

Winners, Losers, and Referendums: The Impact of Brexit on Political Attitudes

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. Data and replication materials for this paper available at https://github.com/mccormackandrew/brexit_winners_losers.

1 Introduction

While a large body of literature has explored the effect of referendums where they are a standard feature of the political system, less attention has been paid to the impact of referendums in contexts where they occur less frequently. What effect, if any, do sporadic yet extremely consequential referendums have on citizens' political attitudes and economic perceptions? In this paper, I examine this question in the context of the Brexit referendum, drawing on the "winner-loser gap" literature as a framework for analysis. Using panel data from the British Election Study, I assess the pre- and post-Brexit attitudes and perceptions of the winners (Leave voters) and losers (Remain voters) of the referendum. The analysis suggests that the political attitudes changed most by the Brexit referendum were not those associated with greater citizen engagement in the political process, but rather those linked to whether or not one's desired outcome was achieved.

2 Background

In recent years, increasing attention has been paid to declining political satisfaction and trust throughout the world's advanced industrial democracies (Norris 1999; Pharr, Putnam, and Dalton 2000). Though there is a fair amount of disagreement on the causes and potential solutions to this dissatisfaction, some have suggested that alternative forms of participation might improve political attitudes (Finkel 1985; Bowler and Donovan 2002). According to this view, the shortcomings of representative democracy are central to the problem of political dissatisfaction. Indeed, the notion that increasing the scope of democratic participation can stimulate more positive attitudes toward the political system has a long tradition in democratic theory (Pateman 1970; Barber 1984).

Empirical work on the impact of direct democracy on political attitudes has yielded mixed results (Mendelsohn and Cutler 2000; Bowler and Donovan 2002; Smith and Tolbert 2004; Dyck and Lascher 2009), which is not entirely surprising given the diversity of methodological approaches used to test these phenomena and the varied nature of direct

democracy between studies. Some works examine national or sub-national contexts where direct democracy is common practice while others consider the impact of single referendums in contexts where instruments of direct democracy are not as common.

Brexit is clearly an example of the latter. With this in mind, the theoretical framework provided by theories of participatory democracy, which tend to emphasize the sustained and institutionalized practice of direct democracy, may be less applicable in a context where referendums are not a standard feature of the political process. In this context, *outcome favourability*—that is, casting a ballot for the winning or losing side of the Brexit referendum—may be a more fruitful analytical perspective for understanding the short-term effects of referendums (Marien and Kern 2017).

A growing body of literature on the “winner-loser gap” argues that outcome favourability has an often overlooked importance in contemporary debates about democratic satisfaction and performance, yet is critical to understanding the perceived legitimacy of and support for democratic procedures (Blais and Gélneau 2007). For instance, Anderson et al. (2007) argue that the winner-loser gap “involves the question of the extent to which citizen attitudes toward democratic reality, and by implication the potential for protest, unrest, or even a collapse of the political system are affected by the consequences of the most routine of democratic mechanisms” (47).

The literature on the winner-loser gap is to a certain degree at odds with theories of electoral legitimacy in which the procedural fairness (hopefully) associated with elections, rather than favourable outcomes, is expected to increase democratic legitimacy (Hooghe and Stiers 2016). According to the latter approach, elections are seen as legitimizing institutions in which citizens have a chance to express their views, participate in the political process, and hold their leaders accountable. At the same time, it is likely that the perceived legitimacy of elections is coloured by the experience of winning or losing (Nadeau and Blais 1993).

Lastly, while literature on the winner-loser gap has found that outcome favourability has positive effects on individuals’ evaluations of the performance of democratic leaders and

institutions (Singh, Lago, and Blais 2011), less attention has been paid to its impact on economic evaluations. A number of works in the economic voting literature address the endogeneity of economic evaluations with respect to vote choice, claiming that partisans tend to form economic evaluations that are consistent with their previously held beliefs (Anderson 2007; Evans and Andersen 2006; Wlezien, Franklin, and Twiggs 1997). I extend this rationale to the winner-loser gap, exploring the consequences of vote choice in the Brexit referendum for economic perceptions.

Before describing my empirical strategy and presenting the results of my analysis, it is necessary to spell out some basic concepts. In both the participatory democracy and winner-loser gap literature, a variety of attitudes associated with political alienation have been linked to direct democracy as well as winning (or losing) an election, the most frequent being political efficacy, political trust, democratic satisfaction, and perceptions of fairness and legitimacy. While there is considerable overlap between these concepts, they are to some extent empirically and conceptually distinct. Political efficacy refers to both internal efficacy—that is, the extent which an individual feels that their actions can have an impact on the political process (Campbell, Gurin, and Miller 1954)—and external efficacy—the perceived responsiveness of political elites and institutions to citizens’ demands (Lane 1959; Niemi, Craig, and Mattei 1991). Satisfaction with democracy is a disputed concept (Linde and Ekman 2003), though “is generally thought of as an expression of approval of regime performance located between diffuse notions of support for democratic principles and specific attitudes toward political actors” (Blais, Morin-Chassé, and Singh 2017, 86). Scholars have construed political trust as an aspect of legitimacy, or a basic evaluative orientation toward government based on how well the government lives up to individuals’ normative expectations (Hetherington 1998; Citrin and Stoker 2018).¹

In sum, while the impact of winning or losing a referendum on political attitudes has

1. For some, measures of political trust are more likely to tap into attitudes toward the basic principles of the democratic system and its governing rules. From this perspective, Hooghe and Stiers (2016, 48) stress that “it is important one does not just focus on satisfaction with current officeholders, but that one should also pay attention to the basic value of political trust in the system.”

received a fair amount of attention in conventional elections, less attention has been paid to the context of referendums. For this reason, I extend the theoretical framework of the winner-loser gap to the Brexit referendum.

3 Expectations

There is good reason to believe that Brexit might produce winner-loser effects similar to those found in conventional elections—it was a highly salient referendum, evidenced by a relatively high turnout (71%) and intense campaigning on both sides (Hobolt 2016). Following the literature on the winner-loser gap, I expect a pronounced increase in satisfaction with democracy among the winners of the Brexit referendum, not unlike those found among the winners of conventional elections. Conversely, I expect that the losers of Brexit will show decreased levels of democratic satisfactions following the referendum.

While electoral legitimacy hinges on the fairness of elections, it has also been found that the experience winning or losing itself strongly shapes perceptions of fairness and legitimacy (Sances and Stewart 2015; Nadeau and Blais 1993). I expect such a process to be at play with respect to Brexit. Relative to pre-Brexit expectations about how fairly the referendum would be conducted, I expect that Leave voters will have more faith in the process because it delivered their desired outcome. Alternatively, the experience of losing the Brexit referendum may lead Remain voters to rethink their evaluations of the legitimacy of the process.

Works in economic voting have emphasize that while economic perceptions are indeed shaped by objective economic conditions, they are to some degree endogenous to partisan preference (Lewis-Beck and Stegmaier 2013; Evans and Andersen 2006). Because this paper examines the attitudinal consequences of Brexit, as opposed to determinants of Brexit voting, I will first examine how outcome favourability shaped prospective economic evaluations, both sociotropic and egocentric. At the same time, because a number of survey waves were administered several months after the decision to leave the EU, winner-loser status may also affect respondents' retrospective evaluations of the economy.

