

# Who voted Leave: the characteristics of individuals mattered, but so did those of local areas

 [blogs.lse.ac.uk/politicsandpolicy/explaining-the-vote-for-brexit/](https://blogs.lse.ac.uk/politicsandpolicy/explaining-the-vote-for-brexit/)

7/6/2016

*Individual demographics had a huge effect in determining the outcome of the referendum, but the characteristics of local areas mattered as well, explain [Monica Langella](#) and [Alan Manning](#). Immigration, the decline in manufacturing and in other sectors, as well as politics, all played an important role in deciding the outcome.*



The UK's vote to leave the EU on 23 June has induced much speculation about the factors behind people's decision. From opinion polls (e.g. the [Ashcroft Polls](#)) we know that the old and the less educated were more likely to vote Leave. But it's likely that voting was not just determined by individual characteristics but by those of local areas. Indeed, the main hypotheses put forward for the Leave vote are that it represents the reaction of those who have been left behind because of globalization (as Gordon Brown argued) or immigration.



This article reports the result of an exercise in which the vote share for Leave in the 380 areas of England, Wales and Scotland are regressed on a variety of area characteristics largely drawn from the census for 2011 and earlier decades. These characteristics are for the population as a whole – not for those eligible to vote (British citizens), registered to vote and actual voters in the referendum. Nevertheless the variables we use can explain 90 per cent of the variation in the vote share across areas.

[27792525851\\_7f5f93cb9a\\_k](#)

The effects reported below are “all other things constant” – all are significantly different from zero, to use the jargon. So based on demographics we find that:

- A *10 percentage point increase* in the share of graduates is associated with a 11.2 percentage point reduction in the vote for leave
- A *10 percentage point increase* in the share of students is associated with a 5.0 percentage point reduction in the vote for leave
- A *10 percentage point increase* in the share of the population aged 60+ is associated with a 3 percentage point increase in the vote for leave
- A *10 percentage point increase* in the white share of the population is associated with a 2.0 percentage point increase in the vote for leave

But we also find the following:

- A *10 percentage point increase* in the migrant share of the population is associated with a 3.3 percentage point increase in the vote for leave. It would appear that concerns about migration did influence the vote.
- It is not just the level but the change in the migrant share from 1991 to 2011 that seems to have been important. And the proportionate change seems more important than the absolute change. A doubling of the migrant share is predicted to raise the leave vote by *1.3 percentage points*.
- Changing industrial structure is important. A fall of *10 percentage points* in the change in the share of employment in agriculture, manufacturing, mining and construction from 1981 to 2011 is associated with a rise in the leave vote of 1.2 per cent. But it's not just heavy industry – a fall of 10 percentage points in the change in the share of employment from 1981 to 2011 in public administration, health and education is

associated with a rise in the leave vote of 1.8 per cent.

- Scotland is *16.5 percentage points* less likely to vote for leave. Perhaps surprisingly given its population mix, London is actually slightly more likely than most regions to have voted leave though the difference is not statistically significant. London voted to remain because its population is younger, better-educated and less white than most of the country (though it also has more immigrants) not because its voters have different attitudes to those in the rest of the country.
- A rise of *10 percentage points* in the current share of the working age population in employment is associated with a 1.3 per cent rise in the leave vote – current worklessness does not seem to explain the vote to leave. So even though the UK labour market currently appears job rich there seems little in the way of a feel-good factor that has influenced the vote to remain.

It is possible that different factors that we do not include in the analysis are the ultimate explanation for the referendum outcome and that other studies can do a better job in explaining the results. Our colleagues Steve Machin and Brian Bell in the FT [suggested](#) that wage growth can explain the vote – though we find it only marginally significant when other variables are included.

Our analysis suggests that individual demographics had a huge effect, but it also points out that concerns about immigration and long-run decline in manufacturing and related sectors played an important role in deciding the outcome. And the fact that Scotland stands out as being radically different from England and Wales, suggests that perhaps the political dimension was important as well.

---

## About the Authors

[Monica Langella](#) is Research Officer at the Centre for Economic Performance.



[Alan Manning](#) is Professor of Economics at LSE and Director of the Community Programme at the Centre for Economic Performance.



Image credit via a [CC BY NC ND](#) licence