Remapping the EP2019 election results to Westminster constituencies

Abstract

This document provides estimates of the results of the 2019 European Parliament election at the level of the Westminster constituency.

1 INTRODUCTION

On Thursday 23rd May 2019 voters across the UK voted to elect 73 members of the European Parliament. Voters in Great Britain voted for party lists in eleven different regions. Voters in Northern Ireland voted using the single transferable vote system. In common with the previous European Parliament elections (2014) and the referendum on the UK's membership of the EU (2016), votes were counted at the level of the local authority. Because local authorities are not the most commonly-discussed geographic division in UK politics, it is helpful to know what the results would have looked like had they been counted at the level of the Westminster constituency.

In a previous paper (Hanretty 2017), I showed how results from the 2016 EU membership referendum could be mapped on to Westminster constituencies using a four-step process. First, estimate a model of the count of voters voting for each option (Leave, Remain) as a function of certain demographic variables (e.g., age, highest level of education, housing tenure) available from

the 2011 census; second, make predictions from that model for Census output areas (small tracts of around 1,000 residents); third, scale (i.e., multiply or divide) those predictions so that the sum of Leave (Remain) voters for all the output areas in a local authority adds up to the known local authority figures); and fourth, add up the scaled predictions for all the output areas in each Westminster constituency.

This short note uses the same technique to produce estimates of how Westminster constituencies voted in the 2019 European Parliament election. These estimates will in future be useful to answer questions of the form "was the vote share won by Conservative party candidates in the 20XX general election lower in areas where the Brexit Party had done well?". These estimates can also be used to answer the question "what would the distribution of seats in the House of Commons look like if voters had voted in the same way that they had voted in European Parliament elections". At the end of this note I give reasons why this question is not a good question to ask.

2 THE RESULTS

The election was a success for the Brexit Party and the Liberal Democrats, hugely disappointing for Labour, and disastrous for the Conservative party. The shares of the vote won by each of the parties are shown in Table 1.

Party	Votes	Share
BRX	5,246,171	31.58%
LD	3,360,064	20.23%
LAB	2,342,836	14.10%
GRN	2,010,442	12.10%
CON	1,511,234	9.10%
SNP	594,553	3.58%
CHUK	571,749	3.44%
UKIP	549,270	3.31%
Other	261,573	1.57%
PC	163,928	0.99%

The results were counted in 371 local authorities in Great Britain. As a result of mergers, this is slightly fewer than the number of local authorities which reported results in 2016. For each local authority, it is possible to identify the party which won most votes. This is shown in Table 2.

Party	Areas
BRX	267
LD	44
SNP	30
LAB	24
GRN	3
PC	3

The Brexit Party is the largest party in around 70% of local authority areas – very much out of step with its share of the vote. The Green Party is the most voted party in Bristol, Brighton and Hove, and Norwich. The Conservative party is never the most voted party in any local authority area.

3 MAPPING ON TO WESTMINSTER CONSTITUENCIES

In order to map these results on to Westminster constituencies, I follow the method outlined in my previous paper. I estimate a model of the count of voters in each local authority area voting for each party. This model is a Poisson model, which includes the log of the number of people in the local authority as an offset, and which features as covariates:

