

Populist Referendum: Was Brexit an Expression of Nativist and Anti-Elitist Sentiment?*

Evgeniia Iakhnis

University of Southern California

Brian Rathbun

University of Southern California

Jason Reifler

University of Exeter

Thomas J. Scotto

University of Strathclyde

Abstract

Was the outcome of the United Kingdom’s “Brexit” referendum to leave the European Union a visible and consequential manifestation of right-wing populism? After all, skepticism in the UK towards the European Union predates the recent rise of European right wing populism. Original survey data show, however, that the interaction of nativist sentiment and anti-elitist attitudes, the cocktail of right-wing populism, led to widespread support for Brexit, even while controlling for other factors. While hostility to immigrants was an important factor, nativists were particularly prone to vote “leave” if they also did not trust political elites, a crucial element of populism. Further underscoring this explanation is the conditional effect of anti-elite sentiment. The relationship between anti-elite sentiment and support for leaving the EU only exists among those with high nativist sentiment; among those low in nativist sentiment, anti-elite feelings did not increase support for Brexit.

*This work was supported by Economic and Social Research Council (ESRC) grants numbered [RES-061-25-0405] and [ES/L011867/1]. This research has received funding from the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation program (grant agreement No 682758). All errors are our own responsibility alone.

Introduction

The 2016 referendum decision by the United Kingdom to leave the European Union has been heralded as one of the most visible examples of the growing strength of right-wing populism in the advanced industrialized world.¹ How do we know, then, that the Brexit decision was truly the manifestation of right-wing populist sentiment? Euroskepticism is hardly new to the UK or the Conservative party, and has been widespread on the right in the United Kingdom long before the recent increase in support for right wing populist parties in Europe as a whole (Forster, 2002, Norton, 1990, Evans, 1998). Recent research shows that both populism and anti-immigrant sentiment, the core features of right-wing populism, predict support for Brexit individually (Hobolt, 2016, Goodwin and Milazzo, 2017). This is different, however, than showing the effect of right-wing populism, which suggests an interactive effect between nativism and anti-elite attitudes.

Using survey data from a multi-wave panel survey of British respondents, we find such an interaction. Anti-elite sentiment increased support for Brexit by 17 percentage points among those high in nativism, but anti-elite sentiment had no effect on those low in nativism. Those with higher anti-immigrant attitudes and distrust of politicians had a predicted probability of 66% for voting to leave, whereas the same class of nativist voters with more muted anti-elite feelings were largely on the fence, with a 49% chance of supporting Brexit.

What is Populism? What is Right-Wing Populism?

Much progress has been made in conceptualizing populism in recent years. There is now a general consensus that populism is, in Mudde's words, a "thin-centered ideology" that considers society to be ultimately separated into two homogeneous and antagonistic groups, "the pure people" versus the "corrupt elite," and which argues that politics should be an expression of the *volonté générale* (general will) of the people (2007, 23; see also Stanley (2008), Jagers and Walgrave (2007), Canovan (1999), Elchardus and Spruyt (2016): 114). Authors note the strong moralistic

¹"Britain allowed its populist right to rise" (The Guardian, 24 June 2016); "Why the far-right is growing in the UK and beyond" (Independent, 31 May 2016); "Right-Wing Populism is Prevailing in Left-Wing Strongholds Around the World" (The New York Times, 27 June 2016); "Populist Anger Upends Politics on Both Sides of the Atlantic" (The New York Times, 24 June 2016)

streak in populism. Elites are not incompetent and ineffective but rather disingenuous and self-serving. Hawkins notes that populism is accompanied by a Manichaeic discourse that identifies Good with a unified will of the people and Evil with a conspiring elite. The populist notion of the General Will ascribes particular virtue to the views and collective traditions of common, ordinary folk, who are seen as the overwhelming majority (2009, 3). Politicians and other elites are thought by populists to be dishonest and profit-seeking. Because of this, populists endorse more direct forms of democratic governance such as referendums that allow ordinary individuals to circumvent “backroom deals and shady compromises” (Canovan, 1999, 6).

Populist ideology is thin in the sense that while it incorporates a set of substantive beliefs about politics, it is not fleshed out enough to produce a specific policy agenda. It must be connected to a particular type of adversary said to be taking advantage of the population as a whole (Canovan, 1999, Jagers and Walgrave, 2007). Populism needs a focus for its animosity, a foe generally thought to be in cahoots with political elites that is doing the people harm. This adversary can vary enormously, and helps define whether a party or movement is a manifestation of right-wing or left-wing populism (Elchardus and Spruyt (2016), Stanley (2008), Hawkins (2009): 24). In the case of Brexit, finding an enemy to fill this role is easy and straightforward—the EU and bureaucrats in Brussels.

The key element that seems to distinguish right-wing populism from other forms is its racial and ethnic component. Mudde (2004, 2007) argues that right-wing populists are nativists who claim to represent the true people who make up the true nation and whose purity is being muddied by new entrants. He writes, “nativism is defined here as an ideology, which holds that states should be inhabited exclusively by members of the native group “the nation” and that nonnative elements (persons and ideas) are fundamentally threatening to the homogenous nation-state (2007, 19). This gives right-wing populism its particular ethnic, cultural and racial caste. Consequently, concerns about immigration are the clearest expression of right-wing populism, many argue (Betz, 1994). Recently, Inglehart and Norris (2016) equate populism in the advanced industrialized world with these kind of nativist beliefs. Nativism adds substance to who is doing harm to the people, which in left-wing populism might be replaced by the enemy of big banks or multinational corporations.

It is important, however, to be mindful of the fact that nativist sentiments may be “populist” in the sense that they assert the privileges, often thought to be unfairly fading, of the most numerous racial, ethnic or religious group against newcomers (Gest, 2016, Elchardus and Spruyt, 2016, Parker and Barreto, 2014). However, nativism need not necessarily be linked with anti-elitist beliefs. In other words, there is nothing inherently anti-establishment about a commitment to a racially, culturally and ethnically homogenous society. Indeed authoritarianism – in other words, deference to elites – and strong in-group identity generally go together (Altemeyer, 1981, Graham et al., 2009). We define right-wing populism as the combination of anti-elitism and nativist identity, arguing that this particular psychological cocktail was a likely driver of Brexit attitudes.

Existing literature has explored the influence of nativism on European integration attitudes. Some studies show that attitudes toward immigrants are the most important predictors of citizens’ support for the EU (De Vreese and Boomgaarden, 2005, De Vreese et al., 2008, McLaren, 2002, Azrout et al., 2011). More broadly McLaren (2002) argues that attitudes toward the European integration tend to be largely based on a general hostility toward other cultures; therefore, individuals who are more concerned about national degradation perceive heightened threat to national integrity from both domestic minority groups and the European Union. Goodwin and Milazzo (2017) show the important role played by anti-immigrant sentiment in the Brexit decision in particular and Hobolt (2016) also demonstrates that populism predicts support for leaving the EU.

However, to say that right-wing populism had an effect on the Brexit vote implies something more than the additive effect of nativism and anti-elite attitudes. To show that right-wing populism affected the Brexit vote suggests an interaction. It implies that the effect of populism and nativism in combination is stronger than the additive effect of the two. No study (that we are aware of) looks at the interaction of anti-elitism and nativism, what we use for the purposes of our paper as the definition of right-wing populism. Right wing populism is a constellation of attitudes that should have an effect that is more than the some of its parts.

Research Design

The data used in the analyses below come from an eight-wave panel study of Great Britain, administered by the survey firm YouGov. The initial wave of the study was fielded in November 2011 (n= 2780), and the last wave was finished in April 2015 (n=2687; 978 of these final wave respondents participated in both the first and final waves).² While cross-sectional surveys have limits in their ability to unambiguously demonstrate causality, the multi-wave design helps considerably in this regard. Our key independent variables are measured early in the panel in wave 2. We did not begin asking our key outcome variable until wave 5 (and we ask it in the final four waves of the panel). Having our key independent variables come temporally prior (not by minutes as in a typical survey but by months/years in our panel study) to our measures of Brexit opinions helps make a much stronger causality case, particularly since we asked our nativism and anti-elitism questions well before there was a concrete plan to offer a referendum. Consequently, there is little reason to think that attitudes about a referendum on EU membership are causing nativist and anti-elite sentiment.