Lastly, I will examine Brexit's association with reported feelings of internal and exter-

nal efficacy. As described in the preceding section, the impact of referendums on political attitudes is often framed in theories of participatory democracy, which insist on a number of positive effects associated with participation, including increases in internal and external efficacy. For instance, participation may have an educative effect that increases the citizen’s own sense of political competence (Pateman 1970; Barber 1984). Participation may also contribute to more positive attitudes about the responsiveness of political authorities and the political system (Finkel 1985). Of course, according to participatory democratic theorists, it is through the continued and institutionalized practice of direct democracy that civic norms and attitudes will be reshaped. These effects may be limited in a one-off referendum like Brexit. Moreover, I will rely on a relatively short-term time period of ten months to assess these relationships. With these caveats in mind, it cannot be overlooked that the referendum delivered Leavers their preferred outcome, which may have affected perceptions of government responsiveness. Moreover, as the decision was put directly to the people, Brexit may have encouraged citizens’ to learn about the issue and thus affect how they view their own understanding of politics.²

4 Data and Methods

Data for this paper came from an internet panel study conducted from 2014-2017 as part of the British Election Study (BES) (Fieldhouse et al. 2017). To examine changes in respondents’ attitudes associated with the Brexit referendum, I draw on data collected from Wave 7 (April 14–May 4 2016) to Wave 11 (April 24–May 3).³ Because my primary interest is in changes in respondents’ attitudes that occurred as a result of Brexit, It is necessary to restrict the data in this way because of the general elections that were held on May 5, 2015 and June 8, 2017. These elections likely produced winner-loser gaps of their own, thus

2. Although the fact that “What does it mean to leave the EU?” was the most searched-for question about the European Union in the UK *after* the decision to leave is not a good indication that citizens were well-informed (Selyukh, n.d.).

3. The data were collected in thirteen waves spanning from February 2013 to June 2017. In each wave, around 30,000 respondents were interviewed. In total, only 17% of respondents participated in all thirteen waves, though the vast majority completed at least two waves. I have structured the data such that each observation is an individual during a given wave.

Table 1: The short term impact of Brexit

	<i>Dependent variable:</i>					
	Satsisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Risk of poverty (4)	Politicans care about people like me (5)	I understand the issues facing the country (6)
Constant	0.145* (0.065)	0.606*** (0.079)	0.405*** (0.042)	0.311** (0.097)	-0.010 (0.054)	0.302*** (0.031)
Brexit	-0.086*** (0.005)	-0.242*** (0.007)	-0.198*** (0.005)	0.065*** (0.009)	0.021*** (0.005)	0.011** (0.003)
Leave	-0.073*** (0.007)	-0.202*** (0.008)	-0.043*** (0.006)	0.031* (0.014)	-0.074*** (0.007)	0.021*** (0.005)
Brexit X leave	0.177*** (0.007)	0.409*** (0.010)	0.189*** (0.007)	-0.063*** (0.014)	0.002 (0.006)	-0.023*** (0.005)
R ²	0.151	0.103	0.236	0.145	0.155	0.323
Adj. R ²	0.150	0.102	0.235	0.144	0.154	0.322
Num. obs.	28677	30707	28885	17530	29208	29299
RMSE	0.259	0.332	0.208	0.281	0.230	0.157

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

Notes: Table entries are OLS regression coefficients. Standard errors in parentheses, clustered by respondent. Estimates for income, gender, age, education, left-right self placement, party identification, occupation, attention to politics and immigration attitudes not included (see Appendix ??). All dependent variables range from zero to one.

excluding them from the analysis will produce cleaner estimates of the winner-loser gap with respect to Brexit.

I estimate a number of OLS regressions where the key independent variables are winner-loser status and wave of interview. Winner-loser status is coded as a dummy variable where 0 indicates an intention to vote remain and 1 indicates an intention to vote leave, measured prior to the referendum, in Waves 7 and 8.⁴ Wave of interview is also a binary variable that takes on a value of 1 for the post-Brexit wave of the survey. If the political attitudes of winners and losers change differentially from pre- to post-Brexit, we should expect to see a significant interaction between wave of interview and winner-loser status.

In addition to these two primary independent variables and their interaction, I control for a number of factors known to be associated with political attitudes and economic percep-

4. Reported pre-Brexit vote intentions, as opposed to post-Brexit reported vote, are used to reduce the possibility of post-treatment bias. In the pre-Brexit vote intention questions respondents were asked if they were (a) planning to vote leave, (b) planning to vote remain, or (c) planning not vote. Another post-Brexit turnout question asked respondents if they voted in the referendum. Among respondents who answered both the pre-Brexit vote intention *and* post-Brexit turnout questions, only 3.6 percent who reported that they would vote (remain or leave) indicated that they did not actually turn out. In other words, for pairwise complete cases, 96 percent of those who expressed a vote intention also said they voted in the referendum after the fact.

Table 2: Six months after Brexit

<i>Dependent variable:</i>								
	Satisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Retro- spective sociotropic (4)	Risk of poverty (5)	Trust MPs (6)	Politicians care about people like me (7)	I understand the issues facing the country (8)
Constant	0.074 (0.070)	0.542*** (0.079)	0.368*** (0.054)	0.433*** (0.054)	0.517*** (0.137)	-0.160 (0.094)	-0.011 (0.058)	0.284*** (0.040)
Brexit	-0.050*** (0.006)	-0.283*** (0.008)	-0.134*** (0.005)	-0.119*** (0.008)	0.019* (0.010)	-0.030** (0.011)	-0.001 (0.005)	-0.010* (0.004)
Leave	-0.065*** (0.007)	-0.217*** (0.008)	-0.033*** (0.006)	-0.029** (0.011)	0.028 (0.014)	-0.076*** (0.017)	-0.077*** (0.007)	0.021*** (0.005)
Brexit X leave	0.083*** (0.008)	0.517*** (0.012)	0.156*** (0.007)	0.129*** (0.011)	-0.012 (0.014)	0.066*** (0.016)	0.027*** (0.007)	-0.028*** (0.006)
R ²	0.146	0.150	0.215	0.179	0.155	0.180	0.150	0.336
Adj. R ²	0.145	0.150	0.214	0.178	0.154	0.178	0.149	0.335
Num. obs.	25083	27268	25432	14523	14292	12567	25691	25755
RMSE	0.252	0.329	0.209	0.206	0.280	0.238	0.228	0.159

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

Notes: Table entries are OLS regression coefficients. Standard errors in parentheses, clustered by respondent. Estimates for income, gender, age, education, left-right self placement, party identification, occupation, attention to politics and immigration attitudes not included (see Appendix ??). All dependent variables range from zero to one.

tions: income, age, age², education, ideology (left-right self-placement), attention to politics, party identification, occupation, and immigration attitudes. For variables that could plausibly change as a result of Brexit—ideology, income, attention to politics, party identification, and immigration attitudes—I use values from the pre-Brexit waves of the panel.⁵ To highlight the effect of the interaction between winner-loser status and Brexit, I do not present the effects of these controls in the main paper. Full models can be found Appendix G, H, and I.

The dependent variable in each regression model corresponds to one of the political attitudes or economic perceptions discussed above. To allow for the comparison of regression coefficients across models, the dependent variables are all recoded to vary between 0 and 1. The wording and original scales of the outcome variable can be found in Appendix F.

5. All controls except for age and age² are recoded to range from 0 to 1, where wealthier, more right-wing, politically attentive, and more positive immigration attitudes take on higher values. Education is recoded as a dummy variable to indicate whether the respondent has received a post-secondary education. Occupation and party identification are represented by a set of dummy variables.

