# **Expert Predictions of the 2016 EU referendum**

Will Jennings and

Stephen Fisher

On behalf of the Political Studies Association

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### A selection of comments from our experts

This study is going to be comprised	of completely	arbitrary	figures,	and is	proba	ıbly
	worthless.					

Any 'expert' who makes a prediction at this stage, and within the context of the current volatility of politics in the UK and abroad, ain't no expert!

The last week could be crucial if the Scottish experience is anything to go by....

Either way the polls will all be wrong!

Just let it be over!

I'm not an expert and my answers are pure guesswork. And I might think differently tomorrow.

#### Introduction

In February last year, ahead of the 2015 general election, the PSA published its first ever survey of experts regarding their predictions of party vote shares and seats for the general election. At the time, the PSA expert respondents confidently predicted a neckand-neck race with the Conservatives on 33% narrowly ahead of Labour on 32%. Predictions of the seat totals suggested a hung parliament, with the Conservatives on 278 and Labour on 282 – with the balance of power being held by the Liberal Democrats and SNP. Not only did this prediction miss the Conservative majority – with the Conservative Party even outperforming the exit poll in key marginals – it also overestimated the Liberal Democrats (who were predicted to win 25 seats, well above the 8 seats that the party was eventually reduced to) and UKIP (who were predicted to win 7 seats, but in the end just retained Clacton). The experts also substantially underestimated the SNP landslide in Scotland, predicting 29 seats, just over half the 56 (out of 59 total) that Nicola Sturgeon's party in fact won.

While there was no inquiry into the failure of the expert forecasters at the last election, it is possible to speculate some reasons as to why these predictions ended up being badly off. One possible reason is simply that the fieldwork dates (between 4th and 21st February) were well ahead of the election, meaning that the experts' predictions might have changed by Election Day as new information and events came to light. Given the widespread shock when the exit poll was announced at 10pm on 7th May, one might be sceptical that the predictions would have changed that much in the intervening period. Likely the main reason was that conventional wisdom in the run-up to the election was strongly informed by the opinion polls, which consistently pointed to little change in the state of voting intentions but subsequently proved to be inaccurate. This expectation was reinforced by media commentary as well as the wide array of political science forecasting models, themselves often derived from poll data, which led to substantial over-confidence in predictions of the election outcome.

One might wonder why, given such a poor performance in 2015, we should revisit expert predictions on the EU referendum? As Philip Tetlock's *Good Judgment Project* and study of 'super-forecasters' has shown, the art and science of prediction is a skill that can be improved with practice. Willingness to learn from mistakes, scepticism combined with openness to different sources of information, and wariness of over-confidence are all factors that might enable a better showing of the expert forecasters this time.

On behalf of the Political Studies Association we have carried out an expert survey of journalists, academics and pollsters concerning their predictions of the outcome of the EU referendum. We asked respondents to share their predictions of the likely winner, the probability of Britain voting to leave the EU, the final vote shares and the level of turnout. The fieldwork for this survey was carried out online between 24<sup>th</sup> May and 2<sup>nd</sup> June, and was by invitation only, distributed to a large mailing list of members of the Political Studies Association, journalists from the print and broadcast media, and pollsters from the major polling companies in the UK. Responses were anonymous, and

<sup>&</sup>lt;sup>1</sup> Chris Hanretty and Will Jennings. 2015. *Expert Predictions of the 2015 General Election*. <a href="http://www.psa.ac.uk/sites/default/files/PSA%20GE%20Election%20Predictions%20">http://www.psa.ac.uk/sites/default/files/PSA%20GE%20Election%20Predictions%20</a> Report.pdf.

the intention was not to provide a documentary record of the individual who got closest to the final result (though no doubt there will be a few who wish to claim bragging rights after June  $23^{\rm rd}$ ), but rather to discover what the predictions of these groups of experts were and whether they differed in meaningful or surprising ways.

In the report that follows, we describe some of the technical details of the survey and then review the headline results.