Dependent variable: Support for Britain leaving the European Union

Our outcome variable examines support for the UK leaving the EU. Fortunately, the specific wording of our question (first asked approximately three years before the June 23, 2016 referendum) very closely matched the specific ballot paper. Specifically, we asked respondents “If there was a referendum on Britain’s membership of the European Union, how would you vote? Respondents could choose ‘leave,’ ‘remain,’ ‘would not vote,’ or ‘don’t know’ (full question wording is available in appendix A). We recoded these responses into a three point variable, where the greatest values indicate a desire to leave the EU, the intermediate category a plan not to vote or an undecided attitude, and the lowest value a desire to remain. In appendix B, we show that responses to this question were remarkably stable over time and reveal just how closely divided the outcome was always going to be.

²The YouGov sampling frame includes the three home countries of England, Scotland, and Wales, but excludes Northern Ireland. Funding for the study was provided by the Economic and Social Research Council grant [number redacted] to [PI redacted]. The panel was periodically refreshed with new respondents. Panelists continued to be invited to take part in survey waves.

Anti-elitism

Our survey includes a large battery of questions on multiple dimensions of political efficacy that allow us to measure populism. Our measure of anti-elite sentiment comes from a subset of questions from a larger battery of political efficacy. While this subscale is often described as capturing trust towards incumbent politicians generally (Craig et al., 1990), the simple converse is that it shows distrust in politicians and therefore reveals sentiment against political elites. We use an additive scale of four survey questions to measure this anti-elite sentiment, which form a reliable scale (Cronbach’s alpha = .77). Full question wording is available in appendix A. This battery of questions was asked in the second wave (May 2012) of our eight-wave panel.³

Nativism

Nativism is measured through a battery of ten Likert scale questions capturing attitudes towards immigration, Islam, and non-white citizens in the UK. Opposition to immigration stands out here because it is the most obvious expression of belief in an ethnically and culturally homogenous people. The items create a clear one-dimensional scale (Cronbach’s alpha = .9). We use an additive scale in our models. Full question wording is available in appendix A, but examples are “The United Kingdom has benefitted from the arrival in recent decades of people from many different countries and cultures?” (reverse coded) and “All further immigration to the UK should be halted.” This battery of questions was asked in the second wave (May 2012) of our eight-wave panel.

The interaction of nativism and anti-elitism

If Brexit was in large part a right-wing populist product, we expect that the interaction of these variables will lead to high levels of support for leaving the European Union. To examine the interaction between nativist and anti-elitist sentiment, we create a series of dummy variables by

³These questions capture the same sort of attitudes previously used to capture populism in other studies. In a study of party discourse, Pauwels (2011) uses words such as ‘arrogant’, ‘promise’, ‘betray’, ‘disgrace’, or ‘truth’ to measure populism. A survey by Rooduijn (2014) asks respondents whether politicians are honest, reliable and keep their promises in order to measure populism. However, we recognize that our measures capture only the anti-elite elements of populism, not two other features: a belief in direct democracy and a faith in ordinary people. Silva et al. (2016) note the centrality of inefficacy to populism.

splitting respondents at the medians of these two variables to create four groups: those who are low in both nativism and anti-elite sentiment (LN-LAE, the excluded or baseline category in the statistical models); those who are low in nativism but high in anti-elite sentiment (LN-HAE); those who are high in nativism but low in anti-elite sentiment (HN-LAE); and those who are high in both nativism and anti-elite sentiment (HN-HAE). The distribution of these respondents can be found in appendix C; all categories are well-populated. This categorization both eases presentation of our interaction effects but also has a methodological grounding. As [Hainmueller et al. \(2017\)](#) remind us, multiplicative interaction models are based on the crucial assumption that the interaction effect is linear, which fails unless the effect of the independent variable changes at a constant rate with the moderator. Indeed an analysis of our data reveal that our data does not meet this strong assumption. Therefore we dichotomize our key independent variables. We expect that those who are high in nativist sentiment will, on average, be more likely to support Britain leaving the European Union. However, we expect that the effect of anti-elitism will be sensitive to how nativist one is. More specifically, we expect that among those who have lower levels of nativist sentiment, low levels of efficacy will not manifest themselves in appreciably higher levels of support for leaving the EU. However, among those who have strong nativist leanings, we expect that the added fuel of high levels of anti-elite sentiment should lead to a significant increase in desire to withdraw from the EU. Importantly, each of these four groups is sufficiently well populated for meaningful comparisons. In the table of ordered probit results that comes later, we refer to abbreviations of these groups, which we present here for easy reference.

Control variables

There is a large literature on the determinants of Brexit ([Clarke et al., 2017](#)), Euroskepticism and Europhilia in member countries of the EU that helps us identify important control variables, such as authoritarianism, ideology, globalization attitudes, economic sentiment and demographic attributes. Full question wording is available in appendix A.

Results

To analyze the effect of our independent variables on support for exiting the UK, we ran a series of ordered probits. For each wave, we present two models. The first model for each wave only includes indicator variables to identify the four key attitudinal subgroups. The second model includes the full slate of control variables we discuss above. Results to these models are presented in Table 1; Figure 1 presents predicted probabilities from the fully specified model using the wave 8 data with all other variables set to their means.⁴ The baseline or excluded category in all models are those who low in both nativism and anti-elite sentiment. The regression coefficients and associated p-values for our indicator variables represent the difference between that group (e.g. High nativist/High anti-elite) and the excluded category. The lower panel in the table computes difference-in-means and associated standard errors and p-value for the full set of pairwise comparisons..

Results conform to expectations.⁵ As expected, high-nativists are consistently more supportive of leaving the EU than are low-nativists. However, whether there is an effect from anti-elite sentiment depends on whether one is in the high-nativist or low-nativist group. Anti-elite sentiment does not lead to an increase in support for leaving the EU among those who are low in nativist sentiment in any of the 8 models. Yet, in all models there is a significant additional effect on top of nativist sentiment for anti-elite sentiment for those who are in the high nativist category. (The difference between those who are high nativist/low anti-elite (or HN/LAE) and those who are high nativist/high anti-elite (or HN/HAE) is indicated in the second panel in Table 1 in the row labeled HN/HAE - HN/LAE.) Interestingly, the difference between these two groups gets marginally larger in the fully specified model compared to the sparsely specified model. The effect of anti-elite sentiment on support for leaving the EU is limited and concentrated to those above the median on nativism.⁶

⁴Predicted probabilities are calculated using the margins command in Stata 14 (which uses the delta methods). All other variables are help at their mean.

⁵The appendices contain several robustness tests. Appendix D shows results with the nativism and anti-elite scales, and also shows the median split models with an interaction term instead of the categorical variable approach we take here. In appendix E, we show that our results are not sensitive to the inclusion or coding of the middle category of our dependent variable through multinomial models as well as dichotomous probit models where we exclude the middle category, code the middle category as “remain”, or recode the middle category as “leave.” Results are consistent across all of these alternate specifications.

⁶In appendix F, we demonstrate that the effect of anti-elite sentiment appears to be fairly linear among high

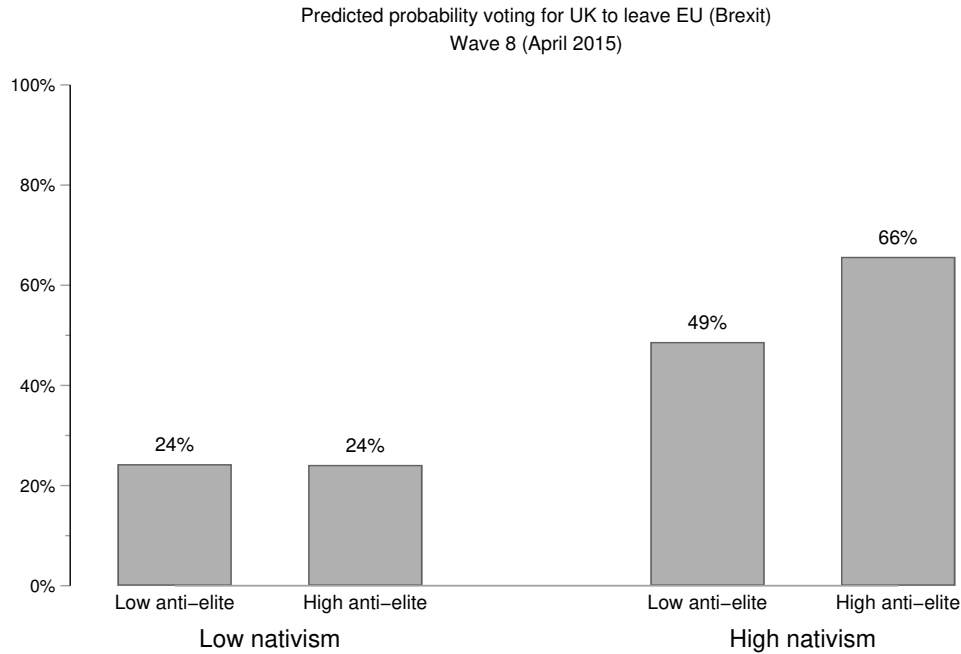
Table 1: Support for the UK leaving the EU (Brexit)