- the proportion of residents with Level 1, 2, 3 or 4 qualifications;
- the proportion of residents who own their home;
- the median age of the area;
- the proportion of residents who are white;
- the proportion of residents in NS-Sec 1-2 and 5-8;
- regional dummies;
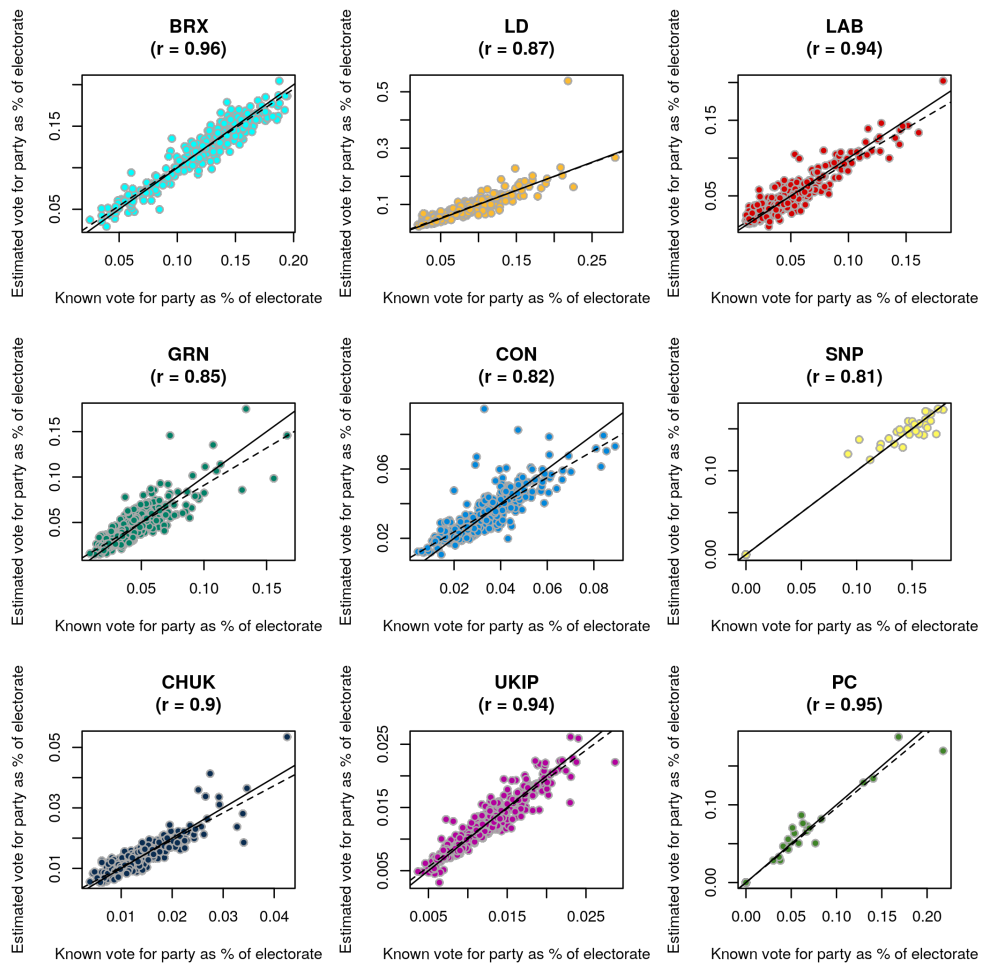- interactions of education and age;

Figure 1: Plotted of estimated share of electorate (vertical axis) against known share of the electorate (horizontal axis) by party

I use the same specification for each party. These models recover parties' strengths across the different local authority areas relatively well. Figure 1 shows the predicted count of voters for each party, as a proportion of the electorate, against the known values. The sub-title for each panel gives the correlation for non-zero predictions. The correlation is high (greater than 0.7) for all parties, and particularly high for the Brexit Party and Change UK. The correlation for the Liberal Democrats would be stronger were it not for an aberrant prediction for Richmond.

The model does not need to predict the parties' performance exactly, since the predictions from these models are scaled to ensure that the predictions

match the known results at local authority level. However, a better model allows us to be more confident in making claims about performance in different constituencies in the same local authority area.

4   WHAT DO THE ESTIMATES LOOK LIKE?

Table 3 shows the estimated "winner" in each Westminster constituency, compared to the winner in the 2017 general election. The Brexit Party is estimated to be the most-voted party in 414 constituencies. Most of these constituencies are currently held by the Conservative party. The Brexit Party's share of constituencies (65%) is slightly lower than the share of local authority areas where they come first.

The Liberal Democrats come next, placing first in 76 constituencies, slightly more than the Labour party. The SNP comes first in 54 seats.

Winner19	Conservative	Green	Labour	Lib Dem	Plaid	SNP	Speaker	Total
Brexit Party	266	0	141	3	1	2	1	414
Conservative	0	0	0	0	0	1	0	1
Green	0	1	9	0	0	0	0	10
Labour	1	0	66	0	0	0	0	67
Liberal Democrat	36	0	34	6	0	0	0	76
Plaid	1	0	6	0	3	0	0	10
SNP	13	0	6	3	0	32	0	54

5   WHY DOES THIS TELL US VERY LITTLE ABOUT THE NEXT GENERAL ELECTION?

The European Parliament elections were conducted using a different electoral system to the electoral system used in Westminster elections. It featured two parties which did not exist at the 2017 general election – and which may not exist at the next general election. Voters voted on grounds which were differ-

ent to the grounds upon which they vote in general elections.

These are all reasons why voting behaviour is very different in European Parliament elections compared to Westminster elections. These reasons mean that European Parliament elections tell us little about the next Westminster election. Strong evidence for this comes from the last (2014) European Parliament elections. In those elections, UKIP was the most-voted party in 168 out of 381 local authority areas (44%), yet in the general election of the following year it won just 1 seat.

REFERENCES

Hanretty, Chris. 2017. "Areal interpolation and the UK's referendum on EU membership." *Journal of Elections, Public Opinion and Parties* 27(4): 466–483.