2		0.00635*** (0.00147)	0.00457* (0.00240)	0.00170 (0.00146)	-0.00251 (0.00424)	-0.00211 (0.00287)	-
ED3		0.00071 (0.00130)	-0.00080 (0.00173)	-0.00226 (0.00219)	-0.00531 (0.00353)	-0.01634*** (0.00366)	-
DEN		0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00001* (0.00000)	-	-
65+		-0.00757*** (0.00160)	-0.01064*** (0.00219)	-0.00649* (0.00309)	-0.00668** (0.00283)	-	-
U		-0.00323** (0.00149)	-0.00456** (0.00199)	-0.00629*** (0.00193)	-0.00350 (0.00198)	-0.00516*** (0.00166)	-0.00439* (0.00238)
POP		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000*** (0.00000)	0.00000 (0.00000)	-0.00000 (0.00000)
AG			-0.07475*** (0.01893)		-0.13600** (0.05726)		-0.13395** (0.06330)
IND			-0.04893*** (0.00915)		0.01651 (0.03276)		0.00499 (0.02386)
Constant	0.53791*** (0.01189)	0.38460*** (0.09254)	0.64394*** (0.14557)	0.58302*** (0.09895)	0.42922 (0.26262)	0.85145*** (0.16512)	0.38186** (0.15047)
# of Obs	386	386	190	386	190	386	190
R-squared	0.01212	0.24705	0.44606	0.21222	0.40452	0.27287	0.38642
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Given the collinearity between position and relegation and Champions League qualification, position was run in its own regression. As explained in the data section, position is slightly counter intuitive. Position is a number, the larger the number of your position, the worse you did. 1 represents 1<sup>st</sup>, 24 represents 24<sup>th</sup>. Hence, as expected we see a negative relationship between incumbent vote share and the number associated with league position.

Position is statistically significant without fixed effects nor controls. It is also significant in arguably the most interesting column, Column (5), where all the controls and regional fixed effects are used. The sign is negative except in Column (7). However, this could be due to some of the older controls being at regional level and not constituency level.

**Table 6 OLS (Eq4)**

Variables	(1) VS Inc	(2) VS Inc	(3) VS Inc	(4) VS Inc	(5) VS Inc	(6) VS Inc	(7) VS Inc
Cupwin	0.06342** (0.02619)	0.04836** (0.02077)	0.05509* (0.03108)	0.03439*** (0.00691)	0.05537*** (0.01158)	0.00812 (0.01084)	0.03700** (0.01395)
GDP		0.00001*** (0.00000)	0.00002*** (0.00000)	0.00000 (0.00000)	0.00001*** (0.00000)	0.00001*** (0.00000)	0.00002*** (0.00000)
ED2		0.00643*** (0.00146)	0.00439* (0.00241)	0.00181 (0.00140)	-0.00272 (0.00397)	-0.00223 (0.00290)	-
ED3		0.00078 (0.00130)	-0.00096 (0.00177)	-0.00220 (0.00220)	-0.00553 (0.00360)	-0.01636*** (0.00369)	-
DEN		0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00001 (0.00000)	-	-
65+		-0.00772*** (0.00160)	-0.01118*** (0.00221)	-0.00670* (0.00314)	-0.00770** (0.00327)	-	-
U		-0.00317** (0.00150)	-0.00421** (0.00201)	-0.00623** (0.00194)	-0.00326 (0.00202)	-0.00522*** (0.00166)	-0.00422* (0.00242)
POP		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000*** (0.00000)	0.00000 (0.00000)	-0.00000 (0.00000)
AG			-0.07344*** (0.01905)		-0.13382* (0.05924)		-0.13674** (0.06399)
IND			-0.04985*** (0.00896)		0.01001 (0.02836)		0.00517 (0.02235)
Constant	0.51361*** (0.00556)	0.36782*** (0.09151)	0.64794*** (0.14552)	0.56997*** (0.08626)	0.47923 (0.26205)	0.85269*** (0.16577)	0.38780*** (0.14198)
# of Obs	386	386	190	386	190	386	190
R-squared	0.01221	0.25078	0.44989	0.21313	0.40460	0.27249	0.39059
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1)

Whether a team had won a trophy that season was also run in its own regression due to collinearly with league results. The relationship is positive and significant in every regression except for one. It is only insignificant is in Column (6), with controls, constituency and time fixed effects but without type of employment. Potentially more specific constituency data for controls would resolve this issue.