	Wave 5 March 2014		Wave 6 May 2014		Wave 7 June 2014		Wave 8 April 2015	
Low nativist/High anti-elite	-0.25*	-0.02	-0.16	0.06	-0.15	0.02	-0.16	-0.00
	(0.10)	(0.10)	(0.11)	(0.11)	(0.10)	(0.12)	(0.12)	(0.13)
High nativist/Low anti-elite	0.91***	0.59***	1.00***	0.64***	1.00***	0.63***	1.01***	0.66***
	(0.09)	(0.09)	(0.09)	(0.10)	(0.10)	(0.10)	(0.12)	(0.13)
High nativist/High anti-elite	1.23***	0.94***	1.37***	1.04***	1.36***	1.03***	1.40***	1.10***
	(0.09)	(0.10)	(0.10)	(0.11)	(0.10)	(0.11)	(0.11)	(0.12)
Authoritarianism		1.04***		1.30***		1.06***		1.06***
		(0.18)		(0.20)		(0.22)		(0.24)
Ideology		1.70***		1.38***		1.38***		1.46***
		(0.21)		(0.23)		(0.24)		(0.29)
University degree		-0.16*		-0.17*		-0.20*		-0.22*
		(0.08)		(0.08)		(0.08)		(0.10)
Internal efficacy		-0.04		-0.06		-0.01		-0.02
		(0.05)		(0.05)		(0.06)		(0.07)
Economic sentiment*		-0.31		-0.51*		-0.45		-0.58*
		(0.21)		(0.23)		(0.23)		(0.29)
Globalization negative		0.52***		0.38*		0.53**		0.33
		(0.14)		(0.15)		(0.16)		(0.18)
British identity		-0.12		-0.11		0.11		-0.18
		(0.16)		(0.17)		(0.18)		(0.20)
Support for redistribution		-0.45***		-0.51***		-0.44**		-0.42*
		(0.13)		(0.14)		(0.14)		(0.17)
Age		0.15		0.38		0.22		0.33
		(0.20)		(0.21)		(0.23)		(0.28)
Female		0.20**		0.16		0.14		0.19
		(0.08)		(0.08)		(0.08)		(0.10)
London		-0.11		-0.10		-0.04		0.04
		(0.10)		(0.11)		(0.11)		(0.12)
Scotland		-0.32*		-0.18		-0.07		-0.18
		(0.13)		(0.15)		(0.15)		(0.19)
HN/LAE - LN-HAE	1.16***	0.61***	1.16***	0.58***	1.15***	0.61***	1.16***	0.67***
	(0.10)	(0.12)	(0.11)	(0.13)	(0.11)	(0.13)	(0.13)	(0.13)
HN/HAE - LN-HAE	1.47***	0.96***	1.52***	0.99***	1.52***	1.02***	1.55***	1.11***
	(0.11)	(0.12)	(0.12)	(0.13)	(0.11)	(0.13)	(0.13)	(0.15)
HN/HAE - HN/LAE	0.31***	0.35***	0.37***	0.40***	0.36***	0.41***	0.38***	0.44***
	(0.10)	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.13)	(0.13)
Number of observations	1553	1553	1331	1331	1294	1294	938	938
Pseudo R-squared	0.12	0.20	0.13	0.21	0.13	0.20	0.14	0.21

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Ordered probit; Std. errors in parentheses; cutpoints omitted. LN-LAE is the excluded category

*For the wave 5 model, economic sentiment is measured in Wave 5; for waves 6 & 7, economic sentiment is measured in Wave 6; for Wave 8, economic sentiment is measured in Wave 8.

Figure 1: Predicted probability of supporting “Leave” in EU referendum



All of the other variables have been rescaled from zero (0) to one (1), allowing one to roughly compare the magnitude of coefficients (also true of the models in the appendices). The controls and alternative explanations that matter are those that line up with previous research into support for Euroskepticism.

Conclusion

The British public’s vote to leave the United Kingdom appears to have indeed been a nativist reaction to the threat posed by the European Union. However, the anti-establishment votes among those nativists seem to have a particularly strong antipathy to the European Union. As we have argued, this indicates that Brexit was indeed a right-wing populist moment. Typically, British resistance to further encroachments of EU authority was a function of leftist protectionist sentiment and conservative concerns about erosions of national sovereignty. Our paper shows

nativists by separating the former variable into terciles (see Table 8 and Figure 2. This relationship can be seen most clearly in Figure 1, which uses predicted probabilities calculated from the wave 8 (April 2015) saturated model.

that while the latter was still important in determining Brexit attitudes, right-wing populism was indeed a potent force in the outcome.

References

- Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba press. [↑4](#)
- Altemeyer, B. (1996). *The authoritarian specter*. Harvard University Press. [↑17](#)
- Anderson, C. J. and M. S. Reichert (1995). Economic benefits and support for membership in the eu: A cross-national analysis. *Journal of Public Policy* 15(3), 231–249. [↑20](#)
- Azrout, R., J. Van Spanje, and C. de Vreese (2011). Talking turkey: Anti-immigrant attitudes and their effect on support for turkish membership of the eu. *European Union Politics* 12(1), 3–19. [↑4](#)
- Betz, H.-G. (1994). *Radical right-wing populism in Western Europe*. Springer. [↑3](#)
- Canovan, M. (1999). Trust the people! populism and the two faces of democracy. *Political studies* 47(1), 2–16. [↑2](#), [↑3](#)
- Carey, S. (2002). Undivided loyalties: is national identity an obstacle to european integration? *European union politics* 3(4), 387–413. [↑21](#)
- Clarke, H., M. J. Goodwin, and P. Whiteley (2017). Why britain voted for brexit: An individual-level analysis of the 2016 referendum vote. *Parliamentary Affairs* 70(3), 439–464. [↑7](#)
- Craig, S. C., R. G. Niemi, and G. E. Silver (1990). Political efficacy and trust: A report on the nes pilot study items. *Political Behavior* 12(3), 289–314. [↑6](#)
- De Vreese, C. H. and H. G. Boomgaarden (2005). Projecting eu referendums: Fear of immigration and support for european integration. *European Union Politics* 6(1), 59–82. [↑4](#)
- De Vreese, C. H., H. G. Boomgaarden, and H. A. Semetko (2008). Hard and soft: Public support for turkish membership in the eu. *European Union Politics* 9(4), 511–530. [↑4](#)
- Eichenberg, R. C. and R. J. Dalton (1993). Europeans and the european community: The dynamics of public support for european integration. *International organization* 47(4), 507–534. [↑20](#)

