

The Aftermath of the 2010 UK General Election: Weighted First-Past-The-Post

THE FIRST-PAST-THE-POST VOTING SYSTEM IS BROKEN

This is not just because it is not representative of vote share, not because it currently gives the Labour party an enormous electoral advantage over other parties, not even because it can apparently boost a party running 3rd in the popular vote to have the most MPs in the House of Commons. These are just symptoms of the problem. *It is broken because the result of the general election depends more on the way that boundaries of constituencies are defined than it does on how people vote.*

Taking the 2010 general election, with the following truncated results:¹

| | Votes | MPs |
|----------------------------|------------|-----|
| Conservative | 10,706,647 | 306 |
| Labour | 8,604,358 | 258 |
| Lib Dem | 6,827,938 | 57 |
| SNP | 491,386 | 6 |
| Green | 285,616 | 1 |
| Sinn Féin | 171,942 | 5 |
| Democratic Unionist | 168,216 | 8 |
| Plaid Cymru | 165,394 | 3 |
| SDLP | 110,970 | 3 |
| Alliance | 42,762 | 1 |
| Speaker | 22,860 | 1 |

TABLE I
2010 GENERAL ELECTION RESULTS

With exactly the same results – that is everyone voting in exactly the same way as happened in this most recent election – but with different boundary definitions, we could have seen the Conservatives get 360 seats. However, given the power to manipulate boundaries, we could, in theory, have got a Labour minority or even a Labour majority of MPs. In fact, even a Lib Dem majority government is possible from these results, given some slightly strange boundary definitions. This is clearly a nonsensical situation to be in and is certainly partly down to the fact that the constituencies are allowed to have radically different sizes.

It is because of this boundary-dependent process that the Conservatives required a 2.8% vote share advantage before even overtaking Labour as the largest party. For the Conservatives to have got a majority under this system with this set of boundaries they would have required about 40.1% of the vote, whereas Labour won a (notional) 48 seat majority in 2005 with only 36.1% of the vote. Even after the 2010 general election Labour have 258 seats off a 29% vote share whereas the Conservatives only managed 198 seats off 32.3% of the vote in 2005.

¹With 1 seat, *Thirsk and Malton*, still to be decided on 27 May 2010.

Before we throw first-past-the-post out of the window and start from scratch, we should recognise that first-past-the-post has not necessarily unique but definite advantages and benefits:

- 1) It is simple to understand.
- 2) It is easy to implement (especially at the local count level).
- 3) There is a paper audit that can be verified by hand.
- 4) It is representative. Individual MPs represent reasonably-sized constituencies. This is preferable in that it provides more locally-relevant representation in comparison to having many MPs representing a super-sized constituency (as in European parliament elections).
- 5) An individual MP can be sacked if the electorate do not think they are doing a good job. This would not be possible with a list-based proportional system where party leaders would tend to be promoted up the list to ensure survival.
- 6) It is hard for extreme parties to get representation. Where an extreme minority view looks likely to be elected, it can be countered at a constituency level rather than at a national level.
- 7) It tends to create majority governments; although as we have seen that is highly dependent on boundaries.

The first three of these advantages should not be underestimated for voter accessibility and acceptance.

WHY NOT HAVE EQUAL-SIZE CONSTITUENCIES?

This is an attractive solution and certainly counters the inequities of *Na h-Eileanan an Iar*, formerly *the Western Isles* having 22,200 voters while the *Isle of Wight* has approximately 110,000 voters. This by itself though does not solve the problem, different configurations of equal-size constituencies would still produce very different election results, so begging the question, which configuration is right and who gets to choose it.

On a practical level, this is also a very difficult system to maintain. Once equal-size constituencies are set, if the population of the UK then goes up or down by 1,000,000, it will do so unevenly, and thus require nearly every constituency in the country to be redrawn to maintain even size. Even if the population stays the same, natural flows of population would be significant enough to require an electoral census every 5 years in order to have a *legitimate* election with equal-size constituencies. Bear in mind, a general election costs over £80

million to run², a census costs over £250 million³ so this would potentially quadruple the cost of running an election in a time when we could probably do with spending the money more wisely.

WEIGHTED FIRST-PAST-THE-POST

A possible alternative is to introduce a system which maintains many of the positive aspects of the traditional first-past-the-post system while reducing the effect of boundary choice in the overall outcome of the election. The way to do this is to keep the local first-past-the-post elections to 650 or so individual constituencies (or however many parliament decides on). After this, a constituency weight is calculated which reflects how representative that constituency is with respect to the rest of the country. The elected MP for that constituency then votes with that weight in House of Commons divisions. The sum of all the weights of all the MPs equals 650, the total number of constituencies. A well selected set of boundaries would give every MP a weight of 1. A parliament with a large disparity in MP voting weights indicates a poorly selected configuration of constituency boundaries. The total of all the MP voting weights for a political party replaces the number of MPs in determining the measure of control that that party has in the House of Commons.