Not only has a constituency never voted out their MP when the local team qualified for the Champions League, only once have they voted out their MP when the local team has won a trophy. Once again, in Manchester United's constituency in 1983.

Fourteen statistically significant values of footballing outcomes effecting the incumbent vote share strongly supports that voters are blind.

### 6.3 Labour Vote Share & Change in Turnout

The structure of the following regressions remains consistent with the previous regression in *Main Results*. However, in the first two regressions below, the dependant variable is Labour Vote Share, due to the potential larger effect on Labour candidates, given that marginal voters are like to be left leaning and that the majority of these constituency are Labour seats. Controls<sup>1</sup> is in reference to all controls except for type of employment, controls<sup>2</sup> is in reference to type of employment and the rows below that refer to the type of fixed effects.

**Table 7 OLS (Eq 2)**

VAR	(1) Labour VS	(2) Labour VS	(3) Labour VS	(4) Labour VS	(5) Labour VS	(6) Labour VS	(7) Labour VS
Relegation	-0.00261 (0.01865)	0.00213 (0.01477)	-0.02196 (0.02013)	-0.00766 (0.01572)	-0.02817** (0.01157)	0.00097 (0.01048)	-0.01274 (0.01821)
UCLQual	0.11438*** (0.03046)	0.08462*** (0.02002)	0.06868*** (0.02148)	0.04654 (0.03129)	0.05685 (0.03187)	0.00023 (0.02024)	0.01378 (0.02592)
OtherEcup	0.05136* (0.02646)	0.02787 (0.02099)	0.00825 (0.02747)	0.01302 (0.02356)	0.00523 (0.02492)	0.00316 (0.01204)	-0.00363 (0.01868)
Automatic	-0.01204 (0.03423)	0.00785 (0.03392)	0.02256 (0.04013)	0.00698 (0.02470)	0.03849 (0.03798)	0.02099 (0.01646)	0.01305 (0.02899)
Playoff	0.01522 (0.01874)	0.00127 (0.01489)	-0.01917 (0.01680)	-0.00294 (0.01639)	-0.01337 (0.02609)	-0.00367 (0.01276)	-0.03048 (0.01883)
Controls <sup>1</sup>	No	Yes	Yes	Yes	Yes	No	Yes
Controls <sup>2</sup>	No	No	Yes	No	Yes	No	Yes
Regional	No	No	No	Yes	Yes	No	No
Constit	No	No	No	No	No	Yes	Yes
Time	No	No	No	No	No	Yes	Yes
# of Obs	424	386	190	386	190	386	190
R <sup>2</sup>	0.03941	0.48489	0.57587	0.43181	0.48077	0.45963	0.39260
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1)

Champions League qualification again shows a significant positive effect on Labour vote share without fixed effects. However, this could be due to urban bias as often the most successful teams come from big cities outside the capital (Kuper & Szymanski, 2010).

Once more, in arguably the most relevant column, column (5), where regional and time fixed effects are used with all controls, relegation has significant negative relationship with Labour vote share.

*Table 8 OLS (Eq3)*

VAR	(1) Labour VS	(2) Labour VS	(3) Labour VS	(4) Labour VS	(5) Labour VS	(6) Labour VS	(7) Labour VS
Cupwin	0.06858** (0.02997)	0.08117*** (0.02075)	0.07437** (0.03362)	0.05595** (0.02471)	0.06168* (0.03006)	0.00993 (0.00657)	0.03619*** (0.01047)
Controls <sup>1</sup>	No	Yes	Yes	Yes	Yes	No	Yes
Controls <sup>2</sup>	No	No	Yes	No	Yes	No	Yes
Regional	No	No	No	Yes	Yes	No	No
Constit	No	No	No	No	No	Yes	Yes
Time	No	No	No	No	No	Yes	Yes
# of Obs	424	386	190	386	190	386	190
R <sup>2</sup>	0.00946	0.47963	0.55980	0.43170	0.45745	0.45669	0.38062
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p<0.01, (\*\*) p<0.05, (\*) p<0.1)