- Elchardus, M. and B. Spruyt (2016, January). Populism, Persistent Republicanism and Declinism: An Empirical Analysis of Populism as a Thin Ideology. *Government and Opposition* 51(01), 111–133. [↑2](#), [↑3](#), [↑4](#)
- Evans, G. (1998). Euroscepticism and conservative electoral support: How an asset became a liability. *British Journal of Political Science* 28(04), 573–590. [↑2](#)
- Feldman, S. and K. Stenner (1997). Perceived threat and authoritarianism. *Political Psychology* 18(4), 741–770. [↑17](#)
- Forster, A. (2002). *Euroscepticism in contemporary British politics: opposition to Europe in the British Conservative and Labour parties since 1945*. Taylor & Francis US. [↑2](#)
- Gabel, M. (1998). Public support for european integration: An empirical test of five theories. *The Journal of Politics* 60(2), 333–354. [↑20](#)
- Gabel, M. and H. D. Palmer (1995). Understanding variation in public support for european integration. *European Journal of Political Research* 27(1), 3–19. [↑20](#)
- Gabel, M. and G. D. Whitten (1997). Economic conditions, economic perceptions, and public support for european integration. *Political Behavior* 19(1), 81–96. [↑20](#)
- Gest, J. (2016). *The New Minority: White Working Class Politics in an Age of Immigration and Inequality*. Oxford University Press, Incorporated. [↑4](#)
- Goodwin, M. and C. Milazzo (2017). Taking back control? investigating the role of immigration in the 2016 vote for brexit. *The British Journal of Politics and International Relations*, 1369148117710799. [↑2](#), [↑4](#)
- Graham, J., J. Haidt, and B. A. Nosek (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of personality and social psychology* 96(5), 1029. [↑4](#)
- Hainmueller, J. and M. J. Hiscox (2007). Educated preferences: Explaining attitudes toward immigration in europe. *International organization* 61(2), 399–442. [↑20](#)

- Hainmueller, J., J. Mummolo, and Y. Xu (2017). How much should we trust estimates from multiplicative interaction models? simple tools to improve empirical practice. Working paper. [↑7](#)
- Hakhverdian, A., E. Van Elsas, W. Van der Brug, and T. Kuhn (2013). Euroscepticism and education: A longitudinal study of 12 eu member states, 1973–2010. *European Union Politics* 14(4), 522–541. [↑20](#)
- Harteveld, E., T. v. d. Meer, and C. E. D. Vries (2013). In europe we trust? exploring three logics of trust in the european union. *European Union Politics* 14(4), 542–565. [↑21](#)
- Hawkins, K. A. (2009). Is Chávez populist? measuring populist discourse in comparative perspective. *Comparative Political Studies* 42(8), 1040–1067. [↑3](#)
- Hobolt, S. B. (2016). The brexit vote: a divided nation, a divided continent. *Journal of European Public Policy* 23(9), 1259–1277. [↑2](#), [↑4](#)
- Hooghe, L. and G. Marks (2005). Calculation, community and cues: Public opinion on european integration. *European Union Politics* 6(4), 419–443. [↑35](#)
- Inglehart, R. and P. Norris (2016). Trump, brexit, and the rise of populism: Economic have-nots and cultural backlash. [↑3](#)
- Inglehart, R., J.-R. Rabier, and K. Reif (1987). The evolution of public attitudes toward european integration: 1970–1986. *Journal of European Integration* 10(2-3), 135–155. [↑19](#)
- Jagers, J. and S. Walgrave (2007). Populism as political communication style: An empirical study of political parties’ discourse in belgium. *European Journal of Political Research* 46(3), 319–345. [↑2](#), [↑3](#)
- Janssen, J. I. (1991). Postmaterialism, cognitive mobilization and public support for european integration. *British Journal of Political Science* 21(4), 443–468. [↑19](#)
- Kritzinger, S. (2003). The influence of the nation-state on individual support for the european union. *European Union Politics* 4(2), 219–241. [↑21](#)

- McLaren, L. M. (2002). Public support for the european union: cost/benefit analysis or perceived cultural threat? *The Journal of Politics* 64(2), 551–566. [↑4](#), [↑21](#)
- Mudde, C. (2004). The populist zeitgeist. *Government and opposition* 39(4), 542–563. [↑3](#)
- Mudde, C. (2007). Populist radical right parties in europe. [↑2](#), [↑3](#)
- Norton, P. (1990). ‘the lady’s not for turning’but what about the rest? margaret thatcher and the conservative party 1979–89. *Parliamentary Affairs* 43(1), 41–58. [↑2](#)
- Parker, C. S. and M. A. Barreto (2014). *Change they can’t believe in: the Tea Party and reactionary politics in America*. Princeton University Press. [↑4](#)
- Pauwels, T. (2011). Measuring populism: A quantitative text analysis of party literature in belgium. *Journal of Elections, Public Opinion and Parties* 21(1), 97–119. [↑6](#)
- Rooduijn, M. (2014). Vox populismus: a populist radical right attitude among the public? *Nations and Nationalism* 20(1), 80–92. [↑6](#)
- Silva, B. C., N. Blanusa, and L. Littvay (2016). What’s behind ‘the people’? a new populist attitudes scale. Working paper. [↑6](#)
- Stanley, B. (2008). The thin ideology of populism. *Journal of Political Ideologies* 13(1), 95–110. [↑2](#), [↑3](#)
- Tillman, E. R. (2013). Authoritarianism and citizen attitudes towards european integration. *European Union Politics* 14(4), 566–589. [↑19](#)

Appendix A: Survey question details and wording

In this section, we provide detailed information about question wording from the survey. In some cases, we provide additional rationale why we included a variable and/or highlight our expectations.

Brexit Referendum question

If there was a referendum on Britain's membership of the European Union, how would you vote?

-I would vote for Britain to remain a member of the European Union.

-I would vote for Britain to leave the European Union.

-I would not vote.

-Don't know

This item is coded on three point scale, so that remain=1, don't know=2, and leave=3. Our primary analyses are robust to excluding don't knows altogether, or coding them with either remain or leave. See appendix [E](#).

Anti-elitism questions

These questions were answered on a five point Likert scale ranging from strongly agree to strongly disagree.

-Those we elect to public office usually try to keep the promises they made during the election.

-Most public officials can be trusted to do what is right without our having to constantly check on them.

-You can generally trust the people who run our government to do what is right.

-Quite a few of the people running our government are not as honest as the voters have a right to expect.

Nativism questions

These questions were answered on a five point Likert scale ranging from strongly agree to strongly

- disagree. -Even in its milder forms, Islam is a serious danger to Western civilization.
- The United Kingdom has benefitted from the arrival in recent decades of people from many different countries and cultures.
 - All further immigration to the UK should be halted.
 - The United Kingdom should allow more highly skilled immigrants from other countries to come and live here.
 - The United Kingdom should allow more low-skilled immigrants from other countries to come and live here.
 - Most crimes in Britain are committed by immigrants.
 - Immigration in recent years has helped Britain's economy grow faster than it would have done.
 - The Government should encourage immigrants and their families to leave the United Kingdom (including family members who were born in the UK).
 - Local councils normally allow immigrant families to jump the queue in allocating council homes.
 - Non-white British citizens who were born in this country are just as 'British' as white citizens born in this country.

Authoritarianism

We measure authoritarianism using three questions, each of which is designed to approximately tap one of the three components of [Altemeyer \(1996\)](#) tripartite conception of right-wing authoritarianism (authoritarian submission, authoritarian aggression, and conventionalism), while also emphasizing child rearing as an important window to measuring authoritarianism (see [Feldman and Stenner \(1997\)](#), p. 747). These three questions which were asked in the first wave of our study (November 2011), scale well together (Cronbach's alpha .79). Authoritarians are likely to oppose supranational institutions that restrict national sovereignty since they favor a strong state to ensure law and order. These questions were answered on a five point Likert scale ranging from strongly agree to strongly disagree.

- Obedience and respect for authority are the most important virtues children should learn.
- Our customs and national heritage are the things that have made us great, and certain people should be made to show greater respect for them.

-Parents and other authorities have forgotten that good old-fashioned physical punishment is still one of the best ways to make people behave properly.

Globalization

One possibility is that support for a British exit from the European Union is driven less by immediate economic perceptions, and is more rooted in beliefs about how globalization affects the British economy. To examine and control for this possibility, we constructed a scale from four questions that specifically tap how globalization affects aspects of the British economy. Choices were negative effect, no effect, positive effect, or don't know. This variable is coded so that higher values indicate stronger beliefs that globalization harms the British economy. These questions were asked in the second of our eight-wave panel.

Do you think globalisation, the increased trade between countries in goods, services, and investments, has had a negative effect, no effect, or a positive effect on each of the following?

-British factory workers -Multinational corporations based in the United Kingdom -You and your immediate family -The British economy

Ideology

Political ideology is likely to predict Brexit attitudes. Since the late 1980s, it is well established that conservatives have been highly resistant to further steps in European integration. We use a left-right self-placement scale rather than party identification for concerns about endogeneity. In particular, identifying with the United Kingdom Independence Party is essentially a measure of pro-Brexit attitudes since the party's main commitment is to leave the EU. (See Appendix H, however, for a model that includes parties as potential givers of elite cues, in which our results do not change.) The specific question wording we use is: "People sometimes use the labels 'left' or 'left wing' and 'right' or 'right wing' to describe political parties, party leaders, and political ideas. Using the 0 to 10 scale below, where the end marked 0 means left and the end marked 10 means right, where would you place yourself on this scale?"

