Demographic analysis summary - by Tom Pruchnow, Persuasion UK

What did we do?

Our modelling involves three steps.

First, we built two prediction models: one for people's actual voting behaviour in 2016 and one for their current opinion today. These models allow us to predict how voters with a specific demographic profile (e.g. born between 1987 and 1991, male, white, with university degree, in a higher profession, etc.) voted in 2016 and what opinion they hold today. To estimate the 2016 model, we used wave 9 of the British Election Study Internet Panel which surveyed around 30,000 people right after the referendum. For the current opinion model, we used the Persuasion/IPPR survey from July.

Second, we built four population tables for English and Welsh local authorities (your local district, city or borough council): 2011, 2016, 2021 and 2025. These tables are the counterpart to the prediction models in that they tell us how many people with a specific demographic profile lived in a specific local authority in each year. The main sources for these tables are the 2011 and 2021 censuses. For the mid-decade 2016 and 2025 years, we use the ONS Mid-Year Population Estimates to update the overall population sizes by age and sex. We also use the Annual Population Survey to update the profiles of people under 30 in 2025, many of whom were still in education in 2021 and so were more likely to change their socio-economic status and where they live over the following four years.

Third, we combine the two sides. For each local authority we have an estimate of how many voters with each demographic profile live there, and a prediction of how voters with that profile voted in 2016 and how they think today. Averaging these predictions across all profiles, weighted by how many people have each one, gives an estimate of how the authority voted in 2016 and where it stands today. Adding up authorities gives the same for regions and for England and Wales as a whole. We can also derive constituency-level figures by combining the local authorities, or parts of them, that each constituency covers.

How do you read the graphs?

The graphs show predicted levels for Leave/Stay-out among decided voters over time. If we included undecided/2016 non-voters, these shares would be lower. It's hard to actually implement this, because people tend to hide that they didn't vote, so the non-voter share in the BES is much too low.

The solid blue line illustrates estimates from the 2016 prediction model (how people actually voted). The dotted orange line uses the current opinion model (what people think today). The turquoise diamond is the official 2016 result reported by the electoral commission.

Along each line, the prediction for a specific voter profile never changes, because the prediction model stays the same. So all over-time changes must reflect changes in who makes up the electorate. Some of this is people's circumstances changing, such as buying a home or moving to another area, and some is people leaving the UK. Most importantly, though, it is young voters entering and older voters leaving the electorate.

We can do the equivalent decomposition for opinion change by considering the difference between the blue and orange line. Since the two estimates are based on the same population tables, all contemporaneous differences between the two trends must be 'persuasion' effects. In 2016, for instance, this persuasion effect would be sufficient to push the Leave share well below 50% in England and Wales.

We report both "restricted" and "everyone" graphs. "Restricted" graphs only consider people who were 18 or older in 2016. The demographic trend you see does accordingly not reflect the effect of younger cohorts entering the electorate: it's primarily the effect of mortality. "Everyone" graphs, on the other hand, include everyone who was 18 or older in the year shown, so the 2025 point covers everyone aged 18 or over in 2025. Here, the demographic trends reflect both entry and exit effects. They are steeper because younger cohorts are more Remain/Re-join leaning.

A note on young people who joined the electorate after 2016: since they could not vote in the referendum, the 2016 prediction model cannot tell us how they would have voted. Instead, we use their predicted current opinion for both lines. This

probably overstates the effect of their entry somewhat: the youngest voters in 2016 have since moved about 8 points towards Rejoin, much like older voters, which suggests the blue line's 2025 point could be about one point higher had new voters been asked in 2016.

What does that tell us?

This exercise allows us to decompose the difference between the estimated 53.3% Leave share in 2016 and the estimated 39.8% Stay-out opinion share in 2025 into three effects: exit, the demographic changes happening to the 2016 electorate, mostly mortality; opinion change among the 2016 electorate; and entry, the effect of young cohorts joining the electorate. The 13.5 percentage point fall we estimate breaks down as follows:

- **Exit:** 2.3 percentage points (17% of overall change) – in the national restricted graph, this is the difference between 2016 and 2025 along the blue 2016 vote trend.
- **Opinion change:** 7.9 percentage points (59% of overall change) – again considering the national restricted graph, this is the difference between the blue and orange lines in 2025.
- **Entry:** 3.3 percentage points (24% of overall change) –- comparing the national everyone and national restricted graphs, this is the difference between the two orange lines in 2025.

The three changes vary in how ‘soft’ or ‘hard’ they are. The main exit effect, mortality, is irreversible, so its 2.3 percentage point effect presents a very ‘hard’ change. Entry effects are ‘softer’ because new voters may become more Leave/Stay-out leaning when the EU issue concretely enters the national debate again. But assuming the Leave ‘ceiling’ for these cohorts is similar to actual Leave support among the slightly older cohorts who voted in 2016, entry is undoubtedly a much ‘harder’ trend than pure opinion effects.