Table 3: Ten months after Brexit

	<i>Dependent variable:</i>							
	Satisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Retro- spective sociotropic (4)	Risk of poverty (5)	Trust MPs (6)	Politicians care about people like me (7)	I understand the issues facing the country (8)
Constant	0.098 (0.060)	0.380*** (0.063)	0.411*** (0.054)	0.580*** (0.066)	0.298** (0.111)	-0.101 (0.089)	0.024 (0.066)	0.325*** (0.030)
Brexit	-0.052*** (0.006)	-0.311*** (0.008)	-0.108*** (0.005)	-0.098*** (0.008)	0.029** (0.010)	-0.004 (0.012)	0.030*** (0.005)	-0.001 (0.006)
Leave	-0.074*** (0.007)	-0.216*** (0.008)	-0.041*** (0.006)	-0.047*** (0.011)	0.032* (0.014)	-0.077*** (0.018)	-0.086*** (0.007)	0.019*** (0.005)
Brexit X Leave	0.128*** (0.008)	0.546*** (0.012)	0.171*** (0.007)	0.133*** (0.011)	-0.015 (0.014)	0.071*** (0.018)	0.068*** (0.007)	-0.016* (0.007)
R ²	0.156	0.166	0.238	0.225	0.178	0.221	0.167	0.312
Adj. R ²	0.155	0.165	0.237	0.224	0.176	0.217	0.166	0.311
Num. obs.	25810	28045	26170	15250	15052	4775	26387	26477
RMSE	0.253	0.326	0.210	0.208	0.279	0.213	0.230	0.163

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

Notes: Table entries are OLS regression coefficients. Standard errors in parentheses, clustered by respondent. Estimates for income, gender, age, education, left-right self placement, party identification, occupation, attention to politics and immigration attitudes not included (see Appendix ??). All dependent variables range from zero to one.

5 Results

Three sets of models are presented in this section to examine the effects of Brexit as well as the persistence of these effects into future waves. While all models draw on Wave 7 and 8 as a pre-Brexit baseline, I test for the same effects with progressively later waves of the survey. In all the models, the coefficients on the interaction between Brexit (post-Brexit waves of the survey) and Leave (winner-loser status) represent the differential change between winners and losers from the pre- to post-Brexit period for the given dependent variable. These coefficients can be interpreted to represent the pre- to post-Brexit change associated with an intention to vote leave, relative to the effect for those who intended to vote remain (Brambor, Clark, and Golder 2005). The Brexit coefficient is thus attitudinal changes associated with Brexit on Remainers.

Table 1 draws on post-Brexit responses from Wave 9, administered for one month immediately after the referendum.⁶ Strong differential effects can be observed with respect

6. Table 1 excludes Trust in MPs and retrospective economic evaluations as these questions were not asked in Wave 9. In addition, perceptions of the fairness of the referendum draw on pre-Brexit responses from Wave 7, as this question was not asked in Wave 8.

to satisfaction with democracy (column 1, $\beta = 0.177$, $SE = 0.007$), prospective national economic evaluations (column 3, $\beta = 0.189$, $SE = 0.007$) and, most notably, perceptions that the referendum was conducted fairly (column 2, $\beta = 0.409$, $SE = 0.010$). The interaction effect for personal economic evaluations (column 4) is more modest and in the opposite direction of what was expected ($\beta = -0.063$, $SE = 0.014$). The effect for external efficacy (column 5) fails to reach conventional levels of statistical significance. Lastly, although there is a significant effect for internal efficacy (column 6), the substantive effects are negligible.⁷

From Table 2, it is clear that many of the immediate effects of Brexit lasted into the second wave following the referendum. While the differential effect of Brexit on satisfaction with democracy (column 1, $\beta = 0.083$, $SE = 0.008$) and prospective sociotropic economic evaluations (column 3, $\beta = 0.156$, $SE = 0.007$) decreased, perceptions of fairness *increased* by over 10 points ($\beta = 0.517$, $SE = 0.012$). In addition, retrospective sociotropic economic evaluations and trust in MPs are introduced in Table 2, as Wave 10 was the first time these questions were asked after Brexit. While the effect of retrospective sociotropic evaluations (column 4, $\beta = 0.129$, $SE = 0.011$) largely mirrors that of prospective sociotropic evaluations, I find a relatively minor effect for trust in MPs (column 7, $\beta = 0.066$, $SE = 0.016$).

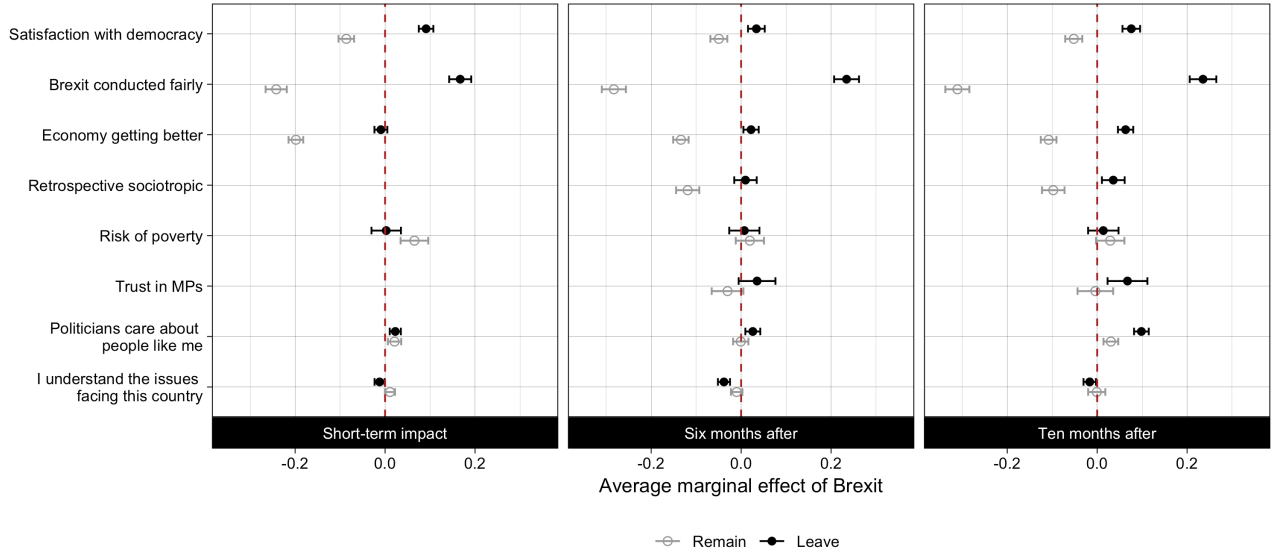
Lastly, ten months after Brexit (Table 3), it appears that the effects still persist for satisfaction with democracy (column 1, $\beta = 0.128$, $SE = 0.008$), prospective sociotropic economic evaluations (column 3, $\beta = 0.171$, $SE = 0.007$), retrospective economic evaluations (column 4, $\beta = 0.133$, $SE = 0.011$) and perception of the referendum's fairness (column 2, $\beta = 0.546$, $SE = 0.012$).

While these results suggest a number of differential effects associated with Brexit, the coefficients on the interaction terms do not tell us the relative movement between winners and losers.⁸ For instance, the positive coefficients on satisfaction with democracy in Tables 1, 2, and 3, may reflect losers becoming less satisfied relative to winners, winners become

7. Given the large number of observations in each model, statistical significance on this minimal effect is not entirely meaningful.

8. As the figure in Appendix B suggests, the direction and strength of the Brexit's effect for Leavers relative to Remainers varies across different outcomes.

Figure 1: OLS coefficients of Brexit on political attitudes by winner-loser status



more satisfied than losers, or both. Along these lines, it is necessary to plot the marginal effects of Brexit for both winners and losers in order to assess the relative movement of political attitudes and economic perceptions associated with Brexit. To this end, Figure 1 graphically illustrates the average marginal effects of Brexit accompanied by their 99% confidence intervals.