Cognitive mobilization

Cognitive mobilization: Previous studies have examined whether high levels of cognitive mobilization lead to more support for European integration as those with high level of political awareness and well-developed cognitive skills are more likely to understand the integrative process and feel less threatened by it (Inglehart et al., 1987, Janssen, 1991, Tillman, 2013). Cognitive mobilization is a very broad concept, so we include different ways to approach this question.

Our preferred measure of cognitive mobilization is a dichotomous variable capturing whether or not a respondent has a university degree. We use the following question wording: “What is the highest educational or work-related qualification you have?” and then separate respondents into two categories.

Coded as not a university graduate:

- No formal qualifications
- Youth training certificate/skillseekers
- Recognized trade apprenticeship complet
- Clerical and commercial
- City and Guild certificate
- City and Guild certificate - advanced
- onc
- CSE grades 2-5
- CSE grade 1, GCE O level, GCSE, School
- Scottish Ordinary/ Lower Certificate
- GCE A level or Higher Certificate
- Scottish Higher Certificate
- Nursing qualification (eg SEN, SRN, SCM
- Teaching qualification (not degree)
- University diploma⁷

⁷In British higher education terminology, a diploma is conferred upon someone who has finished coursework, but did not earn enough credits for a Bachelor’s degree and has exhausted opportunities to retake or resit assessed work. Therefore, we code this is not a university graduate.

-Don't know -Refused

Coded as university graduate:

- University or CNAAB first degree (eg BA, BSc)
- University or CNAAB higher degree (eg MA, MSc)
- Other technical, professional or higher degree

Importantly, we take no position on whether a university education affects pro-EU attitudes via providing the higher skill levels that allow one to thrive in the Single Market or via inculcating pro-market values and beliefs ([Hainmueller and Hiscox, 2007](#)).

We also include a measure of internal efficacy that captures self-reported understanding of politics. We construct this measure using the following questions:

- I feel that I could do as good of a job in public office as most other people.
- I think I am as well-informed about politics and government as most people.
- I Don't often feel sure of myself when talking with other people about politics and government.
- I feel that I have a pretty good understanding of the important political issues facing our country.
- I consider myself well-qualified to participate in politics.
- Sometimes politics and government seem so complicated that a person like me can't really understand what's going on.

Economic sentiment

Some argue that self-interest is a foundation of public opinion and that citizens are more likely to support EU integration if the process brings feasible benefits to them or the national economy ([Gabel and Palmer, 1995](#), [Gabel, 1998](#), [Gabel and Whitten, 1997](#), [Anderson and Reichert, 1995](#), [Eichenberg and Dalton, 1993](#), [Hakhverdian et al., 2013](#)). To examine how economic sentiment affects support for the UK leaving the EU, we create an economic sentiment variable from questions that tap egocentric and sociotropic assessment of both prospective and retrospective

perceptions of the economy. These questions are then scaled into a single variable since they are so strongly correlated. Because economic sentiment is a moving target, we use the most temporally proximate questions available for each of our four measures assessing support for Britain leaving the EU. (This is the only independent variable in our models that comes from different waves). We use the following questions to construct wave-specific assessments of economic sentiment. Responses are based on a five category Likert scale ranging from "a lot better" to "a lot worse":

-How do you think the general economic situation in this country has changed over the last 12 months?

-How does the financial situation of your household now compare with what it was 12 months ago?

-How do you think the financial situation of your household will change over the next 12 months?

-How do you think the general economic situation in this country will develop over the next 12 months?

National identity

Following the shift in the nature of the European project from a mostly economic to close political cooperation, the criteria for evaluating the EU broadened to include symbolic political considerations, such as feelings of national identity ([Harteveld et al., 2013](#), [Carey, 2002](#), [McLaren, 2002](#), [Kritzinger, 2003](#)). To measure British identity, we construct a scale using the following questions:

How important is being British to you?

-Not important at all

-Very unimportant

-Neither unimportant nor important/Don't know

-Very important

-Extremely important

How well does the term British describe you?

- Not at all
- Not very well
- Very well
- Extremely well
- Don't know (recoded to as midpoint of answer categories)

When talking about Britons, how often do you say 'we' instead of 'they'?

- Never
- Rarely
- Sometimes
- Quite Often
- Always
- Don't know [dropped from analysis]

For me, to possess British citizenship is:

- Not important at all
- Very unimportant
- Neither unimportant nor important/Don't know
- Very important
- Extremely important

Support for redistribution

One argument made against British being in the European Union is the financial cost of membership, and the fact that pays more into the EU than what it gets back in direct benefits. As a consequence, we expect that those who are more supportive or redistributive policies generally will be more supportive of remaining in the EU; that is, the redistributive nature of British membership in the EU will not be as nearly as problematic for this group. This question is coded such that higher values indicate more support for redistributive policies and was asked

in the first our eight waves. The question is presented as a six point scale anchored by the two following statements:

-Government should get out of the business of promoting income equality. -Government should do more to reduce income inequality.

Additional control variables

Demographics: We include controls for age and sex. As with other variables, age has been rescaled 0-1. We also include an indicator variable for female respondents.

Regional indicators: The June 23 referendum revealed two regions—Scotland and London—that were outliers in strength of opposition to Brexit. We include indicators for these two regions in case there is some residual variance not captured by our attitudinal and demographic variables.

Appendix B: Variation of intention to vote “leave” or “stay” over time

	Wave 5 March 2014	Wave 6 May 2014	Wave 7 June 2014	Wave 8 April 2015
I would vote for Britain to remain a member of the European Union.	40%	39%	39%	41%
I would vote for Britain to leave the European Union.	40	39	39	38
I would not vote.	5	4	5	4
Don't know	15	17	16	17

Appendix C: Distribution of responses across nativism and anti-elitism

Group	Cases (Wave 5)	Proportion (Unweighted, Wave 5)
Low nativist/Low anti-elite (LN-LAE)	523	34%
Low nativist/High anti-elite (LN-HAE)	284	18%
High nativist/Low anti-elite (HN-LAE)	335	22%
High nativist/High anti-elite (HN-HAE)	416	27%

Appendix D: Models with alternate specifications of the independent variables

Table 2: Alternative model specifications using the full nativism and anti-elite scales