There is a positive significant effect with a team winning a competition and the Labour candidate's vote share. If the team is winning, football fans with a potential Labour leaning are voting for their candidate. Perhaps, the marginal voters, who tend to be Labour leaning, go and vote when they are in a good mood, influenced by the success of their local football team. This effect can lead to an increase in Labour vote share. In a further regression relegated to the appendix (Table 15), Labour Vote Share appears to decrease the lower the team in the constituency finishes, regardless of whether it is in the Premier League or the Championship, the sign is negative in all columns and significant in two.

*Table 9 (Eq 2)*

VARIABLE	(1) Δ turnout	(2) Δ turnout	(3) Δ turnout	(4) Δ turnout	(5) Δ turnout	(6) Δ turnout	(7) Δ turnout
Relegation	-0.00402 (0.00836)	-0.00105 (0.00735)	-0.00123 (0.00682)	0.00113 (0.00593)	-0.00075 (0.00670)	0.00159 (0.00704)	0.00363 (0.00896)
UCLQual	0.02083 (0.01793)	0.01978 (0.01428)	0.02260* (0.01246)	0.02051*** (0.00474)	0.02876*** (0.00193)	0.01777 (0.01605)	0.05033*** (0.01597)
OtherEcupQ	-0.02063 (0.01302)	-0.02033* (0.01181)	-0.00423 (0.00945)	-0.02069 (0.01241)	0.00013 (0.00856)	-0.02145* (0.01168)	0.01315 (0.00992)
Automatic	-0.00079 (0.01122)	0.00229 (0.01128)	-0.01835 (0.01366)	-0.00052 (0.01407)	-0.02252* (0.01035)	-0.00935 (0.01014)	-0.02679*** (0.00843)
Playoff	0.00476 (0.01133)	0.01460 (0.00951)	0.00730 (0.00835)	0.01317* (0.00612)	0.00486 (0.00806)	0.01322* (0.00707)	0.01277 (0.00823)
Controls <sup>1</sup>	No	Yes	Yes	Yes	Yes	No	Yes
Controls <sup>2</sup>	No	No	Yes	No	Yes	No	Yes
Regional	No	No	No	Yes	Yes	No	No
Constit	No	No	No	No	No	Yes	Yes
Time	No	No	No	No	No	Yes	Yes
# of Obs	386	386	190	386	190	386	190
R-squared	0.01509	0.29114	0.22443	0.31959	0.29754	0.47618	0.33864
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p<0.01, (\*\*) p<0.05, (\*) p<0.1)



In regards to change in turnout, Table 9 below shows that the effect of relegation appears to be largely insignificant, despite the negative correlation shown in Table 2. However, in perhaps the most telling column, Column (5), with controls and regional effects, Champions League qualification has again shown a positive significant effect on turnout. Football fans are more inclined to vote when their team is doing well. Champions League qualification appears to be having a strong effect on elections in England.

The further regressions in regards to change in turnout have also been relegated to the appendix (Table 14). They show a largely positive but insignificant relationship with winning a competition. Similarly, in regards to league position, largely the expected sign but insignificant results.

## **7. Conclusion**

This analysis studied the research question, does a football team's performance in the English Football League affects the re-election of the incumbent MP? In order to investigate whether voters take events out of the hands of the incumbent politician into account when voting in an election. The two main hypotheses studied in order to answer this question were (1) there is a negative effect of threat of relegation on incumbent vote share in the UK and (2) there is positive effect of other footballing outcomes such as Champions League qualification on incumbent vote share in the UK.

The analysis was done by running a series of OLS regressions, incorporating fixed effects and demographic controls, to see the effect of footballing outcomes, such as relegation, Champions League qualification, winning a trophy, league position, automatic promotion and participation in a playoff on the vote share of the incumbent MP of the team's constituency.