The marginal effects of Brexit for winning and losing on satisfaction with the way democracy works in the UK largely confirm H1a and H1b—Brexit is associated with a moderate increase for winners and a roughly equivalent decrease for losers in satisfaction with democracy. While the effect is strongest immediately after the referendum, differences in democratic satisfaction appear to persist up to ten months after the referendum. This is in line with findings from the winner-loser gap literature that satisfaction with democracy is contingent on election outcomes (Anderson and LoTempio 2002; Anderson et al. 2007; Blais and Gélinau 2007; Bowler and Donovan 2002). Moreover, these results suggest that a similar process may be at play with respect to referendums. That said, it is difficult to say the exact mechanism that is producing this effect. Brexit was an extremely consequential decision accompanied by an intense campaign—the increase in democratic satisfaction associated

with Brexit could plausibly be the result of emotional gratification, satisfaction with the policy implications of the result, or a combination of these and other factors.

The most striking result from Figure 1 is undoubtedly the divergence between how fairly respondents believed the referendum was conducted. That is, for respondents who reported that they would vote leave in the pre-Brexit period, the initial post-Brexit period is associated with a 17 point increase in perceptions of fairness, whereas those whose intention was to remain saw a 24 point decrease. Ten months after Brexit, this gap widens to a 24 percent increase for Leave respondents and a 31 percent decrease for Remain respondents. I take these changes as a confirmation of H2—outcome favourability appears to strongly shade perceptions of fairness. Indeed, although similar caveats about the unique political circumstances of Brexit as those above apply here, this finding is nonetheless consistent with works that find a legitimacy gap between the winners and losers of elections. It also suggests that, in the context of referendums—the Brexit referendum at least—outcome favourability may trump the enhanced decision-making influence afforded to citizens by this process (Arnesen 2017). While the mechanism once again is not clear-cut, the divergence in this relatively straightforward question is consistent with the notion that losers update their attitudes to restore consistency between their attitudes and behaviour.⁹

What implications do these results carry with respect to personal (H3e and H3f) and national (H3a–H3d) economic evaluations? The marginal effects of Brexit for winning and losing on both retrospective and prospective national economic evaluations lend support to H3b and H3d—the post-Brexit period accompanies a decrease in Remainers’ national economic evaluations. Leavers, on the other hand, did not seem to adjust their economic perceptions, which is surprising given that the value of the pound fell dramatically immediately following the referendum. On the other hand, the effect of Brexit on personal economic

9. This is not to suggest that these updated attitudes are necessarily wrong. Indeed, it is possible that those with a remain vote intention did expect the referendum to be conducted fairly before the referendum and updated their beliefs if it was not. If the recent allegations coming from whistleblowers who worked for the Leave campaign are accurate, this may be a reasonable reaction <http://www.cbc.ca/news/technology/chris-wylie-testify-uk-facebook-cambridge-analytica-1.4594668>.

evaluations is negligible in Model 1 and not statistically distinguishable from zero at the 99 percent level in Models 2 and 3. That is, neither Leavers nor Remainers seem to update their perceived risk of unemployment and poverty after Brexit, disconfirming H3e and H3f. In short, these findings suggest that while Brexit winners and losers did not, on average, adjust their personal economic assessments to a large degree, the outcome of the Brexit referendum may have affected losers' perceptions of where the British economy was headed as well as how it had been performing. This is consistent with much of the literature on economic voting, where sociotropic economic considerations have consistently been found as more consequential to vote choice than egocentric considerations (Lewis-Beck and Stegmaier 2013). Obviously, my analysis is not about the determinants, but rather the *consequences* of vote choice, though these findings are suggestive as to the type of economic evaluations most affected by referendums. Indeed, these findings are consistent with the notion that partisan predisposition—in this case, partisans of the Leave camp—impacts individuals' assessments of the objective economy, perhaps even in the case of highly salient referendums like Brexit.

Lastly, the post-Brexit period is not associated in any meaningful way with improvements in measures of external and internal efficacy. Thus, H4a and H4b cannot be confirmed. A similar conclusion can be reached with respect to political trust. There appears to be little movement with respect to trust before and after the referendum for both Leave and Remain voters, disconfirming H4c. As mentioned earlier, there are not strong theoretical reasons to expect that a one-off referendum like Brexit would have the ability to transform strong predispositions like efficacy and trust, as participatory democratic theory predicts for contexts where direct democracy is more institutionalized. Indeed, the framework offered by participatory democratic theory may be inappropriate for an event like Brexit.

6 Discussion

While it has been well-documented that conventional elections produce differential effects among winners and losers, this phenomena has received little attention in the context of referendums. This paper has gone some way toward expanding our understanding of the

winner-loser gap to include non-conventional forms of democratic decision-making. Tracking individuals' political attitudes both before and after Brexit, I have found evidence to suggest that associating with the winning (Leave) or losing (Remain) side of the referendum systematically impacted both democratic satisfaction as well as perceptions of the fairness of the decision-making process. With respect to the perceived legitimacy of referendum decisions, the reversal of attitudes between those who intended to vote Leave and Remain after Brexit suggests that outcome favourability, much like in conventional elections, is an important source of consent to referendum outcomes (Nadeau and Blais 1993).

Moreover, while it has been acknowledged that traditional forms of partisanship have a strong influence on perceptions of economic performance (Wlezien, Franklin, and Twiggs 1997; Anderson 2007; Bartels 2002), this phenomena has received less attention in both the winner-loser gap literature and in the context of referendums. The results in this paper demonstrate that an affinity toward the winning or losing side of Brexit are associated with changes in economic perceptions, and that these perceptions may have been affected by the outcome of the referendum itself. Indeed, those who intended to vote Remain prior to the Brexit vote became markedly less optimistic about where the British economy was heading as well as how it had been performing, while Leave voters largely maintained their pre-Brexit economic outlooks.

Lastly, there is reason to doubt the magnitude with which the Brexit referendum made citizens feel like their voices are being heard and that the government is responsive to their needs. In the context of conventional elections, Craig et al. (2006, 579) claim, this is especially likely when candidates obscure the real issues by opting for either general platitudes or negative attacks, voters are unhappy with the electoral choices available to them, or doubts exist about whether the election itself was conducted in a fair and honest fashion. There is little doubt that all three of these factors were at play during the Brexit referendum. For example, Calhoun (2016, 50) argues that the Brexit vote was “grounded in nostalgia ... almost entirely negative and devoid of plans for an alternative future” and

that “those who will have to live the longest with the consequences wanted a different choice.” Moreover, while interest in participatory democracy as a solution for problems of political alienation and enthusiasm has grown among political scientists and policymakers, the Brexit referendum was clearly not proposed for these reasons. The primary motivation for holding a referendum on EU membership can be attributed to internal divisions within the Conservative party, rather than an earnest desire to engage citizens politically (Hobolt and Vries 2016; Moore 2017; Prosser 2016). Indeed, it is likely that more meaningful and earnest attempts at engagement will be required for such an effect to take hold. As Barber (1984, 154) notes,

political elites “throw referenda at the people without providing adequate information, full debate, or prudent insulation from money and media pressures and then pillory them for their lack of judgement. They overwhelm the people with the least tractable problems of mass society—busing, inflation, tax structures, nuclear safety, right-to-work legislation, industrial waste disposal, environmental protection (all of which the representative elites have themselves have utterly failed to deal with)—and then carp at their uncertainty or indecisiveness or the simple-mindedness with they muddle through to a decision.”

