

EU referendum data analysis - Attitudes to the free market and free movement of people

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Introduction

The EU referendum vote reflected the attitude of the people to the European Union on the 23th June 2016. As we know a small majority of voters elected to leave the EU. Since then there have been a number calls for a second referendum, but the UK government is so far committed to delivering what they believe is the will of the people, and in particular there has been a focus on the control of the free movement of people into the UK.

There is an assumption in this position for which there has been limited evidence. Namely that the referendum result implies that the UK population wishes to control the free movement of people within the EU.

To test this assumption YouGov have conducted an online survey of 1639 people representative of the EU referendum voting population, to try and find evidence to support or refute this assumption.

Conflict of interest

This report has been independently written and commissioned. It has had no support from any political organisation; no financial relationships with any organisations that might have an interest in this work; no other relationships or activities that could appear to have influenced this work. The opinions expressed in this report are the author's own.

Background

The result of the EU referendum vote is a recommendation that the UK government negotiates for the UK to leave the EU. It does not give any information about the reasons for this recommendation. This is problematic, as the process of triggering Article 50 has many potential outcomes, and the UK government did not have a predetermined negotiating position before the referendum vote. The campaigns on both sides of the argument addressed issues such as the cost of EU membership, the risk to UK workers posed by immigration, lack of democratic accountability and transparency in the European Commission, and loss of sovereignty, all of which will have influenced the decision. The referendum vote was not for a specific different relationship with the EU, but rather to reject the existing one. We do not have any concrete evidence which of those issues affected the decision making of the population, or which of them continue to influence that decision making, now the need for a new relationship has become clear. As a result the government cannot know what specific outcomes to aim for when negotiating to leave the EU.

It seems important for the UK economy that we are able to trade freely with the EU. The issue of free movement of people is also vitally important to the EU, and any negotiation based on the UK having access to the free trade zone without free movement of people is likely to be fraught, prolonged and probably eventually unsuccessful.

There has been an assumption made that control of the free movement of people is a key issue for the UK electorate, and hence should be a central focus of the negotiation following enactment of Article 50. This assumption places a great deal of uncertainty over the future of the UK's access to the EU market. This in turn is affecting confidence in the UK, reducing investment into the UK from Europe, creating cultural barriers to businesses that rely on Europe, fostering ill will in Europe during the negotiation period, as the position of EU nationals in the UK, and UK nationals in the rest of the EU, is placed into doubt. The economic risks associated with this negotiating position may be possible to control, but there are also reputational and socio-cultural risks resulting from it that we should not ignore.

We wanted to test the assumptions that the UK government are making on the free movement of people with the UK electorate to see what the electorate's view is on this specific issue.

Method

To assess the UK population's attitude to the UK government's negotiating position around immigration we asked the following question:

"The advantages to the UK of access to the EU free market outweigh any disadvantages of the free movement of

workers across the EU."

With responses on a 5 point Likert scale ("**Strongly agree**", "**Agree**", "**Not sure**", "**Disagree**", "**Strongly disagree**"), to a sample of 1639 people using an online survey conducted by YouGov using their daily omnibus service, on the 19th and 20th of July 2016.

The omnibus service is conducted using an online interview administered to members of the YouGov Plc UK panel of 185,000+ individuals who have agreed to take part in surveys. An email was sent to panellists selected at random from the base sample according to the sample definition, inviting them to take part in the survey and providing a link to the survey. YouGov Plc normally achieves a response rate of between 35% and 50% to surveys but this does vary depending on the subject matter, complexity and length of the questionnaire. The responding sample is weighted to the profile of the sample definition to provide a reporting sample representative of the UK population. The profile is normally derived from census data or, if not available from the census, from industry accepted data.

The sample included some representation from all demographic groups across 6 broad regions of the UK (London Rest of the South, Midlands and Wales, North of England, Scotland, Northern Ireland). There was some sample bias noted with a moderate underrepresentation of 18-24 year old males in London, and in the Midlands / Wales, and over representation of females of all age groups in the Rest of the South. A weighting was applied to correct this sample bias based on demographics.