The constituency weight is calculated straightforwardly by dividing the total party weight by the number of MPs elected to that party. The party weight is roughly calculated by multiplying the fractional national vote-share by 650. So a party with a national vote-share of 0.5 would be given a party weight of 325. If 325 MPs were elected to that party, then each MP would be given a constituency weight of 1. If more than 325 MPs were elected then MPs in that party would have a weight of less than 1 and similarly, if fewer than 325 MPs were elected to that party, each MP in that party would be given a weight of greater than 1. A similar calculation is carried out for all the main parties in the chamber.

Independent MPs and the Speaker (who are not part of a national party, by definition) are given a vote weight of 1. For reasons explained later, very small political parties who achieve less than a so-called *Electoral Threshold* are also given a voting weight of 1 per MP. Parties who do not achieve first-past-the-post representation are, as now, not represented.

ELECTORAL THRESHOLD

The Electoral Threshold is designed to prevent extreme parties taking advantage of low-level reactionary national sentiment. It does not prevent representation, but it does allow it to be countered on a constituency-by-constituency basis.

From looking at the last 40 years of electoral data, a sensible suggested value for the Electoral Threshold would be 3 seats.

²Ministry of Justice, 2005 election

³House of Commons Treasury committee, 2001 census

Parties achieving only 1 or 2 MPs would not get scaled. Obviously the exact threshold would be decided by parliament.

It would be unfair if parties who achieved or exceeded the Electoral Threshold but whose weighted vote would take them below the Electoral Threshold were punished for doing well. Therefore parties with 3 or more MPs whose weighting would take them below the Electoral Threshold of 3 will be given a party weight of 3.

ACTUAL CALCULATION

Any party that does not achieve first-past-the-post representation is removed from the calculation. The party national vote-share is rescaled to take account of this deletion.

In the first place, weight is awarded to Independent MPs, the Speaker and MPs belonging to parties who achieve representation less than the electoral threshold on the basis of 1 per seat.

After this, party weight equal to the Electoral Threshold is awarded to parties who achieve the Electoral Threshold or more seats, but whose scaled vote-share would have put their weight below the Electoral Threshold.

The total weight awarded so far is deducted from 650, the total weight of the House of Commons, to give the residual weight. The remaining parties are given their party weight in proportion to the rescaled national vote-share from the residual weight.

FEATURES

This is not a perfect system, it is designed to be simple, verifiable and to have certain beneficial properties. Specific features include:

Enfranchisement: Many more voters in the country will be enfranchised, whether they live in a Labour, Conservative or Lib Dem stronghold or a marginal. Even if their vote does not go towards the winner of their constituency vote, it will just as importantly go towards the national vote-share of their chosen party.

Electoral Threshold protection: A party that gets less than the Electoral Threshold in MPs, does not benefit (or suffer) from vote-share scaling. In most cases this gives slight over-representation to small parties and Independents who cannot mount a national campaign. However it also prevents an individual MP commanding very high voting weights. Finally, this can also be seen as a protective mechanism against parties with extreme views. It allows moderate parties to mount a defence in a specific small number of constituencies.

No MP, No representation: A party that would not get a seat under a classic first-past-the-post election, does not get representation, no matter how much national vote-share it receives. This is a deliberate feature to prevent subversion by extreme parties. It means that parties like UKIP and the BNP

would receive no representation, unless they could convert national sentiment into actual seats.

PREVIOUS ELECTIONS

Previous elections calculated using this system are shown below. These should be interpreted with care as it is almost certain that, under the weighted first-past-the-post system, people would have voted differently. One consequence of weighted first-past-the-post is that, except in rare circumstances, tactical voting for an MP that a voter would otherwise not support, is less attractive. It can only be speculation, but we would imagine that the Labour vote in 1997 and 2001 would have been depressed and the Lib Dem vote would correspondingly have been increased, if those elections had been conducted under weighted first-past-the-post.

| | Votes | MPs | Weight |
|----------------------------|------------|-----|--------|
| Conservative | 10,706,647 | 306 | 254.09 |
| Labour | 8,604,358 | 258 | 204.2 |
| Lib Dem | 6,827,938 | 57 | 162.04 |
| SNP | 491,386 | 6 | 11.66 |
| Green | 285,616 | 1 | 1 |
| Sinn Féin | 171,942 | 5 | 4.08 |
| Democratic Unionist | 168,216 | 8 | 3.99 |
| Plaid Cymru | 165,394 | 3 | 3.93 |
| SDLP | 110,970 | 3 | 3 |
| Alliance | 42,762 | 1 | 1 |
| Speaker | 22,860 | 1 | 1 |