In this vein, my results suggest that the political attitudes changed most by the Brexit referendum were not those associated with greater citizen engagement in the political process, such as efficacy and trust, but rather those linked to whether or not one’s desired outcome was achieved.

While this paper offers some insights into how referendums can shape political attitudes, it is not without limitations. First, as has been emphasized throughout the paper, Brexit was not a normal referendum. This was a particularly important decision left to the people largely for political reasons. At the same time, this does not necessarily proscribe the generalizability of the findings: referendums are almost always held at the behest of representative elites and thus by definition will be held for political reasons. Moreover, as

Prosser (2016) notes, EU treaty referendums are usually held as a result of domestic political pressure. Brexit is not unique in this regard. That said, the most important and unresolved question to pose for future research is whether the effects found for Brexit hold for referendums held in other settings and over different questions.

Methodologically, it may be that the estimates in this paper are systematically influenced by factors unrelated to the winner-loser effect of Brexit. For instance, preceding the Brexit referendum was the 2015 general election, in which the Conservative party pledged a “straight in-out referendum of the European Union by the end 2017” (Conservative Party 2015). Another unexpected election was called early and came one year after the Brexit referendum in June of 2017 amidst leadership contests in both major parties. In addition, a variety of local elections were held concurrently with the 2015 and 2017 national elections as well as in 2016. Although the BES panel data was restricted to account for general and local elections, the possibility of bias does remain. Lastly, although the post-Brexit waves of the survey stretch until almost a year after the referendum, it is hard deliberate on Brexit’s long-term impact. This is true not only because of the limited scope of the panel, but also because, as more elections and perhaps more referendums occur, it will be increasingly difficult to trace attitudinal changes back to Brexit.

Turning to the implications of my findings, while a large body of literature has explored this question in contexts where direct democracy is a standard feature of the political system, less attention has been paid to the impact of referendums in contexts where they occur less frequently. That said, it is important to understand how sporadic yet extremely consequential referendums such as Brexit affect citizens. This is especially true amidst the rise of populist parties in advanced industrial democracies as virtually all of these parties call for the increased use of referendums or other forms of plebiscitary democracy (Mudde 2007). Thus, understanding the impact of referendums on citizens’ political support, especially among the losers of these processes, has become an increasingly relevant line of inquiry.

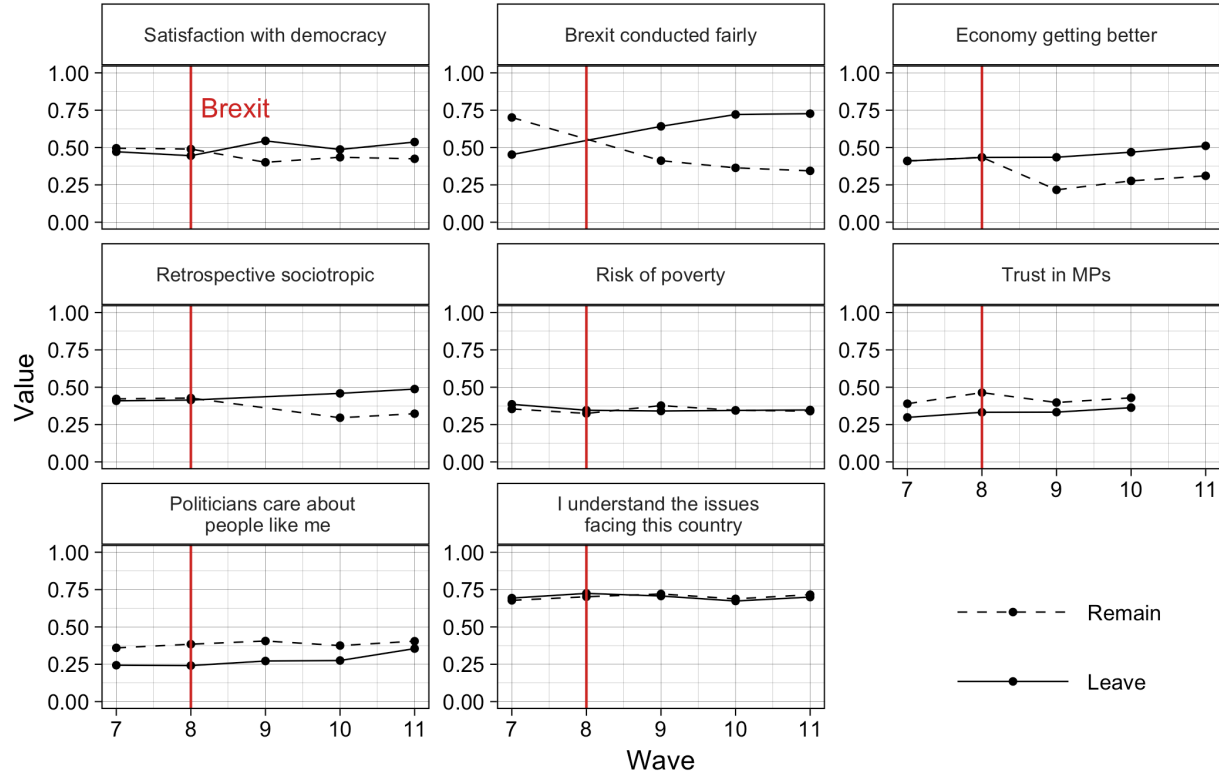
Appendix

A Pre-Brexit descriptive statistics for Leave and Remain voters

Variable	Leave voters			Remain voters			Difference of means
	Mean	SD	N	Mean	SD	n	
<i>Control variables</i>							
Age	52.91	14.99	142576	45.40	17.18	146512	7.51
Attention to politics	0.71	0.21	165856	0.72	0.20	183272	-0.01
Post-secondary education	0.32	0.47	158432	0.56	0.50	176416	-0.24
Income	0.38	0.24	103080	0.45	0.26	120816	-0.08
Left-right self placement	0.59	0.21	127264	0.41	0.22	149528	0.19
Female	0.50	0.50	166080	0.52	0.50	183520	-0.02
Immigration attitudes (cultural)	0.25	0.25	164296	0.62	0.27	180672	-0.37
Immigration attitudes (economic)	0.30	0.24	164152	0.63	0.24	179856	-0.33
Routine/semi-routine occupation	0.27	0.44	149376	0.17	0.38	155000	0.09
<i>Outcome variables</i>							
Satisfaction with democracy	0.45	0.29	84332	0.46	0.29	90806	-0.01
How fairly will/was Brexit (be) conducted?	0.46	0.35	12977	0.69	0.31	13335	-0.23
Politicians care about people like me	0.27	0.25	87552	0.37	0.26	93596	-0.10
I understand the issues facing this country	0.70	0.21	87448	0.71	0.21	93867	-0.00
Retrospective economic	0.48	0.28	68181	0.48	0.26	72823	0.00
Economy getting better	0.48	0.27	74093	0.47	0.26	78050	0.01
Risk of poverty	0.39	0.33	73107	0.36	0.31	79589	0.03
Trust in MPs	0.32	0.26	73769	0.40	0.24	80279	-0.09

All differences except for retrospective economic evaluations ($t = 0.996$, $p = 0.32$) significant at the 0.001 level.

B Average values among Leave and Remain voters across waves



C Panel Data Structure

Below are the number of waves in the panel study as well as when they were conducted. As can be seen, Brexit is sandwiched between two elections, which might produce their own winner-loser effect or affect political attitudes in some other way. For this reason, the data are constrained to include only Waves 7 through 11.

Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Wave 9	Wave 10	Wave 11	Wave 12	Wave 13
Feb 20– Mar 9 2014	May 22– June 25 2014	Sept 19– Oct 17 2014	Mar 4– Mar 30 2015	Mar 31– May 6 2015	May 8– May 26 2015	April 14– May 4 2016	May 6– June 22 2016	Jun 24– July 4 2016	Nov 24– Dec 12 2016	April 24– May 3 2017	May 5– June 7 2017	June 9– June 23 2017
				Pre- election	Post- election		Pre- Brexit	Post- Brexit			Pre- election	Post- election

D Marginal effects

These are the values for the marginal effects plotted in Figure 1. Credit goes to Frederik Hjorth for the code used to create these values (<https://gist.github.com/fghjorth/45c81a15f40660bc2852>). I use his function `interaction_plot_binary` in conjunction with `cluster.vcov` function from the `multiwayvcov` package to produce marginal effects with cluster robust confidence intervals.

Dependent variable	Remain			Leave		
	Lower CI	Marg. Effect	Upper CI	Lower CI	Marg. Effect	Upper CI
Short-term impact of Brexit						
Satisfaction with Democracy in the UK	-0.10	-0.09	-0.07	0.07	0.09	0.11
How fairly will/was Brexit (be) conducted?	-0.27	-0.24	-0.22	0.14	0.17	0.19
The economy is getting worse-better	-0.21	-0.20	-0.18	-0.02	-0.01	0.01
Likelihood of not having enough to cover daily living costs during next 12 months	0.03	0.07	0.10	-0.03	0.00	0.04
Politicians don't care what people like me think	0.01	0.02	0.04	0.01	0.02	0.04
I have a pretty good understanding of the important political issues facing our country	-0.00	0.01	0.02	-0.02	-0.01	-0.00
Six months after Brexit						
Satisfaction with Democracy in the UK	-0.07	-0.05	-0.03	0.02	0.03	0.05
How fairly will/was Brexit (be) conducted?	-0.31	-0.28	-0.26	0.21	0.23	0.26
The economy is getting worse-better	-0.15	-0.13	-0.12	0.01	0.02	0.04
The economy has gotten worse-better	-0.14	-0.12	-0.09	-0.02	0.01	0.03
Likelihood of not having enough to cover daily living costs during next 12 months	-0.01	0.02	0.05	-0.03	0.01	0.04
How much trust do you have in Members of Parliament in general?	-0.07	-0.03	0.01	-0.01	0.04	0.08
Politicians don't care what people like me think	-0.02	-0.00	0.02	0.01	0.03	0.04
I have a pretty good understanding of the important political issues facing our country	-0.02	-0.01	0.00	-0.05	-0.04	-0.02
Ten months after Brexit						
Satisfaction with Democracy in the UK	-0.07	-0.05	-0.03	0.06	0.08	0.10
How fairly will/was Brexit (be) conducted?	-0.34	-0.31	-0.28	0.21	0.24	0.26
The economy is getting worse-better	-0.13	-0.11	-0.09	0.05	0.06	0.08
The economy has gotten worse-better	-0.12	-0.10	-0.07	0.01	0.04	0.06
Likelihood of not having enough to cover daily living costs during next 12 months	-0.00	0.03	0.06	-0.02	0.01	0.05
How much trust do you have in Members of Parliament in general?	-0.04	-0.00	0.04	0.02	0.07	0.11
Politicians don't care what people like me think	0.01	0.03	0.05	0.08	0.10	0.11
I have a pretty good understanding of the important political issues facing our country	-0.02	-0.00	0.02	-0.03	-0.02	-0.00

E Dependent variables by panel wave

As mentioned above, not all dependent variables were asked in all surveys. Find below a table which shows which dependent variables were asked in which waves.

Dependent variable	Wave 7	Wave 8	Wave 9	Wave 10	Wave 11
Satisfaction with Democracy in the UK	×	×	×	×	×
Satisfaction with Democracy in the EU	×	×	×	×	
Politicians don't care what people like me think	×	×	×	×	×
It doesn't matter which party is in power	×		×	×	×
It is often difficult for me to understand what is going on in government and politics	×		×	×	×
I have a pretty good understanding of the important political issues facing our country	×	×	×	×	×
Likelihood of being out of a job and looking for work during next 12 months	×	×	×	×	×
The economy is getting worse-better	×	×	×	×	×
Likelihood of not having enough to cover daily living costs during next 12 months	×	×	×	×	×
How much trust do you have in Members of Parliament in general?	×	×	×	×	
How fairly will/was Brexit (be) conducted?	×		×	×	×

F Variables measurement and wording

All of the dependent variables and independent variables (with the exception of age and age² in this paper) were recoded to range from 0 to 1 for comparable interpretation. These are the original measures of the dependent variables.

Dependent variable	Range	Wording
On the whole, how satisfied or dissatisfied are you with the way that democracy works in the UK	1–4	Very dissatisfied – very satisfied
On the whole, how satisfied or dissatisfied are you with the way that democracy works in EU	1–4	Very dissatisfied – very satisfied
How fairly do you expect the EU referendum to be conducted?	1–5	Conducted fairly – conducted unfairly
Do you think that [the economy is] getting better, getting worse or staying about the same?	1–5	Getting a lot worse – getting a lot better
During the next 12 months, how likely or unlikely is it that you will be out of a job and looking for work?	1–5	Very unlikely – very likely
During the next 12 months, how likely or unlikely is it that there will be times when you don't have enough money to cover your day to day living costs	1–5	Very unlikely – very likely
How much trust do you have in Members of Parliament in general?	1–7	No trust – a great deal of trust
Politicians don't care what people like me think	1–5	Strongly disagree – strongly agree
It doesn't matter which political party is in power	1–5	Strongly disagree – strongly agree
It is often difficult for me to understand what is going on in government and politics	1–5	Strongly disagree – strongly agree
I have a pretty good understanding of the important political issues facing our country	1–5	Strongly disagree – strongly agree

