Poll Methodology, Weighting And Adjustment Systems

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In the 2005 general election campaign the polls all ended up saying more or less the same thing. In the final round of published pre-election polls by BPC members, we were very close in our estimation of the GB vote share for each party.

	ICM	MORI	NOP	Populus ¹	YouGov	Result
	%	%	%	%	%	%
Labour	38	38	36	38	37	36
Conservatives	32	33	33	32	32	33
Liberal Democrats	22	23	23	21	24	23
Other Parties	8	6	9	9	7	8

There were, however, marked differences between the polling companies in *how* they arrived at these figures: between them the BPC member organisations used three different fieldwork methods during the election campaign, and no two companies apply exactly the same weightings and adjustments to their data before publication, indeed there are some marked differences and – in terms of polling methodology – we cannot all be right.

The question therefore arises, what, if anything can we learn about the performance of the polls at the 2005 election by looking more closely at the methodology, weighting and adjustment systems used by all the polling companies?

¹ This was the final Populus poll that was published before close of polls. Populus did another poll, commissioned by Lord Ashcroft, with later fieldwork – finishing a day later than the poll published in The Times on election day – which was much closer to the final result but was not published for six weeks and could not therefore be used at the time for the immediate post-election assessment by the BPC of how accurate each company's final poll had been. The figures from the final Populus poll were Labour 36%, Conservative 32%, Lib Dem 23%, Others 9% – representing an average error of 0.5%.

The first, and most basic, issue to look at is how each company conducts its fieldwork. The table below shows that of the 5 BPC members publishing polls on the eve of the election, four were conducted by random digit dialling telephone fieldwork. Given how close the final polls were to one another in average error, it

	Telephone	Internet	Average error
NOP	\checkmark		0.25%
ICM	\checkmark		1%
YouGov		✓	1%
Populus	\checkmark		1.5%
MORI	\checkmark		1%

is impossible to conclude that one mode of interviewing produces more accurate data than another, or that such variation as there was in the spread of final figures for each party can be accounted for by mode of interviewing.

It is in the area of weightings and adjustments that more differences between the various polling companies are to be found. Of the five companies that published a polling day prediction of vote share (with fieldwork substantially or entirely conducted in the week of the election), all weight their samples on the basis of age, socio-economic grouping and region – though YouGov, unlike the other companies, do not use standard government regions as the basis for their regional weighing and breakdown. All the companies derive the base figures to which they weight for these demographic factors from the same basic sources.

Four of the five companies use some kind of past vote weighting method in order to try and ensure that their samples are politically representative. The exception is MORI (though Communicate Research, who did not have a published poll in the final few days of the campaign, also do not weight samples on the basis of their past vote).

Past vote weighting can and often does make a significant difference to voting intention numbers as illustrated in the table below, which shows the impact of each stage of weighting on a recent Populus voting poll.



The theory of past voting weighting holds that the simplest and most direct way to gauge the political representativeness of a sample is to look at the proportions in which it voted for each party at the last election since this, obviously, is a known result and can therefore be used as a benchmark. But it has been long established from general election panel studies and other research that some voters will always misreport how they voted at the last election, either correcting past behaviour to match current preference or simply forgetting or misremembering. This means that if it were possible to poll the entire electorate and ask how they voted at the last election the resulting data would be fairly close to, but not the same as, the actual result.

Different companies have had different approaches to the question of how to estimate this 'misremembering factor', but the historic data on which the theory is based yields the fundamental observation that demographically representative poll samples are consistently likely to produce more people who remember voting Labour than actually did, and that only part of this is due to sample error. Of the four companies which do weight by past vote – NOP, ICM, Populus and YouGov – three applied weights which reflect this premise, weighting recalled past vote for Labour to a figure above their actual vote share at the previous election, but lower than the unweighted recalled vote of the sample; indeed, though individual methods varied to the extent that exact numerical past vote weights varied a little, NOP, ICM and Populus applied essentially the same weights to 2001 recalled past vote in their samples: Labour 45%, Conservative 31% and Lib Dem 18%. YouGov, which of course conducts polling on a fundamentally different basis than the other three companies that weight by past vote, weighted the recalled 2001 vote of its samples to the following proportions: Labour 52%, Conservative 27%, Lib Dem 14%. The implication of this is that YouGov samples must tend to understate Labour support, rather than overstate it as telephone pollsters have tended to do, while markedly overstating Tory and Lib Dem support.