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Wave 5	Wave 6	Wave 7	Wave 8	Wave 5	Wave 6	Wave 7	Wave 8
Nativism (full scale)	2.774*** (0.235)	2.774*** (0.248)	3.021*** (0.251)	2.750*** (0.309)	0.688 (0.930)	0.991 (1.041)	1.156 (1.129)	2.567 ⁺ (1.329)
Anti-elite (full scale)	0.557* (0.218)	0.689** (0.233)	0.592* (0.231)	0.641* (0.273)	-0.679 (0.578)	-0.369 (0.646)	-0.508 (0.702)	0.532 (0.802)
Nativism * Anti-elite					2.222* (0.975)	1.896 ⁺ (1.099)	1.983 ⁺ (1.188)	0.191 (1.363)
Authoritarianism	0.748*** (0.192)	1.032*** (0.216)	0.731** (0.236)	0.801** (0.261)	0.746*** (0.193)	1.022*** (0.216)	0.729** (0.235)	0.800** (0.260)
Ideology	1.576*** (0.216)	1.234*** (0.235)	1.196*** (0.249)	1.267*** (0.310)	1.577*** (0.216)	1.238*** (0.235)	1.199*** (0.249)	1.266*** (0.310)
University degree	-0.127 ⁺ (0.0763)	-0.138 ⁺ (0.0809)	-0.155 ⁺ (0.0823)	-0.176 ⁺ (0.0972)	-0.123 (0.0761)	-0.137 ⁺ (0.0808)	-0.153 ⁺ (0.0821)	-0.177 ⁺ (0.0970)
Internal	-0.0169 (0.0515)	-0.0460 (0.0555)	0.0102 (0.0591)	-0.00753 (0.0714)	-0.0211 (0.0521)	-0.0511 (0.0558)	0.00343 (0.0590)	-0.00757 (0.0715)
Economic sentiment	-0.166 (0.222)	-0.363 (0.237)	-0.303 (0.241)	-0.379 (0.299)	-0.155 (0.225)	-0.361 (0.239)	-0.297 (0.243)	-0.378 (0.299)
Globalization neg.	0.410** (0.148)	0.275 ⁺ (0.157)	0.434** (0.168)	0.255 (0.188)	0.419** (0.148)	0.280 ⁺ (0.157)	0.429* (0.168)	0.254 (0.188)
British identity	-0.0920 (0.162)	-0.108 (0.176)	0.117 (0.182)	-0.203 (0.206)	-0.0995 (0.164)	-0.114 (0.178)	0.105 (0.183)	-0.206 (0.206)
Support redistribution	-0.300* (0.128)	-0.397** (0.140)	-0.291* (0.148)	-0.293 ⁺ (0.173)	-0.291* (0.129)	-0.385** (0.139)	-0.280 ⁺ (0.148)	-0.292 ⁺ (0.173)
Age	0.109 (0.198)	0.354 (0.215)	0.135 (0.238)	0.289 (0.283)	0.113 (0.198)	0.355 ⁺ (0.215)	0.138 (0.236)	0.291 (0.282)
Female	0.176* (0.0761)	0.112 (0.0807)	0.0746 (0.0843)	0.157 (0.102)	0.175* (0.0761)	0.111 (0.0807)	0.0748 (0.0842)	0.157 (0.102)
London	-0.112 (0.0977)	-0.0996 (0.110)	-0.0351 (0.122)	0.0336 (0.122)	-0.105 (0.0977)	-0.0938 (0.110)	-0.0341 (0.122)	0.0347 (0.122)
Scotland	-0.305* (0.133)	-0.179 (0.149)	-0.0786 (0.151)	-0.194 (0.188)	-0.297* (0.134)	-0.170 (0.149)	-0.0694 (0.151)	-0.193 (0.188)
<i>N</i>	1553	1331	1294	938	1553	1331	1294	938

Probit coefficients. Standard errors in parentheses. Cut points omitted.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Alternate model specifications using median splits and interaction (in place of categorical variables only)

	(1)	(2)	(3)	(4)
	Wave 5	Wave 6	Wave 7	Wave 8
Nativism (median split)	0.591*** (0.0932)	0.644*** (0.0990)	0.626*** (0.104)	0.664*** (0.125)
Anti-elite (median split)	-0.0176 (0.104)	0.0596 (0.115)	0.0185 (0.117)	-0.00470 (0.134)
Nativism median * Antielite median	0.370** (0.143)	0.341* (0.156)	0.390* (0.156)	0.442* (0.185)
Authoritarianism	1.042*** (0.181)	1.301*** (0.202)	1.056*** (0.222)	1.064*** (0.242)
Ideology	1.698*** (0.210)	1.382*** (0.227)	1.380*** (0.241)	1.456*** (0.291)
University degree	-0.164* (0.0752)	-0.172* (0.0802)	-0.201* (0.0813)	-0.215* (0.0977)
Internal efficacy	-0.0423 (0.0508)	-0.0561 (0.0549)	-0.00825 (0.0573)	-0.0175 (0.0709)
Economic sentiment	-0.306 (0.212)	-0.510* (0.230)	-0.450+ (0.235)	-0.581* (0.288)
Globalization negative	0.522*** (0.143)	0.375* (0.152)	0.534** (0.163)	0.332+ (0.185)
British identify	-0.120 (0.157)	-0.109 (0.170)	0.107 (0.177)	-0.179 (0.200)
Support redistribution	-0.449*** (0.127)	-0.510*** (0.137)	-0.442** (0.143)	-0.421* (0.169)
Age	0.152 (0.196)	0.377+ (0.214)	0.215 (0.232)	0.331 (0.281)
Female	0.202** (0.0757)	0.157+ (0.0806)	0.135 (0.0838)	0.194+ (0.102)
London	-0.108 (0.0954)	-0.0972 (0.108)	-0.0426 (0.114)	0.0417 (0.121)
Scotland	-0.319* (0.131)	-0.184 (0.146)	-0.0736 (0.147)	-0.177 (0.187)
<i>N</i>	1553	1331	1294	938

Probit coefficients. Standard errors in parentheses. Cut points omitted.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix E: Alternative model specifications: multinomial logit and dichotomous codings of the dependent variable

Table 4: Multinomial logit (“Leave” baseline/reference category)

	Wave 5		Wave 6		Wave 7		Wave 8	
	Remain	DK	Remain	DK	Remain	DK	Remain	DK
Low nativism/High anti-elite	-0.00144	-0.201	-0.241	-0.660*	-0.0591	-0.120	0.118	0.275
	-0.226	-0.277	(0.255)	(0.305)	(0.257)	(0.323)	(0.316)	(0.371)
High nativism/Low anti-elite	-1.220***	-0.471*	-1.380***	-0.852***	-1.232***	-0.669**	-1.284***	-0.908**
	-0.199	-0.225	(0.219)	(0.244)	(0.217)	(0.259)	(0.255)	(0.331)
High nativism/High anti-elite	-1.943***	-0.941***	-2.095***	-1.556***	-2.114***	-0.984***	-2.187***	-1.213***
	-0.227	-0.246	(0.244)	(0.275)	(0.246)	(0.277)	(0.273)	(0.341)
Authoritarianism	-2.058***	-1.428**	-2.691***	-1.621**	-2.225***	-2.033***	-2.293***	-1.500*
	-0.397	-0.474	(0.442)	(0.499)	(0.453)	(0.570)	(0.522)	(0.618)
Ideology	-3.397***	-1.103*	-2.834***	-1.188*	-2.854***	-0.793	-2.865***	-1.705**
	-0.443	-0.455	(0.493)	(0.516)	(0.520)	(0.506)	(0.616)	(0.607)
University degree	0.343*	-0.0559	0.366*	-0.104	0.423*	-0.0369	0.415*	-0.00953
	-0.16	-0.187	(0.173)	(0.204)	(0.173)	(0.205)	(0.209)	(0.253)
Internal efficacy	0.158	-0.649***	0.109	-0.646***	0.0644	-0.629***	0.0793	-0.600***
	-0.114	-0.127	(0.126)	(0.140)	(0.129)	(0.143)	(0.162)	(0.165)
Economic sentiment	0.609	0.105	1.085*	0.0665	1.090*	-0.220	1.222*	0.931
	-0.463	-0.5	(0.512)	(0.523)	(0.528)	(0.554)	(0.611)	(0.716)
Globalization negative	-1.143***	-0.752*	-0.849*	-0.463	-1.104**	-0.376	-0.712+	-0.155
	-0.306	-0.346	(0.331)	(0.392)	(0.339)	(0.394)	(0.384)	(0.434)
British identity	0.144	-0.063	0.117	0.0723	-0.363	-0.357	0.215	-0.774
	-0.336	-0.359	(0.369)	(0.426)	(0.380)	(0.419)	(0.435)	(0.526)
Support redistribution	0.949***	0.199	1.037***	0.151	0.991**	0.0350	0.928**	-0.254
	-0.267	-0.302	(0.296)	(0.325)	(0.306)	(0.321)	(0.360)	(0.420)
Age	-0.388	-2.296***	-1.036*	-2.520***	-0.719	-2.825***	-0.792	-2.304**
	-0.435	-0.506	(0.484)	(0.548)	(0.500)	(0.591)	(0.622)	(0.746)
Female	-0.426**	0.559**	-0.355*	0.156	-0.315+	0.106	-0.377+	0.402
	-0.159	-0.194	(0.176)	(0.203)	(0.179)	(0.209)	(0.217)	(0.256)
London	0.215	-0.00945	0.198	-0.255	0.116	-0.134	-0.0703	-0.200
	-0.206	-0.244	(0.233)	(0.280)	(0.229)	(0.302)	(0.260)	(0.349)
Scotland	0.631*	-0.24	0.439	-0.0656	0.172	-0.0644	0.457	0.204
	-0.265	-0.349	(0.300)	(0.337)	(0.303)	(0.342)	(0.389)	(0.412)
Constant	3.185***	4.299***	3.657***	5.145***	3.667***	5.377***	3.132***	4.727***
	-0.699	-0.786	(0.763)	(0.869)	(0.789)	(0.860)	(0.903)	(1.063)
N	1553		1331		1294		938	