G Table 1 with full controls

Table 8: The short term impact of Brexit

	<i>Dependent variable:</i>					
	Satsisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Risk of poverty (4)	Politicans care about people like me (5)	I understand the issues facing the country (6)
Constant	0.145* (0.065)	0.606*** (0.079)	0.405*** (0.042)	0.311** (0.097)	-0.010 (0.054)	0.302*** (0.031)
Brexit	-0.086*** (0.005)	-0.242*** (0.007)	-0.198*** (0.005)	0.065*** (0.009)	0.021*** (0.005)	0.011** (0.003)
Leave	-0.073*** (0.007)	-0.202*** (0.008)	-0.043*** (0.006)	0.031* (0.014)	-0.074*** (0.007)	0.021*** (0.005)
Income	0.036** (0.012)	0.057*** (0.013)	0.014 (0.009)	-0.325*** (0.016)	0.080*** (0.011)	0.036*** (0.007)
Age	0.001 (0.001)	0.001 (0.001)	-0.002* (0.001)	0.008*** (0.002)	-0.002 (0.001)	0.003*** (0.001)
Age ²	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000*** (0.000)	0.000 (0.000)	-0.000*** (0.000)
Education	-0.021*** (0.006)	0.012 (0.007)	-0.011* (0.005)	-0.030*** (0.008)	0.023*** (0.006)	0.016*** (0.004)
Ideology	0.291*** (0.020)	0.020 (0.021)	0.225*** (0.016)	-0.091*** (0.025)	0.099*** (0.016)	-0.030* (0.013)
Gender	0.019*** (0.005)	0.016** (0.006)	-0.020*** (0.004)	0.037*** (0.007)	0.024*** (0.005)	-0.026*** (0.003)
Scotland	-0.015 (0.009)	0.024** (0.009)	0.006 (0.007)	-0.033** (0.011)	0.029*** (0.008)	-0.008 (0.005)
Wales	0.003 (0.010)	0.006 (0.011)	-0.004 (0.007)	0.002 (0.012)	0.023** (0.008)	0.010* (0.005)
Conservative	0.282*** (0.055)	0.074 (0.068)	0.105** (0.033)	0.058 (0.087)	0.193*** (0.041)	-0.009 (0.023)
Green	0.086 (0.058)	-0.037 (0.072)	-0.022 (0.036)	0.046 (0.090)	0.027 (0.045)	-0.013 (0.025)
Labour	0.232*** (0.056)	0.011 (0.068)	0.010 (0.033)	0.121 (0.087)	0.086* (0.041)	-0.028 (0.023)
Liberal Democrat	0.192*** (0.056)	0.026 (0.069)	0.032 (0.034)	0.070 (0.088)	0.132** (0.043)	-0.011 (0.024)
Other/don't know/none	0.168** (0.056)	0.010 (0.068)	0.020 (0.033)	0.097 (0.087)	0.089* (0.041)	-0.021 (0.023)
Plaid Cymru	0.096 (0.063)	-0.030 (0.075)	0.015 (0.040)	0.085 (0.097)	0.123* (0.051)	-0.009 (0.028)
Scottish National Party	0.055 (0.058)	-0.065 (0.070)	-0.021 (0.036)	0.112 (0.089)	0.093* (0.043)	-0.015 (0.024)
UKIP	0.145** (0.056)	-0.035 (0.069)	-0.001 (0.033)	0.100 (0.088)	0.085* (0.042)	0.009 (0.023)
Routine/semi-routine occupation	0.004 (0.007)	-0.001 (0.007)	0.010* (0.005)	0.025** (0.009)	-0.006 (0.006)	-0.004 (0.004)
Attention to politics	-0.111*** (0.016)	-0.105*** (0.017)	-0.040** (0.013)	0.059** (0.022)	0.099*** (0.013)	0.567*** (0.011)
Immigration attitudes (cultural)	0.075*** (0.019)	0.026 (0.019)	-0.012 (0.014)	0.015 (0.026)	0.089*** (0.019)	-0.030** (0.011)
Immigration attitudes (economic)	-0.013 (0.020)	-0.000 (0.021)	0.030 (0.015)	-0.057* (0.027)	0.080*** (0.022)	0.014 (0.012)
Brexit X Leave	0.177*** (0.007)	0.409*** (0.010)	0.189*** (0.007)	-0.063*** (0.014)	0.002 (0.006)	-0.023*** (0.005)
R ²	0.151	0.103	0.236	0.145	0.155	0.323
Adj. R ²	0.150	0.102	0.235	0.144	0.154	0.322
Num. obs.	28677	30707	28885	17530	29208	29299
RMSE	0.259	0.332	0.208	0.281	0.230	0.157

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

H Table 2 with full controls

Table 9: Six months after Brexit

	<i>Dependent variable:</i>							
	Satsisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Retro- spective sociotropic (4)	Risk of poverty (5)	Trust MPs (6)	Politicians care about people like me (7)	I understand the issues facing the country (8)
Constant	0.074 (0.070)	0.542*** (0.079)	0.368*** (0.054)	0.433*** (0.054)	0.517*** (0.137)	-0.160 (0.094)	-0.011 (0.058)	0.284*** (0.040)
Brexit	-0.050*** (0.006)	-0.283*** (0.008)	-0.134*** (0.005)	-0.119*** (0.008)	0.019* (0.010)	-0.030** (0.011)	-0.001 (0.005)	-0.010* (0.004)
Leave	-0.065*** (0.007)	-0.217*** (0.008)	-0.033*** (0.006)	-0.029** (0.011)	0.028 (0.014)	-0.076*** (0.017)	-0.077*** (0.007)	0.021*** (0.005)
Income	0.046*** (0.012)	0.061*** (0.014)	0.030** (0.011)	0.025 (0.014)	-0.321*** (0.017)	0.038* (0.016)	0.080*** (0.011)	0.026*** (0.007)
Age	0.000 (0.001)	0.002 (0.001)	-0.003** (0.001)	-0.003 (0.001)	0.009*** (0.002)	-0.003 (0.002)	-0.002 (0.001)	0.004*** (0.001)
Age ²	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000*** (0.000)	0.000* (0.000)	0.000 (0.000)	-0.000*** (0.000)
Education	-0.014* (0.006)	0.008 (0.007)	-0.006 (0.005)	-0.002 (0.007)	-0.046*** (0.009)	-0.009 (0.008)	0.018** (0.006)	0.015*** (0.004)
Ideology	0.321*** (0.021)	0.071** (0.022)	0.249*** (0.018)	0.205*** (0.024)	-0.087*** (0.026)	0.222*** (0.027)	0.110*** (0.017)	-0.033* (0.013)
Gender	0.022*** (0.005)	0.026*** (0.006)	-0.018*** (0.005)	-0.015** (0.006)	0.014 (0.008)	0.025*** (0.007)	0.018*** (0.005)	-0.030*** (0.003)
Scotland	-0.012 (0.009)	0.049*** (0.010)	0.005 (0.007)	0.006 (0.009)	-0.041*** (0.011)	0.005 (0.011)	0.022** (0.008)	-0.006 (0.005)
Wales	-0.003 (0.011)	0.016 (0.011)	0.001 (0.008)	0.006 (0.013)	0.024 (0.014)	0.026 (0.015)	0.023* (0.010)	0.008 (0.007)
Conservative	0.342*** (0.060)	0.064 (0.067)	0.134** (0.046)	0.069 (0.039)	-0.124 (0.127)	0.332*** (0.082)	0.209*** (0.048)	-0.028 (0.033)
Green	0.146* (0.063)	-0.057 (0.071)	-0.011 (0.048)	-0.037 (0.043)	-0.063 (0.129)	0.134 (0.084)	0.033 (0.051)	-0.027 (0.035)
Labour	0.303*** (0.061)	-0.008 (0.068)	0.024 (0.046)	-0.010 (0.040)	-0.066 (0.127)	0.248** (0.083)	0.106* (0.048)	-0.045 (0.033)
Liberal Democrat	0.259*** (0.061)	0.012 (0.068)	0.062 (0.046)	-0.003 (0.042)	-0.089 (0.128)	0.269** (0.083)	0.156** (0.049)	-0.038 (0.034)
Other/don't know/none	0.236*** (0.060)	-0.003 (0.068)	0.041 (0.046)	0.007 (0.039)	-0.069 (0.127)	0.196* (0.082)	0.105* (0.048)	-0.042 (0.033)
Plaid Cymru	0.111 (0.071)	-0.022 (0.076)	0.051 (0.052)	-0.017 (0.047)	-0.116 (0.142)	0.150 (0.091)	0.135* (0.056)	-0.057 (0.040)
Scottish National Party	0.112 (0.062)	-0.091 (0.070)	-0.014 (0.047)	-0.066 (0.042)	-0.013 (0.129)	0.151 (0.084)	0.099* (0.050)	-0.044 (0.034)
UKIP	0.187** (0.061)	-0.071 (0.068)	-0.003 (0.046)	-0.004 (0.040)	-0.063 (0.128)	0.183* (0.083)	0.087 (0.048)	-0.007 (0.033)
Routine/semi-routine occupation	0.007 (0.007)	0.001 (0.007)	0.011* (0.005)	0.004 (0.007)	0.033** (0.010)	-0.014 (0.009)	-0.004 (0.006)	-0.003 (0.004)
Attention to politics	-0.128*** (0.016)	-0.070*** (0.018)	-0.025 (0.013)	-0.013 (0.016)	0.031 (0.024)	0.216*** (0.020)	0.103*** (0.013)	0.574*** (0.011)
Immigration attitudes (cultural)	0.069*** (0.018)	0.059** (0.020)	-0.008 (0.015)	0.013 (0.020)	0.053* (0.026)	0.119*** (0.023)	0.102*** (0.017)	-0.032** (0.011)
Immigration attitudes (economic)	0.010 (0.020)	-0.058** (0.021)	0.053** (0.016)	0.006 (0.021)	-0.092** (0.029)	0.093*** (0.024)	0.058** (0.018)	0.025* (0.013)
Brexit X Leave	0.083*** (0.008)	0.517*** (0.012)	0.156*** (0.007)	0.129*** (0.011)	-0.012 (0.014)	0.066*** (0.016)	0.027*** (0.007)	-0.028*** (0.006)
R ²	0.146	0.150	0.215	0.179	0.155	0.180	0.150	0.336
Adj. R ²	0.145	0.150	0.214	0.178	0.154	0.178	0.149	0.335
Num. obs.	25083	27268	25432	14523	14292	12567	25691	25755
RMSE	0.252	0.329	0.209	0.206	0.280	0.238	0.228	0.159