The conclusion from this is strikingly similar to the report’s broader findings. We estimate pure demographic effects of up to 5.6 percentage points. Subtracting the 5.6 percentage points from the 53.3% share in 2016, we attain a ‘hard’ 52% –

48% Re-join Stay-out split for England and Wales, the same shares the stress-testing experiments report.

Does the picture change for different places in England and Wales?

We can do the same decomposition for smaller geographical units such as regions or local authorities in England and Wales. In the main report we show a regional decomposition using Persuasion's own 2026 data. For this detailed note, we switch to the British Election Study, whose May–June 2026 wave asked the same Rejoin–Stay-out question of about 24,000 people in England and Wales. This larger sample is needed to estimate opinion reliably in smaller geographies such as regions and local authorities. Nationally the two sources tell the same story: opinion change accounts for about 60% of the swing towards Rejoin, although the BES puts the overall change at 14.5 rather than 13.5 points, because it finds slightly more opinion change and a larger effect of new voters.

Our sub-national estimates are also anchored to the actual 2016 result in each region or local authority. This is necessary because our models pull geographical estimates towards the national average. Especially at the local authority level, they overestimate the Leave share in heavily pro-Remain areas such as inner London boroughs, and underestimate it in heavily Leave-voting areas such as Thurrock in Essex, where the model puts 2016 Leave at 62% against an actual 72%. We therefore shift each area's estimates until its 2016 figure matches the real result, and apply the correction to all estimates. This assumes that whatever made the model miss an area in 2016 still applies today: an area that voted more Leave in 2016 than its demographics predict is still more pro-Brexit than its demographics predict in 2025. At the regional level, the anchoring moves levels by at most two points; it matters most for individual outlier local authorities.

Geography	Source	2016 vote	2025 vote (exit)	2025 opinion (eligible 2016)	2025 opinion (everyone)	Exit	Opinion	Entry	Total
England and Wales	Persuasion survey (report)	53.3	51.0 (-2.3)	43.1 (-7.9)	39.8 (-3.3)	17%	59%	24%	-13.5
England and Wales	British Election Study	53.4	51.3 (-2.1)	42.7 (-8.6)	38.9 (-3.8)	14%	60%	26%	-14.5
East	British Election Study	56.5	54.3 (-2.2)	44.8 (-9.4)	41.5 (-3.4)	15%	63%	22%	-15
East Midlands	British Election Study	58.8	56.7 (-2.1)	48.5 (-8.2)	44.4 (-4.1)	15%	57%	28%	-14.4

London	British Election Study	40.1	38.1 (-1.9)	30.5 (-7.6)	27.2 (-3.3)	15%	59%	26%	-12.9
North East	British Election Study	58	55.9 (-2.2)	45.9 (-10.0)	41.7 (-4.2)	13%	61%	26%	-16.4
North West	British Election Study	53.7	51.3 (-2.4)	42.2 (-9.1)	38.3 (-3.9)	16%	59%	25%	-15.4
South East	British Election Study	51.8	49.5 (-2.3)	42.4 (-7.1)	38.9 (-3.4)	18%	56%	27%	-12.9
South West	British Election Study	52.9	51.1 (-1.8)	43.2 (-7.9)	39.4 (-3.8)	14%	59%	28%	-13.5
Wales	British Election Study	52.5	50.1 (-2.4)	40.7 (-9.5)	37.1 (-3.5)	16%	62%	23%	-15.4
West Midlands	British Election Study	59.3	56.6 (-2.7)	47.2 (-9.4)	43.1 (-4.1)	16%	58%	25%	-16.1
Yorkshire and the Humber	British Election Study	57.7	55.7 (-2.0)	46.0 (-9.7)	41.8 (-4.1)	13%	61%	26%	-15.9

There is some variation in total change and the importance of each change type (exit, opinion, entry) by region:

- Exit and entry effects vary relatively little across regions, so large total swings are driven by opinion change (e.g. the North East).
- Regions with the largest Leave shares see the largest total falls. This is largely mechanical: only Leave voters can change their mind towards Rejoin, so where there are more of them, there is more opinion change. Every region loses about a sixth of its 2016 Leave share through opinion change.
- Exit effects vary moderately, from −1.8 points in the South West to −2.7 in the West Midlands. The deaths of the oldest, most Leave-leaning voters affect all regions fairly uniformly (except London, where there are fewer of them). Migration patterns offset or amplify this effect. London gains young, strongly Remain voters and loses people in their forties, leading to a larger Exit effect than its few deaths alone would suggest. The opposite holds for the South West, which gains Leave-leaning voters approaching or in retirement, making its Exit effect the smallest.
- Entry effects range from −3.3 points in London and the East to −4.2 in the North East. Two factors partly offset each other. More-Remain regions have more new voters: they make up 17% of London's electorate against 12–14% elsewhere. But there, new voters' opinion differs less from that of people already eligible in 2016 (a 20-point gap in London against 27–30 points

elsewhere), so each new voter moves the regional average less. On balance, entry effects are somewhat larger in more Leave-leaning regions.

Check out our online look-up tool to see the same decomposition at the local-authority and constituency level.