## Response rate

The expert survey on the EU referendum received an even more enthusiastic response than last year which 537 people responded to. This time we reached 596. In total, invitations to complete the survey were distributed to 2,301 people. The total number of responses for each of our expert groups is shown in Table 1. This indicates a response rate of around 26%.

In total we asked respondents to make five predictions: the first concerned which side would win, the second related to the probability of Britain voting to leave the EU, the third and fourth were predictions of the respective vote shares for Leave and Remain, and the fifth concerned the turnout rate. Of those respondents who offered *any* predictions, most (94%) completed all five predictions. The response rate was much higher than the 79% completion rate for our expert survey for the general election in 2015. Last year's survey asked a lot more questions and included quite demanding forecasts of GB vote shares for minor parties and seat projections.

Table 1 below reports the survey completion rate, defined as the proportion of responses of each group which included *at least one* prediction of the referendum outcome, probability of voting to leave, the vote share or turnout. The table shows that academics are by far the most numerous group, and also have the highest completion rate.

**Table 1.** Number of respondents by type

Role	Respondents	Completed
Academic	496	96%
Journalist	33	91%
Pollster	13	92%
Other	54	91%

#### Predictions of the outcome

Our first question about expert predictions asked "In your opinion, which side do you think is most likely to win the referendum?" and listed the options "Remain", "Leave" and "Both sides have an exactly equal chance". In Table 2 below, we report the percentage of respondents for each option, both across all respondents, and for each particular group of experts – academics, pollsters, journalists and other (the latter group includes think tankers, politics teachers, election nerds and others who are PSA members).

Predictions of the outcome might suggest to some that the campaign to remain in the EU has little to worry itself about. Some 87% of respondents think that Britain is more likely to vote to stay. Just 5% believe that Brexit is the most likely outcome. There is a greater consensus among journalists, with 97% saying that Britain will vote to stay in the EU, a figure some 10 percentage points higher than that from the political scientists. Despite the small sample size for journalists this difference is statistically significant.

Table 2. Predicted outcome

	Overall	Academics	Pollsters	Journalists	Other
Remain	87	87	92	97	84
Leave	5	5	0	3	2
Both sides have an exactly equal chance	8	7	8	0	14

# **Predictions of the probability of Britain voting to leave**

Our second question asked "What do you think is the probability of Britain voting to leave the EU?" This sought a more nuanced prediction of how our respondents perceived the likelihood of the referendum outcome – rather than offering a simple binary choice. The results are reported in Table 3. Here the predictions point to a result that is much more finely balanced, with the mean probability of Britain voting to leave the EU put at 38%. Of the different groups, the political scientists are much more uncertain about the outcome than journalists or pollsters. The average estimated probability of Britain voting to leave for academics was 38%. The corresponding figures are 33% for pollsters and 32% for journalists. The difference between journalists and academics is of only borderline statistical significance and other differences are not significant because of small sample sizes.

**Table 3.** Predicted probability of Britain voting to leave the EU

	Mean	Academics	Pollsters	Journalists	Other
Probability of voting to leave the EU	38	38	33	32	38

While the predictions of the referendum outcome that our experts think is most likely suggest certainty over the vote, there is widespread recognition of the possibility of Brexit. The majority of responses fall within 25% to 45% range (this is the inter-quartile range of responses). This also can be seen below, in Figure 1, by plotting the frequency

of responses for different values of the probability of Britain voting to leave the EU. Intriguingly the figure shows many more people giving probabilities of a Leave vote just short of 50% than just above 50%. Perhaps there is a psychological process whereby respondents feel more confident about which side of 50% they want their predicted probability to be than about what level it should be at.

Frequency Probability of Leave (%)

Figure 1. Histogram of predictions of the probability of Britain voting to leave the EU

#### Predictions of the vote share for each side

Our third question asked "What do you think will be the share of the vote for each side?" In Table 4 we report the average predicted vote share for each side, both across all respondents, and for each particular group of experts. These figures tell a uniform story, with the average prediction being a ten point lead, with 55% voting to Remain and 45% voting to Leave. None of the between group differences are statistically significant.