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

I Table 3 with full controls

Table 10: Ten months after Brexit

	<i>Dependent variable:</i>							
	Satsisfaction with democracy (1)	Brexit conducted fairly (2)	Economy getting better (3)	Retro- spective sociotropic (4)	Risk of poverty (5)	Trust MPs (6)	Politicians care about people like me (7)	I understand the issues facing the country (8)
Constant	0.098 (0.060)	0.380*** (0.063)	0.411*** (0.054)	0.580*** (0.066)	0.298** (0.111)	-0.101 (0.089)	0.024 (0.066)	0.325*** (0.030)
Brexit	-0.052*** (0.006)	-0.311*** (0.008)	-0.108*** (0.005)	-0.098*** (0.008)	0.029** (0.010)	-0.004 (0.012)	0.030*** (0.005)	-0.001 (0.006)
Leave	-0.074*** (0.007)	-0.216*** (0.008)	-0.041*** (0.006)	-0.047*** (0.011)	0.032* (0.014)	-0.077*** (0.018)	-0.086*** (0.007)	0.019*** (0.005)
Income	0.058*** (0.012)	0.065*** (0.014)	0.057*** (0.010)	0.061*** (0.013)	-0.366*** (0.017)	0.012 (0.021)	0.093*** (0.011)	0.034*** (0.008)
Age	0.001 (0.001)	0.002 (0.001)	-0.003** (0.001)	-0.004*** (0.001)	0.008*** (0.002)	-0.003 (0.002)	-0.003* (0.001)	0.003*** (0.001)
Age ²	-0.000 (0.000)	-0.000 (0.000)	0.000* (0.000)	0.000** (0.000)	-0.000*** (0.000)	0.000 (0.000)	0.000* (0.000)	-0.000*** (0.000)
Education	-0.013* (0.006)	0.007 (0.007)	0.000 (0.005)	0.003 (0.006)	-0.035*** (0.009)	-0.012 (0.011)	0.015** (0.006)	0.014** (0.005)
Ideology	0.307*** (0.020)	0.108*** (0.022)	0.256*** (0.016)	0.218*** (0.020)	-0.099*** (0.027)	0.184*** (0.036)	0.107*** (0.016)	-0.033* (0.016)
Gender	0.024*** (0.005)	0.029*** (0.006)	-0.025*** (0.004)	-0.025*** (0.005)	0.023** (0.008)	0.011 (0.010)	0.022*** (0.005)	-0.033*** (0.003)
Scotland	-0.007 (0.009)	0.044*** (0.010)	0.002 (0.007)	0.000 (0.008)	-0.032* (0.013)	0.022 (0.014)	0.029*** (0.008)	0.000 (0.006)
Wales	0.000 (0.010)	0.011 (0.010)	-0.000 (0.008)	-0.001 (0.010)	-0.003 (0.013)	0.025 (0.015)	0.020* (0.009)	0.004 (0.006)
Conservative	0.329*** (0.050)	0.200*** (0.050)	0.086 (0.046)	-0.009 (0.056)	0.117 (0.098)	0.277*** (0.069)	0.171** (0.057)	-0.049* (0.022)
Green	0.122* (0.054)	0.101 (0.054)	-0.068 (0.048)	-0.162** (0.059)	0.167 (0.101)	0.058 (0.073)	-0.029 (0.060)	-0.049* (0.024)
Labour	0.283*** (0.051)	0.150** (0.051)	-0.040 (0.046)	-0.125* (0.057)	0.183 (0.099)	0.186** (0.069)	0.049 (0.058)	-0.066** (0.022)
Liberal Democrat	0.230*** (0.051)	0.152** (0.051)	0.002 (0.047)	-0.100 (0.057)	0.158 (0.100)	0.213** (0.070)	0.097 (0.058)	-0.049* (0.022)
Other/don't know/none	0.210*** (0.050)	0.137** (0.050)	-0.018 (0.046)	-0.096 (0.057)	0.162 (0.099)	0.095 (0.069)	0.052 (0.057)	-0.063** (0.022)
Plaid Cymru	0.127* (0.059)	0.148* (0.059)	-0.021 (0.051)	-0.100 (0.064)	0.059 (0.109)	0.080 (0.092)	0.058 (0.064)	-0.069* (0.031)
Scottish National Party	0.084 (0.053)	0.034 (0.053)	-0.095* (0.048)	-0.161** (0.059)	0.205* (0.101)	0.080 (0.072)	0.043 (0.059)	-0.059* (0.023)
UKIP	0.172*** (0.052)	0.075 (0.051)	-0.058 (0.047)	-0.090 (0.057)	0.184 (0.099)	0.129 (0.070)	0.043 (0.058)	-0.034 (0.022)
Routine/semi-routine occupation	0.010 (0.007)	-0.001 (0.007)	0.008 (0.005)	0.001 (0.007)	0.031** (0.010)	-0.001 (0.012)	0.001 (0.006)	-0.003 (0.004)
Attention to politics	-0.142*** (0.016)	-0.092*** (0.018)	-0.010 (0.014)	-0.013 (0.016)	0.050* (0.023)	0.303*** (0.027)	0.118*** (0.013)	0.565*** (0.012)
Immigration attitudes (cultural)	0.059** (0.018)	0.032 (0.020)	-0.017 (0.015)	-0.026 (0.018)	0.034 (0.028)	0.162*** (0.031)	0.090*** (0.017)	-0.024* (0.011)
Immigration attitudes (economic)	-0.004 (0.020)	-0.017 (0.022)	0.045** (0.016)	0.014 (0.020)	-0.079** (0.029)	0.038 (0.033)	0.063*** (0.018)	0.009 (0.013)
Brexit X Leave	0.128*** (0.008)	0.546*** (0.012)	0.171*** (0.007)	0.133*** (0.011)	-0.015 (0.014)	0.071*** (0.018)	0.068*** (0.007)	-0.016* (0.007)
R ²	0.156	0.166	0.238	0.225	0.178	0.221	0.167	0.312
Adj. R ²	0.155	0.165	0.237	0.224	0.176	0.217	0.166	0.311
Num. obs.	25810	28045	26170	15250	15052	4775	26387	26477
RMSE	0.253	0.326	0.210	0.208	0.279	0.213	0.230	0.163

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

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