Standard errors in parentheses. Cut points omitted. LN-LAE is the excluded category.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Alternate model specifications with binary dependent variable (excluding “don’t know” responses)

	Wave 5	Wave 6	Wave 7	Wave 8
Low nativism/High anti-elite	0.00420 (0.129)	0.142 (0.145)	0.0480 (0.148)	-0.0523 (0.180)
High nativism/Low anti-elite	0.742*** (0.118)	0.850*** (0.129)	0.775*** (0.129)	0.800*** (0.153)
High nativism/High anti-elite	1.108*** (0.130)	1.187*** (0.141)	1.216*** (0.144)	1.244*** (0.156)
Authoritarianism	1.134*** (0.236)	1.566*** (0.254)	1.263*** (0.272)	1.327*** (0.301)
Ideology	1.815*** (0.246)	1.549*** (0.269)	1.572*** (0.283)	1.531*** (0.332)
University degree	-0.227* (0.0933)	-0.240* (0.101)	-0.245* (0.101)	-0.227+ (0.121)
Internal efficacy	-0.105 (0.0652)	-0.00849 (0.0717)	-0.0664 (0.0725)	-0.0289 (0.0909)
Economic sentiment	-0.259 (0.261)	-0.513+ (0.285)	-0.534+ (0.301)	-0.656+ (0.342)
Globalization negative	0.648*** (0.175)	0.509** (0.190)	0.625** (0.190)	0.457* (0.210)
British identify	-0.0830 (0.198)	-0.0324 (0.215)	0.152 (0.223)	-0.0654 (0.256)
Support redistribution	-0.545*** (0.152)	-0.554** (0.169)	-0.615*** (0.172)	-0.477* (0.204)
Age	0.218 (0.261)	0.581* (0.283)	0.499+ (0.287)	0.220 (0.360)
Female	0.233* (0.0922)	0.238* (0.102)	0.196+ (0.103)	0.217+ (0.122)
London	-0.137 (0.120)	-0.128 (0.141)	-0.103 (0.132)	0.0577 (0.151)
Scotland	-0.322* (0.153) (0.406)	-0.297+ (0.170) (0.447)	-0.124 (0.177) (0.453)	-0.293 (0.220) (0.525)
<i>N</i>	1305	1115	1098	793

Probit coefficients. Standard errors in parentheses. Model constant omitted. LN-LAE is the excluded category.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Alternate model specifications with binary dependent variable (recoding “don’t know” responses to remain)

	Wave 5	Wave 6	Wave 7	Wave 8
High Nativism/Low anti-elite	0.00110 (0.119)	0.193 (0.133)	0.0250 (0.136)	-0.104 (0.164)
High nativism/Low anti-elite	0.562*** (0.104)	0.705*** (0.115)	0.636*** (0.117)	0.710*** (0.142)
High nativism/High anti-elite	0.911*** (0.110)	1.121*** (0.120)	0.994*** (0.121)	1.089*** (0.138)
Authoritarianism	1.100*** (0.208)	1.402*** (0.228)	1.307*** (0.235)	1.199*** (0.273)
Ideology	1.543*** (0.217)	1.337*** (0.245)	1.258*** (0.250)	1.477*** (0.298)
University degree	-0.131 (0.0830)	-0.128 (0.0905)	-0.158 ⁺ (0.0907)	-0.176 (0.112)
Internal efficacy	0.0927 (0.0568)	0.113 ⁺ (0.0627)	0.115 ⁺ (0.0638)	0.112 (0.0784)
Economic sentiment	-0.224 (0.231)	-0.374 (0.251)	-0.261 (0.262)	-0.599 ⁺ (0.319)
Globalization negative	0.576*** (0.155)	0.406* (0.173)	0.507** (0.172)	0.322 (0.197)
British identity	-0.0825 (0.169)	-0.0952 (0.191)	0.138 (0.192)	0.0458 (0.223)
Support redistribution	-0.394** (0.136)	-0.406** (0.151)	-0.354* (0.150)	-0.268 (0.182)
Age	0.640** (0.228)	0.948*** (0.253)	0.878*** (0.255)	0.726* (0.336)
Female	0.0424 (0.0826)	0.0942 (0.0909)	0.0841 (0.0919)	0.0753 (0.113)
London	-0.101 (0.108)	-0.0142 (0.123)	-0.0235 (0.118)	0.0738 (0.142)
Scotland	-0.213 (0.137)	-0.152 (0.151)	-0.0555 (0.155)	-0.216 (0.198)
Constant	-2.640*** (0.352)	-3.033*** (0.389)	-3.047*** (0.402)	-2.728*** (0.472)
<i>N</i>	1553	1331	1294	938

Probit coefficients. Standard errors in parentheses. Model constant omitted. LN-LAE is the excluded category.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Alternate model specifications with binary dependent variable (recoding “don’t know” responses to leave)

	Wave 5	Wave 6	Wave 7	Wave 8
Low nativism/High anti-elite	-0.0243 (0.113)	-0.0170 (0.123)	0.0164 (0.130)	0.0413 (0.150)
High nativism/Low anti-elite	0.652*** (0.108)	0.634*** (0.115)	0.629*** (0.116)	0.617*** (0.137)
High nativism/High anti-elite	0.983*** (0.121)	0.939*** (0.128)	1.086*** (0.131)	1.083*** (0.147)
Authoritarianism	0.938*** (0.205)	1.210*** (0.225)	0.818** (0.265)	0.996*** (0.274)
Ideology	1.746*** (0.231)	1.368*** (0.248)	1.484*** (0.264)	1.325*** (0.321)
University degree	-0.214* (0.0842)	-0.236** (0.0892)	-0.250** (0.0908)	-0.240* (0.107)
Internal efficacy	-0.215*** (0.0580)	-0.199** (0.0629)	-0.165* (0.0662)	-0.158* (0.0795)
Economic sentiment	-0.368 (0.241)	-0.638* (0.261)	-0.698** (0.269)	-0.553+ (0.316)
Globalization negative	0.500** (0.161)	0.391* (0.171)	0.568** (0.184)	0.385+ (0.199)
British identity	-0.108 (0.182)	-0.0517 (0.193)	0.126 (0.205)	-0.308 (0.237)
Support redistribution	-0.519*** (0.142)	-0.591*** (0.154)	-0.574*** (0.165)	-0.572** (0.192)
Age	-0.302 (0.231)	-0.0838 (0.251)	-0.306 (0.285)	-0.124 (0.313)
Female	0.357*** (0.0835)	0.239** (0.0894)	0.199* (0.0929)	0.298** (0.110)
London	-0.128 (0.107)	-0.180 (0.119)	-0.0839 (0.133)	0.0118 (0.131)
Scotland	-0.405** (0.140)	-0.250 (0.156)	-0.109 (0.160)	-0.191 (0.200)
Constnat	-0.531 (0.351)	-0.470 (0.384)	-0.466 (0.385)	-0.374 (0.459)
<i>N</i>	1553	1331	1294	938

Probit coefficients. Standard errors in parentheses. Model constant omitted. LN-LAE is the excluded category.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix F: Effect of anti-elitism on likelihood of voting “leave” appears linear among high nativists

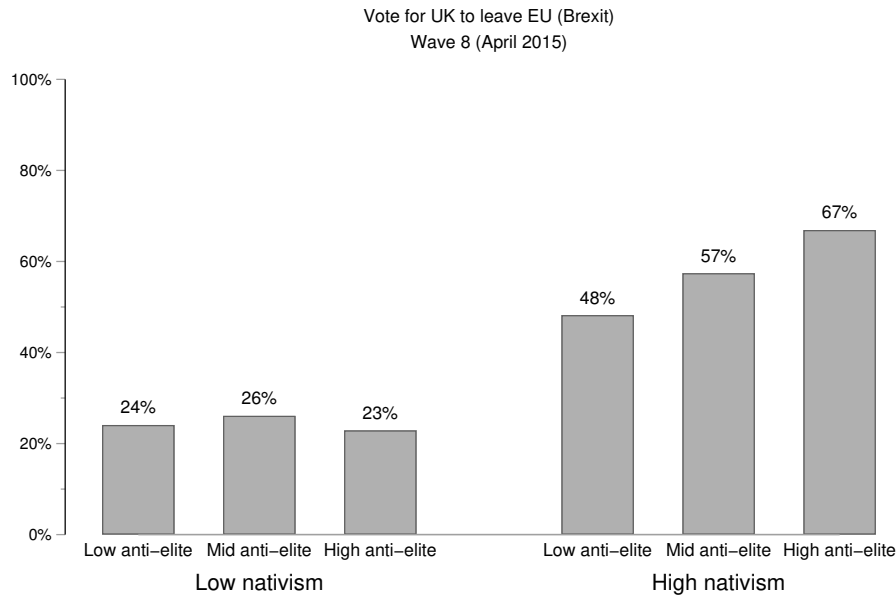
Table 8: Alternate specification with anti-elitism broken into terciles