The sample included people who voted across the political spectrum in the 2015 general election. The proportions were compared to the known outcome of the election, and a underrepresentation of people who did not vote in the last election was noted. This suggests that there is a disengaged cohort in the population that neither voted in the 2015 election nor responds to surveys, and our sample is only really looking at engaged voters. It is likely that this disengaged group affects all results equally, but this is a potential source of bias in the results. The other voting patterns were appropriate and a second weighting factor has been applied for the sample bias against those that did not vote.

When looking at the reported voting patterns in the EU referendum we find a strong independent bias towards Remain, even when all the other potential sources of sample bias are corrected for. This appears to be a reporting bias in our sample with far more people reporting that they had voted remain than can have been the case, and an underrepresentation of "did not vote". This level of bias is in contrast to all other parameters, and looks to be a systematic reporting bias. Any result which depends on the reporting of the voters' EU referendum vote must be treated with caution, and we have made no conclusions based on that aspect of the data.

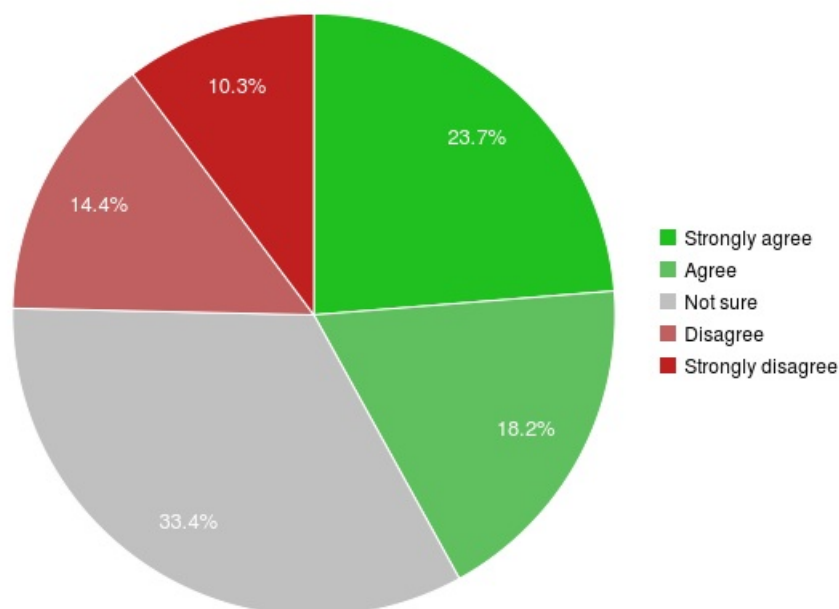
The other potential biases identified for surveys of this type is a central tendency bias, and agreement bias. It is not possible to control for these given the design of the survey.

Results

The top level results for the study question shows the following distribution of answers from the survey sample.

The advantages to the UK of access to the EU free market outweigh any disadvantages of the free movement of workers across the EU.

response	count (n=1639)	percent
Strongly agree	389	23.7%
Agree	299	18.2%
Not sure	547	33.4%
Disagree	236	14.4%
Strongly disagree	168	10.3%



YouGov have applied a weighting function to individual's responses in the sample to correct for small variations in the sample. This is shown in the second column in the following table. YouGov's weighting methodology accounts for divergence of the sample from the observed EU referendum result. As discussed above this appears to be a systematically biased variable. A second weighting function therefore, that does not use this information as part of the weighting has also been constructed which depends only on demographics and political orientation. This is shown in the third column. In subsequent data we have used the YouGov weighting as that produces the most conservative results.