Results of Champions League qualification and winning a trophy were exclusively positive and significant in the vast majority of regressions, leaving the hypothesis difficult to refute. It does appear that this research supports the existing work that suggests, when voting in an election, voters reward the incumbent, for events out of the hands of the politician.

However, this result goes further than Bagues & Esteve-Volart (2016), as this result does not come from an economic shock but as a result of mood alone from football results. Results from the threat of relegation however, were negative but insignificant. The dependent variable was then changed to investigate other effects of footballing outcomes on election results.

Large stadiums tend to be in more urban areas. This, along with the socio-economic makeup of British football fans led to a strong Labour Party bias in the data. Previous literature also finds that the marginal voter tends to be more left leaning than the regular voter. Consequently, this bias is exploited to see if the footballing outcomes affect change in turnout. The results are largely insignificant, except for Champions League qualification where results are largely positive and significant. This result suggests that a positive footballing outcome for the local team increases the turnout.

I also check to see if there are the same effects on Labour vote share as there are on the incumbent. We see the same results, that winning a trophy and Champions League have a positive significant effect on labour vote share. However, this could be due to the fact that better teams come from more urban areas, meaning they are areas with an even larger Labour support anyway. However, given that the results for Champions League qualification on change in turnout are positive and significant, it is possible that the positive footballing outcome mobilises football fans into voting, hence indirectly influencing the election in favour of The Labour Party candidate in that constituency. Furthermore, the regression shows a negative and significant result in arguably the most relevant regression with relegation. It is possible that relegation has a negative shock on the vote share of the Labour Candidate.

One's mood can be affected by football, mood can affect whether a voter turns out, turnout has a significant and positive effect on the change in Labour vote share, hence effecting the election result. There is a negative correlation between relegation and incumbent vote share and moreover, a negative correlation between turnout and relegation. Perhaps a study with more divisions and with local elections could lead to more significant results. Local Fans of clubs doing well, feel good about their area and because they feel good about their area, they feel good about their politician and politics in general, they are more likely to vote

for their incumbent and more likely to vote in general.

Furthermore, there is a positive correlation between league position with incumbent vote share, supporting the hypothesis. The better they do in the league, the better they feel, the better the result of their local politician. The result is even stronger on Labour candidates. Perhaps, this is a result politician are already aware of and why Jeremy Corbyn was regularly seen at Liverpool and Arsenal games, while also why Boris Johnson claims to support "all of the London teams".

Voter behaviour is undoubtedly a subject that requires further exploration. Additionally, in regards to sporting events, as it is a helpful way to study none financial related community shocks. More work in the field could help clear up the endogeneity problem discussed in the literature review and more specifically the field is lacking work on negative effects of random irrelevant events on electoral outcomes. I believe this papers research is justified as it can help us understand more about voters, their behaviour and what helps a politician get re-elected. Further development on the results could possibly lead to attempts by incumbents to get more involved in the football club and the footballing community to show they are doing all they can for the local football club and trying to affect the results of the club. It could potentially lead to more public funds being pushed into the sport. Further research into the topic is not only justified but required.

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## Appendix

Table 10 Logit Model

VARIABLES	(1) Cupwin	(2) Cupwin	(3) OtherEcupQ	(4) OtherEcupQ
GDP	-0.00016 (0.00020)	-0.00005 (0.00006)	0.00006 (0.00015)	0.00001 (0.00005)
AG	-1.08051 (2.07649)		-1.52322 (1.50931)	
IND	-0.74024 (0.92537)		-0.35707 (0.64647)	
ED2	0.04411 (0.24517)	0.02485 (0.08796)	0.15062 (0.18528)	0.04788 (0.07008)
ED3	0.10403 (0.16177)	0.03294 (0.07547)	0.06935 (0.12314)	0.03205 (0.06147)
U	-0.25433 (0.23005)	-0.06872 (0.10165)	0.00707 (0.10741)	0.02471 (0.07145)
65+	0.02670 (0.19957)	-0.04706 (0.09671)	-0.08682 (0.13725)	-0.02663 (0.07359)
DEN	0.00041 (0.00030)	0.00013 (0.00012)	0.00009 (0.00021)	0.00007 (0.00011)
POP	0.00008 (0.00007)	0.00000 (0.00004)	0.00001 (0.00005)	0.00001 (0.00003)
Constant	-4.99238 (13.44216)	-3.97350 (5.65329)	-5.81538 (9.76571)	-5.72681 (4.45392)
Observations	190	386	190	386