	Wave 8		Wave 8	
Low nativism (median split)/Mid anti-elite (tercile split)	0.07	(0.15)		
Low nativism (median split)/High anti-elite (tercile split)	-0.03	(0.17)		
High nativism (median split)/Low anti-elite (tercile split)	0.67***	(0.14)		
High nativism (median split)/Mid anti-elite (tercile split)	0.90***	(0.16)		
High nativism (median split)/High anti-elite (tercile split)	1.15***	(0.13)		
Nativism (median split)			0.41 ⁺	(0.21)
Anti-elite (tercile split)			-0.00	(0.08)
Nativism (median) * Antielite (tercile)			0.24*	(0.11)
Authoritarianism	1.05***	(0.24)	1.05***	(0.24)
Ideology	1.47***	(0.29)	1.47***	(0.29)
University degree	-0.21*	(0.10)	-0.21*	(0.10)
Internal efficacy	-0.02	(0.07)	-0.02	(0.07)
Economic sentiment	-0.61*	(0.29)	-0.60*	(0.29)
Globalization negative	0.31 ⁺	(0.18)	0.32 ⁺	(0.18)
British identity	-0.17	(0.20)	-0.17	(0.20)
Support redistribution	-0.40*	(0.17)	-0.40*	(0.17)
Age	0.31	(0.28)	0.32	(0.28)
Female	0.19 ⁺	(0.10)	0.19 ⁺	(0.10)
London	0.04	(0.12)	0.04	(0.12)
Scotland	-0.18	(0.19)	-0.18	(0.19)
N	938		938	

Ordered probit. Standard errors in parentheses. Cutpoints omitted. Low nativism-low anti-elite is the excluded category.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 2: Predicted probability of supporting “Leave” in EU referendum



Appendix G: Brexit was not a left-wing populist phenomenon

To test the possibility that Brexit might have garnered support from left as well as right-wing populists, we tested for another interaction, between our anti-elitist measures as well as a measure measuring anti-capitalist sentiment created from two additional survey items (‘Corporate greed is a major problem in Britain’ and ‘British banks are making excessive profits at the expense of ordinary people’.) These items were measured along a five-point Likert scale ranging from strongly disagree to strongly agree and were asked in wave 7. (Because these items come from wave 7, we only use the dependent variable from waves 7 and 8.) We again created four categories of respondents based on median splits. Those low in anti-capitalism and low in anti-elitism serve as the excluded category and the baseline for comparison. Results show no effect of the interaction between the two items on support or opposition to Brexit. Those who are high in anticapitalism and high in anti-elite attitudes are actually less likely to support Brexit than those with low anti-elite attitudes who are also high in anticapitalism.

Table 9: Alternate model: Testing for the effect of left-wing populism by substituting anti-capitalist sentiment for nativism

	Wave 7	Wave 8
Low anti-capitalist/High anti-elite	0.452*** (0.118)	0.410** (0.147)
High anti-capitalist/Low anti-elite	0.108 (0.112)	-0.0407 (0.129)
High anti-capitalist/High anti-elite	0.354*** (0.0997)	0.375** (0.121)
Authoritarianism	1.469*** (0.221)	1.491*** (0.249)
Ideology	1.576*** (0.245)	1.629*** (0.316)
University degree	-0.290*** (0.0798)	-0.315** (0.0975)
Internal efficacy	0.00899 (0.0575)	0.0172 (0.0710)
Economic sentiment	-0.568* (0.229)	-0.647* (0.300)
Globalization negative	0.718*** (0.164)	0.532** (0.192)
British identity	0.203 (0.180)	-0.0825 (0.214)
Support redistribution	-0.569*** (0.146)	-0.577** (0.189)
Age	0.414+ (0.234)	0.526+ (0.282)
Female	0.158+ (0.0832)	0.240* (0.104)
London	-0.116 (0.116)	-0.0444 (0.120)
Scotland	-0.0717 (0.147)	-0.165 (0.194)
<i>N</i>	1294	918

Ordered probit. Standard errors in parentheses. Cut points omitted. Low anticapitalism/low anti-elitism is the excluded category.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix H: Results are robust to the inclusion of party identification as an elite cue

Hooghe and Marks (2005) offer an approach to explaining public opinion on European integration that includes the importance of elite cues. Given that the integration process is difficult to understand, ordinary voters look to particular elites to offer them guidance about how to think. Below we incorporate partisan identification into our model, a typical way of exploring such effects. Using the United Kingdom Independence Party as the baseline, we do find partisan effects. However, our main variables of interest continue to matter.

Table 10

	(1) Wave 5	(2) Wave 6	(3) Wave 7	(4) Wave 8
Low nativism/High anti-elite	-0.06 (0.10)	0.05 (0.12)	-0.01 (0.12)	-0.02 (0.14)
High nativism/Low anti-elite	0.55*** (0.10)	0.61*** (0.10)	0.59*** (0.11)	0.63*** (0.13)
High nativism/High anti-elite	0.86*** (0.10)	0.97*** (0.11)	0.98*** (0.11)	1.05*** (0.12)
Authoritarianism	1.05*** (0.19)	1.29*** (0.21)	1.03*** (0.22)	1.02*** (0.25)
Ideology	1.26*** (0.24)	0.69** (0.25)	0.81** (0.27)	0.90** (0.33)
University degree	-0.15 (0.08)	-0.19* (0.08)	-0.21* (0.08)	-0.23* (0.10)
Internal efficacy	-0.04 (0.05)	-0.07 (0.06)	-0.00 (0.06)	-0.04 (0.07)
Economic sentiment	-0.36 (0.22)	-0.69** (0.24)	-0.57* (0.25)	-0.71* (0.30)
Globalization negative	0.54*** (0.14)	0.39* (0.16)	0.53** (0.17)	0.33 (0.19)
British identity	-0.04 (0.16)	-0.06 (0.18)	0.19 (0.18)	-0.18 (0.21)
Support redistribution	-0.33* (0.13)	-0.40** (0.14)	-0.32* (0.15)	-0.36* (0.17)
Age	0.14 (0.21)	0.27 (0.23)	0.21 (0.24)	0.26 (0.29)
Female	0.18* (0.08)	0.12 (0.08)	0.11 (0.08)	0.16 (0.10)
London	-0.14 (0.10)	-0.14 (0.11)	-0.07 (0.11)	0.01 (0.13)
Scotland	-0.44** (0.16)	-0.22 (0.17)	-0.18 (0.17)	-0.22 (0.23)
BNP	0.20 (0.38)	4.02*** (0.43)	-0.27 (0.49)	-0.92 (0.57)
Tory	-0.54* (0.23)	-1.05** (0.36)	-0.79** (0.27)	-0.69* (0.31)
None/DK/Other	-0.59* (0.23)	-1.34*** (0.36)	-0.86** (0.27)	-0.96** (0.31)
Labour	-0.92*** (0.23)	-1.67*** (0.36)	-1.33*** (0.27)	-1.14*** (0.32)
Liberal Democrats	-1.34*** (0.26)	-1.86*** (0.38)	-1.74*** (0.30)	-1.30*** (0.34)
SNP	-0.94 (0.64)	-5.43*** (0.44)	-4.86*** (0.40)	-4.85*** (0.43)
Plaid	-0.25 (0.34)	-1.12* (0.44)	-0.50 (0.37)	-0.80 (0.47)
Green	-0.86** (0.31)	-1.48*** (0.42)	-1.32*** (0.37)	-1.25** (0.42)
N	1553	1331	1294	938

Ordered probit. Standard errors in parentheses. Cutpoints omitted. UKIP is the excluded category for party.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$