**Table 4.** Predicted vote share for each side

	Mean	Academics	Pollsters	Journalists	Other
Remain	55	55	56	56	55
Leave	45	45	44	44	45

With a consistent story emerging from the expert predictions, of a likely win for Remain, and a fairly substantial lead, should the outcome of the referendum be in any doubt?

Anyone who has read Philip Tetlock's study of super-forecasters might be concerned by the tendency of our experts to make their predictions of vote shares at 5-point intervals. The frequency of predictions at different vote shares is plotted in Figure 2 below. From this, the spikes that you can see in the histogram are at 35, 40, 45 and 55 (though interestingly not 50). Tetlock observes that the best forecasters tend to be people who make predictions in fine gradations. Using rounded numbers might suggest that our experts are 'locking-on' to coarser probabilities. Also, there is again a marked tendency to give answers just short of 50% than just above 50% for Leave.

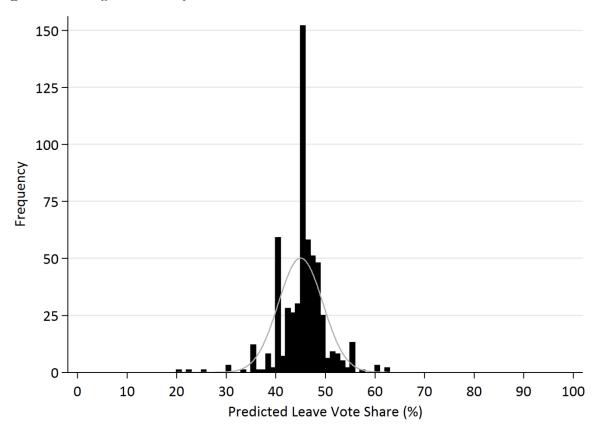


Figure 2. Histogram of the predicted vote share for Leave

## **Predictions of turnout**

Finally, we also asked respondents "What do you think the turnout will be?" While not directly indicative of the referendum outcome, the level of turnout could matter in the degree to which the two sides are able to mobilise their supporters. A low turnout might mean that the side which is most effective in getting its sympathisers to turn out to vote will win. Our experts' predictions of turnout, summarised in Table 5 below, are fairly consistent. The average predicted turnout is 61% and the variation among the political scientists, pollsters, journalists and other respondents is not statistically significant. This is well below the turnout of 85% achieved in the 2014 Scottish Independence referendum and, indeed, below the level of turnout at the 2015 general election. It also is substantially lower than the implied turnout from self-reported likelihood of voting questions in many opinion polls.

**Table 5.** Predicted turnout

	Mean	Academics	Pollsters	<i>Journalists</i>	Other
Turnout	61	61	59	63	59

#### Conclusion

The findings of our expert survey are that while our respondents seem fairly sure that Remain is most likely to win the EU referendum, and that it will receive around 55% of the vote, giving it a decent sized lead, the Brexit camp still has a fighting chance. Our experts are not upbeat about voter turnout, which means that the campaign that is best able to mobilise their supporters may have an advantage.

As we discovered last May, consensus in predictions across expert groups may just be a sign of groupthink or exercises in mutual self-delusion. Certainly we should be wary in placing too much weight on expert predictions or any single method alone. And we should also note that there is potential for some modes of prediction to affect each other, such as opinion polls influencing pundit forecasts. That said it is striking that while both experts and betting market punters have access to the same opinion polls, the experts in our survey express considerably more uncertainty than do the prediction and betting markets. The average probability of a Brexit vote is 38% among experts but was just 26% or lower for betting markets during our fieldwork period.

Maybe the greater caution of the experts in our survey suggests that they have learnt the lessons of 2015 rather better than the gamblers. Nonetheless, the strong consensus that Remain are more likely to win means that a victory for Leave would again shake confidence in the wisdom of pollsters, pundits and political scientists (and perhaps the confidence of these people too). No doubt it would be seen by some as another bloody nose for 'the establishment'.

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