Robust standard errors in parentheses, (\*\*\*) p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1)

Table 11 Logit Model

VARIABLES	(1) Automatic	(2) Automatic	(3) Playoff	(4) Playoff
GDP	0.00034* (0.00020)	-0.00003 (0.00005)	0.00001 (0.00004)	-0.00005 (0.00013)
AG	-0.73112 (1.10611)			-0.00708 (0.76963)
IND	-2.10875*** (0.76884)			-0.04733 (0.50090)
ED2	-0.25188* (0.15144)	0.01155 (0.07453)	0.04395 (0.06168)	0.02787 (0.11704)
ED3	-0.05559 (0.10312)	0.01679 (0.06421)	0.01331 (0.05561)	0.00755 (0.08337)
U	0.10350 (0.11371)	-0.01017 (0.07665)	-0.09812 (0.06719)	-0.05248 (0.08993)
65+	0.17969 (0.13190)	0.06613 (0.07982)	-0.05330 (0.06548)	-0.05339 (0.10193)
DEN	0.00024 (0.00022)	0.00002 (0.00012)	-0.00011 (0.00011)	-0.00009 (0.00018)
POP	-0.00003 (0.00006)	-0.00001 (0.00003)	0.00001 (0.00003)	0.00002 (0.00004)
Constant	11.81627 (8.55020)	-3.62961 (4.84355)	-2.59938 (4.10709)	-2.15709 (6.92393)
Observations	190	386	386	190

Robust standard errors in parentheses, (\*\*\*) p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1)

Table 12 OLS

VARIABLES	(1)	(2)	(3)	(4)
	Δ Labour VS	Δ Tory VS	Δ Labour VS	Δ Tory VS
Turnout	0.28732*** (0.05400)	-0.11353*** (0.03374)	0.39801*** (0.07590)	-0.12661*** (0.04688)
Constant	-0.18235*** (0.03515)	0.06751*** (0.02196)	-0.25382*** (0.04922)	0.07596** (0.03041)
Observations	386	386	386	386
R-squared	0.06867	0.02865	0.07959	0.02242
Number of id			67	67

Robust standard errors in parentheses, (\*\*\*) p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1)