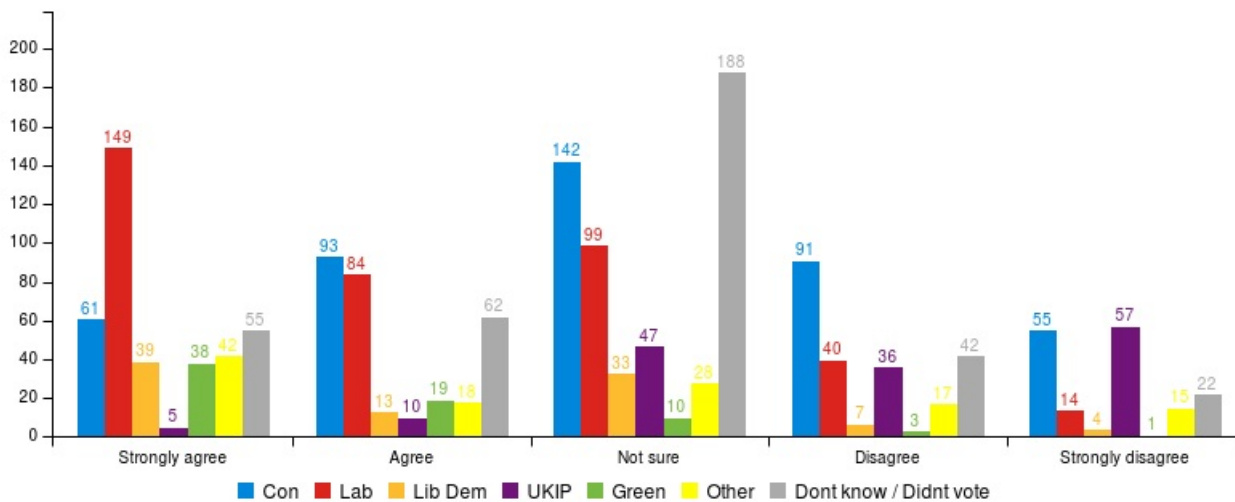
The advantages to the UK of access to the EU free market outweigh any disadvantages of the free movement of workers across the EU.

response	count (n=1639)	unweighted percentage (+/- 95% confidence)	yougov weighting including EU referendum data (+/- 95% confidence)	alternative weighting excluding EU referendum data (+/- 95% confidence)
Strongly agree	389	23.7% (+/-2.1%)	21.1% (+/-2.0%)	22.6% (+/-2.1%)
Agree	299	18.2% (+/-1.9%)	16.9% (+/-1.9%)	18.1% (+/-1.9%)
Not sure	547	33.4% (+/-2.3%)	36.4% (+/-2.4%)	35.5% (+/-2.4%)
Disagree	236	14.4% (+/-1.8%)	15.0% (+/-1.8%)	13.8% (+/-1.7%)
Strongly disagree	168	10.3% (+/-1.5%)	10.5% (+/-1.5%)	10.0% (+/-1.5%)

We can look at these results broken down by the political orientation of the voters based on their reported vote in the 2015 general election. This uses YouGov's weighting algorithm.

The advantages to the UK of access to the EU free market outweigh any disadvantages of the free movement of workers across the EU.

Political orientation	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Con	12.8%	19.4%	32.7%	21.6%	13.5%
Lab	35.8%	20.4%	28.5%	11.6%	3.8%
Lib Dem	37.9%	11.6%	36.8%	7.4%	6.3%
UKIP	3.2%	6.4%	32.5%	22.9%	35.7%
Green	50.0%	27.8%	14.8%	3.7%	3.7%
Other	30.3%	13.8%	28.4%	16.5%	11.0%
Dont know / Didnt vote	13.3%	15.8%	54.6%	10.5%	5.5%



Discussion

This survey shows 41.9% of the sample agree that the benefits of free trade with the EU outweigh any disadvantages of free movement of people, with only 24.7% percent of the sample disagreeing, and 33.4% uncertain.

Whilst this does not represent an absolute majority of the sample, if we discount those who are uncertain (in line with the methodology of the EU referendum itself), this represents a 62.9% to 37.1% split in favour of free trade and free movement of people . This is clearly a more significant result than the 51.9% to 48.1% split seen on the 23th June (albeit on a small sample).

From this sample YouGov estimates that 38.0% of population agree, 25.5% disagree and 36.5% are not sure, leading to a weighted percentage of 59.8% to 40.2% of those who have an opinion. As discussed above this weighting probably represents the low end for the "agree" sample. Both corrected and uncorrected show a clear separation between the 2 groups at a 95% confidence interval. It seems likely that the observed difference between agree and disagree is a statistically significant one.