Having defined the main weighting and adjustment regimes used, the next question is whether *before* those weights were applied pollsters were finding a similar or different picture of likely voter behaviour. Though the polling companies all ended up in about the same place in terms of share of vote for each party, the fact that there were different approaches to weighting (MORI and Communicate not weighting by past vote, YouGov applying substantially different past vote weights from NOP, ICM and Populus) must mean that there were variations in what the fieldwork of different companies was finding in the first instance.

There is some variation between the companies in the proportions of their sample saying 'don't know' to the voting intention question, or refusing to answer the question. ICM (20%) and Populus (17%) found rather more 'Don't knows' than YouGov (10%) or MORI (9%). YouGov, by definition of being an internet pollster, has no 'refusers', while MORI had 7% in this category, far lower than Populus (15%) or ICM (14%). Overall, therefore, about a third of ICM and Populus respondents did not name a party in answer to the voting intention question, about twice the proportion as for MORI.

A key to the story of any poll on voting intentions lies in the 'churning': the switching by voters from one party to another, as defined by the cross-tabulation of their past vote and their current intention. Here again the fieldwork of the different companies was not entirely consistent. YouGov found a somewhat lower proportion of voters for the three main parties voting the same way as they had at the previous election: 72% compared with 77% in MORI's data, and 81% according to both Populus and ICM. YouGov in particular found rather fewer 2001 Labour voters still intending to vote Labour (66%) than ICM (75%), MORI (70%) or Populus (77%).

The table below shows the percentages switching between the main parties – and indicates that the polling companies had somewhat different pictures of what was actually happening beneath the surface of the election: ICM, for instance, showing more than twice the percentage switching from Lib Dem to Tory as doing the reverse, while Populus found these two figures to be the same. YouGov and MORI found about twice the proportion switching Labour to Lib Dem as the other way around, while Populus and ICM found the ratio to be more like 1:1.5.

	Lab-Con	Con-Lab	Con-LD	LD-Con	LD-Lab	Lab-LD
ICM	6%	2%	5%	11%	11%	16%
YouGov	9%	4%	8%	14%	8%	16%
MORI	9%	2%	10%	13%	11%	21%
Populus	8%	2%	7%	7%	10%	14%

The simple conclusion from all this is that the polls all ended up in about the same place, but got there by somewhat different means – and presumably cannot all be right in the methodological assumptions and the weightings and adjustments used.

Furthermore, though having topline figures that were very similar from one company to another, the underlying data tells quite significantly varying stories about what was happening beneath the surface in terms of switching between parties, and about how many voters were willing to say how they'd vote at all. And, again, the polling companies cannot all be right about these swings and behaviours by voters.

These facts make it difficult for the polling companies to make any kind of substantial methodological response to 2005 to improve accuracy: each company could make changes to compensate for errors, but this can only be done by taking steps to bring their own polls retrospectively into line with the election result, which underlines the fact that pollsters can only ever respond to the last election and that any changes made presume that poll errors are systematic (which is hard to judge since all the polling companies deviated from the result by less than the theoretical margin of error of their final poll).

The question about how polling companies could or should apply lessons from the 2005 election to improve their methodologies is inextricably linked to the theological question of 'what are polls for?' If polls are simply a snapshot of voter opinions taken at the latest moment which newspaper deadlines allow (effectively nearly 48 hours before the election ends) is it reasonable to measure them - and judge their methods - against the actual result? We know that many voters decide at the last moment how to vote and many others change their minds between parties over the last couple of days; 'final' campaign polls are bound to miss these movements and there is nothing that can be done methodologically to allow for them. The alternative is for polling companies to produce final projections that are more than just the final voting intention figures derived from polling methodology. But if that is the right approach at election times - i.e. the approach likely to produce 'poll' numbers closest to actual results - why isn't it the right approach at all other times? These are questions that the polling industry must continue to ponder. The advent of the British Polling Council guarantees that at least the outcome of these considerations - and any changes in methods that companies may make to try and improve accuracy - will be transparent and all interested parties can form their own views about them.