TABLE II
2010 GENERAL ELECTION WITH PARTY WEIGHTS

| | Votes | MPs | Weight |
|----------------------------|-----------|-----|--------|
| Labour | 9,562,122 | 356 | 241.25 |
| Conservative | 8,772,598 | 198 | 221.33 |
| Liberal Democrat | 5,981,874 | 62 | 150.92 |
| SNP | 412,267 | 6 | 10.4 |
| Democratic Unionist | 241,856 | 9 | 6.1 |
| Plaid Cymru | 174,838 | 3 | 4.41 |
| Sinn Féin | 174,530 | 5 | 4.4 |
| Ulster Unionist | 127,414 | 1 | 1 |
| SDLP | 125,626 | 3 | 3.17 |
| Independent | 122,000 | 1 | 1 |
| Respect | 68,094 | 1 | 1 |
| Health Concern | 18,739 | 1 | 1 |

TABLE III
2005 GENERAL ELECTION WITH PARTY WEIGHTS

| | Votes | MPs | Weight |
|----------------------------|------------|-----|--------|
| Labour | 10,724,953 | 413 | 278.91 |
| Conservative | 8,357,615 | 166 | 217.35 |
| Liberal Democrat | 4,814,321 | 52 | 125.2 |
| SNP | 464,314 | 5 | 12.08 |
| Ulster Unionist | 216,839 | 6 | 5.64 |
| Plaid Cymru | 195,893 | 4 | 5.09 |
| Democratic Unionist | 181,999 | 5 | 4.73 |
| Sinn Féin | 175,933 | 4 | 4.58 |
| SDLP | 169,865 | 3 | 4.42 |
| Health Concern | 28,487 | 1 | 1 |

TABLE IV
2001 GENERAL ELECTION WITH PARTY WEIGHTS

| | Votes | MPs | Weight |
|----------------------------|------------|-----|--------|
| Labour | 13,518,167 | 418 | 297.83 |
| Conservative | 9,600,943 | 165 | 211.52 |
| Liberal Democrat | 5,242,947 | 46 | 115.51 |
| SNP | 621,550 | 6 | 13.69 |
| Ulster Unionist | 258,349 | 10 | 5.69 |
| SDLP | 190,814 | 3 | 4.2 |
| Plaid Cymru | 161,030 | 4 | 3.55 |
| Sinn Féin | 126,921 | 2 | 2 |
| Democratic Unionist | 107,348 | 2 | 2 |
| Independent | 64,482 | 1 | 1 |
| Speaker | 23,969 | 1 | 1 |
| UK Unionist | 12,817 | 1 | 1 |

TABLE V
1997 GENERAL ELECTION WITH PARTY WEIGHTS

| | Votes | MPs | Weight |
|--------------------------------|------------|-----|--------|
| Conservative | 14,093,007 | 336 | 277.19 |
| Labour | 11,560,484 | 271 | 227.38 |
| Liberal Democrat | 5,999,384 | 20 | 118 |
| SNP | 629,564 | 3 | 12.38 |
| Ulster Unionist | 271,049 | 9 | 5.33 |
| SDLP | 184,445 | 4 | 3.63 |
| Plaid Cymru | 156,796 | 4 | 3.08 |
| Democratic Unionist | 103,096 | 3 | 3 |
| Ulster Popular Unionist | 19,305 | 1 | 1 |

TABLE VI
1992 GENERAL ELECTION WITH PARTY WEIGHTS

MID-TERM CHANGES IN REPRESENTATION

By-elections

During a parliamentary session, for various reasons, a by-election can be called in a constituency to elect a new MP. This raises two issues: should the votes of constituents be counted towards the national vote share; and what happens if an MP of a different party is elected. The principle behind weighted first-past-the-post is that the vote share should reflect a snapshot of the whole nation's intention at a single point (a general election), and therefore the extra votes cast in a by-election should not be integrated into the vote-share calculation that was derived from the previous general election. In contrast, if an MP of a different party is elected for that constituency, the constituents are entitled to have their constituency weight recalculated to reflect the new MP's affiliation. In most cases, this will affect the individual MP voting weights for the party that gained the seat and party that lost the seat but will have a neutral effect on overall party weight as the vote share calculation does not change. In exceptional circumstances, if the new MP is an independent or if the new MP takes a party above or below the electoral threshold, the entire calculation will need to be rerun.

Crossing the Floor

Occasionally an MP will cross the floor of the House to join another party in the middle of a parliamentary term. Under current rules, this does not automatically precipitate a by-election in a constituency, so naturally this contingency has to

be dealt with. In these circumstances and especially because there has not been a by-election to ratify the change, we envisage that parliament would likely prefer to maintain the status quo and keep the constituency weight that had been attributed to that seat when the member had last been elected at the previous general election. This would mean that the MP would neither gain or lose from switching allegiance, and would be treated as if they were rebelling against their former party in most divisions. If the MP decided to reinforce their switch of party by resigning their seat and standing in a resulting by-election, then the rules outlined above would come into play. Once a subsequent general election came round, the usual calculation would be carried out and if the MP kept their seat under the new party banner, they would, at that stage, be attributed the same constituency weight as other MPs in their new party.

Dr. J T Bradley
Imperial College London

Dr. H J Wilson
University College London