Taken from the opposite viewpoint, based on this survey, only 25.5% of the UK population would actively support a political solution the EU that included the UK leaving the free market, in order to control the free movement of people from the EU.

The implication of this result is that whilst the UK voted to leave the EU, it was not done solely on the basis of concerns over the free movement of workers within the EU. It does not seem likely that this issue alone would have been enough to persuade the electorate to vote to leave the EU. This finding is consistent with [Lord Ashcroft's post referendum polls](#)

(<http://lordashcroftpolls.com/2016/06/how-the-united-kingdom-voted-and-why/>) which suggested that "the ability to control our laws" was far more significant than the immigration question and border control.

Examining the political breakdown we must be cautious as the smaller sample size of the subgroups affects the confidence of our figures. However we can see a division between the various political parties, on their support for free movement of people. Conservative voters appear evenly split between agreement and disagreement, UKIP supporters are clearly in general disagreement, and the other political parties (including the SNP in the "other" category) demonstrate varying degrees of agreement with the principle that benefits of free trade outweigh disadvantages of free movement of people. This is in line with expectation, based on the political rhetoric of the parties.

This split raises an awkward question for the Conservative government and its strategy for negotiation with the EU. How can the Conservative government develop a negotiating position around free trade and free movement of people, that is in line with the attitudes of the whole population demonstrated by this survey, despite their core voters being equivocal on it, and a group of possible target voters being opposed to it? The interests of the whole UK versus the interests of the Conservative party appear to be misaligned, and this could have very far reaching consequences.

Recommendations

We've looked at one facet of the decision making around the vote to leave, at a very superficial level, and found a significant divergence between the electorate's view and the apparent direction of policy in the UK. This was found in a relatively small sample answering a single question, as a result there are likely to be nuances that we cannot pick up that might influence the qualitative interpretation of this result. We recommend that this result is confirmed on a larger sample, with alternative methodologies.

There are other issues such as the cost of EU membership, or erosion of sovereignty, which could be far more important to the electorate as a whole, and it would be an illuminating exercise to try and work out the relative importance the electorate places on the various issues that made up this debate using a broader set of questions. Reducing the complexity of our relationship to the EU to a binary decision, has resulted in a decision that many people do not understand, both in the UK and Europe. We think the UK government need to get to the detail behind that decision as, in the words of the US declaration of independence (https://en.wikipedia.org/wiki/United_States_Declaration_of_Independence#Annotated_text_of_the_engrossed_Declaration), *"When in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another... ..a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation."*

In this analysis we see that the assumption that the issue of the free movement of people within the EU is an overwhelming concern for the electorate is not supported by the evidence. We find evidence that leaving the EU free market, to better control our borders, is not generally supported by the population. We think that it is important that the government actively seeks more evidence about the issues which are of central importance to the UK electorate before they trigger Article 50.

As the Conservative government are potentially in a conflicted position based on the will of their core voters, versus the will of the population as a whole, it would appear doubly important that they find concrete evidence to base their decision making on, lest they find themselves operating outside of the will of the electorate.

Author's notes

This report summarises information collected from online polling undertaken by YouGov of a UK sample of over 1600 people aged 18 and over, weighted to account for representativeness.

These data were further analysed by the authors using a [data analysis methodology available in github](https://github.com/rjchallen/brexit-data-science) (<https://github.com/rjchallen/brexit-data-science>); direct replication of the statistics featured in this report using the tables published by YouGov may therefore be subject to rounding errors. Any inaccuracies or errors in the further analyses of these data are the sole responsibility of the authors.

Total sample size was 1,639 adults. Fieldwork was undertaken between 19th - 20th July 2016. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+). YouGov is a member of the British Polling Council.

About the author

Robert Challen is a health informatician with experience in data science and evidence based medicine. He was motivated to commission this survey, and write this report, by the apparent lack of concrete evidence supporting the brexit debate.