Table 13 OLS

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	inc_win	inc_win	inc_win	inc_win	inc_win	inc_win	inc_win
Relegation	-0.04597 (0.05106)	-0.04397 (0.05078)	-0.01636 (0.07254)	-0.05619 (0.04644)	-0.03021 (0.07123)	-0.07154* (0.04246)	-0.06910 (0.06866)
UCLQual	0.10694*** (0.02020)	0.07433*** (0.02619)	0.04703 (0.04994)	0.03396 (0.01974)	0.06243 (0.04702)	0.04578 (0.05582)	-0.05851 (0.08374)
OtherEcupQ	0.02198 (0.06234)	0.00888 (0.06514)	-0.01807 (0.10045)	-0.00808 (0.06499)	-0.03478 (0.12412)	0.02846 (0.06375)	-0.07138 (0.10407)
Automatic	-0.09306 (0.09238)	-0.08735 (0.09104)	0.00758 (0.09980)	-0.08811 (0.07343)	0.04360 (0.13584)	-0.07649 (0.08820)	-0.04558 (0.11166)
Playoff	-0.08056 (0.07242)	-0.09549 (0.07168)	-0.01819 (0.08073)	-0.09214 (0.08193)	0.00143 (0.06142)	-0.08116 (0.08321)	-0.00490 (0.12439)
GDP		0.00000 (0.00000)	-0.00000 (0.00001)	-0.00000 (0.00000)	-0.00001 (0.00001)	-0.00001 (0.00001)	-0.00001 (0.00001)
ED2		0.00517 (0.00501)	-0.00066 (0.01080)	-0.00178 (0.00556)	-0.00398 (0.01313)	0.00187 (0.01256)	-
ED3		-0.00174 (0.00470)	-0.00230 (0.00722)	-0.00510 (0.00482)	-0.00686 (0.00980)	0.00794 (0.01703)	-
DEN		0.00000 (0.00001)	0.00000 (0.00001)	0.00002* (0.00001)	0.00002 (0.00002)	-	-
65+		-0.00879* (0.00511)	-0.02402*** (0.00832)	-0.00418 (0.00871)	-0.01242 (0.01252)		
POP		-0.00000 (0.00000)	-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	-0.00000 (0.00001)
U		-0.00900 (0.00560)	-0.01318 (0.00823)	-0.01287*** (0.00347)	-0.01155 (0.00741)	-0.01839*** (0.00615)	-0.01107 (0.00879)
AG			-0.03303 (0.06347)		-0.19251 (0.16859)		-0.29616 (0.27584)
IND			-0.04317 (0.03502)		0.11860 (0.09629)		0.12414 (0.07767)
Constant	0.89306*** (0.02020)	0.95984*** (0.31216)	1.85932*** (0.50743)	1.07702** (0.34410)	0.71547 (0.79801)	0.85659 (0.78550)	0.57510 (0.54926)
# of Obs	386	386	190	386	190	386	190
R-squared	0.01636	0.04886	0.08472	0.04995	0.08266	0.04213	0.06170
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1)

Table OLS 14

VARIABLE	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout
Pos	-0.00038 (0.00047)	-0.00050 (0.00043)	-0.00011 (0.00040)	-0.00031 (0.00019)	-0.00001 (0.00033)	-0.00016 (0.00047)	0.00018 (0.00055)
GDP		0.00000*** (0.00000)	-0.00000*** (0.00000)	0.00000*** (0.00000)	-0.00000 (0.00000)	-0.00000*** (0.00000)	-0.00000 (0.00000)
ED2		-0.00361*** (0.00081)	-0.00142 (0.00116)	-0.00376*** (0.00069)	-0.00028 (0.00075)	-0.00392** (0.00175)	-
ED3		-0.00101 (0.00071)	0.00021 (0.00076)	-0.00055 (0.00052)	0.00071 (0.00043)	0.00991*** (0.00246)	-
DEN		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	-	-
65+		0.00055 (0.00086)	0.00125 (0.00094)	0.00043 (0.00067)	0.00071 (0.00079)		
POP		-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000* (0.00000)	0.00000 (0.00000)	-0.00000*** (0.00000)	-0.00000* (0.00000)
U		0.00805*** (0.00094)	0.00284*** (0.00085)	0.00872*** (0.00113)	0.00220* (0.00110)	0.00643*** (0.00092)	0.00306*** (0.00112)
AG			-0.00466 (0.00657)		-0.01153 (0.02110)		-0.02009 (0.02340)
IND			0.00068 (0.00467)		-0.03325* (0.01539)		-0.03421*** (0.00879)
Constant	-0.00435 (0.00637)	0.05504 (0.05366)	0.05988 (0.07348)	0.03230 (0.05011)	0.26301** (0.08123)	-0.06253 (0.10168)	0.34390*** (0.06749)
# of Obs	386	386	190	386	190	386	190
R <sup>2</sup>	0.00180	0.27615	0.18407	0.30327	0.24610	0.45777	0.27127
# of id						67	51
# of id2				10	10		
VARIABLE	(8)	(9)	(10)	(11)	(12)	(3)	(14)
	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout	$\Delta$ turnout
Cupwin	0.01361 (0.01567)	0.00950 (0.01803)	0.00054 (0.01263)	0.00311 (0.01953)	0.00508 (0.00577)	-0.00681 (0.02352)	-0.00691 (0.01196)
GDP		0.00000*** (0.00000)	-0.00000*** (0.00000)	0.00000*** (0.00000)	-0.00000 (0.00000)	-0.00000*** (0.00000)	-0.00000 (0.00000)
ED2		-0.00354*** (0.00081)	-0.00141 (0.00116)	-0.00372*** (0.00069)	-0.00032 (0.00083)	-0.00392** (0.00174)	-
ED3		-0.00095 (0.00072)	0.00023 (0.00077)	-0.00051 (0.00057)	0.00066 (0.00047)	0.00998*** (0.00247)	-
DEN		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)	-	-
65+		0.00046 (0.00085)	0.00121 (0.00094)	0.00038 (0.00060)	0.00065 (0.00078)		
POP		-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000* (0.00000)	0.00000 (0.00000)	-0.00000*** (0.00000)	-0.00000* (0.00000)
U		0.00803*** (0.00094)	0.00285*** (0.00086)	0.00872*** (0.00112)	0.00221* (0.00111)	0.00643*** (0.00090)	0.00307*** (0.00116)
AG			-0.00457 (0.00653)		-0.01173 (0.02105)		-0.01985 (0.02282)
IND			0.00046 (0.00476)		-0.03331* (0.01479)		-0.03323*** (0.00813)
Constant	-0.00929*** (0.00299)	0.04677 (0.05297)	0.05874 (0.07297)	0.02681 (0.05150)	0.26757** (0.08273)	-0.06609 (0.10126)	0.33847*** (0.06634)
Observations	386	386	190	386	190	386	190
R-squared	0.00154	0.27394	0.18376	0.30226	0.24656	0.45784	0.27132
# of id						67	51
# of id2				10	10		



Table 15 OLS

VAR	(1) Labour VS	(2) Labour VS	(3) Labour VS	(4) Labour VS	(5) Labour VS	(6) Labour VS	(7) Labour VS
POS	-0.00201* (0.00102)	-0.00100 (0.00085)	-0.00183* (0.00111)	-0.00067 (0.00097)	-0.00209 (0.00132)	-0.00042 (0.00071)	-0.00030 (0.00105)
GDP		0.00001*** (0.00000)	0.00002*** (0.00000)	0.00001*** (0.00000)	0.00002*** (0.00000)	0.00001*** (0.00000)	0.00002*** (0.00000)
ED2		0.01318*** (0.00212)	0.01024*** (0.00352)	0.00875** (0.00361)	0.00507 (0.00488)	0.00528* (0.00304)	-
ED3		0.00259 (0.00170)	0.00052 (0.00230)	-0.00026 (0.00289)	-0.00340 (0.00332)	-0.01131*** (0.00329)	-
DEN		-0.00000 (0.00000)	0.00000 (0.00000)	0.00000 (0.00001)	0.00001 (0.00001)	-	-
65+		-0.01404*** (0.00167)	-0.01618*** (0.00233)	-0.01168*** (0.00271)	-0.01125*** (0.00297)	-	-
U		-0.00247 (0.00157)	-0.00288 (0.00188)	-0.00577*** (0.00129)	-0.00251 (0.00220)	-0.00491*** (0.00134)	-0.00501*** (0.00174)
POP		-0.00000** (0.00000)	0.00000 (0.00000)	-0.00000 (0.00000)	0.00000*** (0.00000)	0.00000 (0.00000)	0.00000 (0.00000)
AG			-0.09777*** (0.02119)		-0.13672** (0.05313)		-0.10791** (0.04205)
IND			-0.04057*** (0.01050)		-0.01619 (0.03584)		-0.03080 (0.02343)
Constant	0.51598*** (0.01445)	0.23879** (0.11879)	0.54163*** (0.17515)	0.37580* (0.17139)	0.47046* (0.25632)	0.45833** (0.17910)	0.57011*** (0.14195)
# of Obs	424	386	190	386	190	386	190
R <sup>2</sup>	0.00925	0.46958	0.55839	0.42579	0.46320	0.45709	0.37650
# of id						67	51
# of id2				10	10		

Robust standard errors in parentheses, (\*\*\*) p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1)