MEMBERS OF PARLIAMENT ARE MINIMALLY ACCOUNTABLE FOR THEIR ISSUE STANCES (AND THEY KNOW IT) – SUPPLEMENTARY INFORMATION

In this appendix, we report summary statistics, give a statement on missingness in our data, and report the text of the survey fielded to Members of Parliament. We also report an additional figure referred to in the main body of the text. This figure reports the average marginal effect of perceived rather than actual congruence.

For reasons of space, we report full regression tables as part of the replication archive. This archive can be seen at https://doi.org/10.7910/DVN/KSTD9J. Because these regressions include three-way regression tables, the tables span several pages. The tables included as part of the replication archive are as follows:

- Tables S2 - 4 report coefficient values for the logistic regression models visualized, in the main body of the text, as Figure 3 (unconditional effects of congruence). The models in these tables are estimated on voters in Conservative-held seats, voters in Labour-held seats, and all voters respectively.
- Table S5 reports coefficient values for the logistic regression models visualized, in the main body of the text, as Figure 4 (conditional effects of congruence).
- Table S6 reports regressions of perceptions of MPs' stances of Brexit, visualized in the main body of the text as Figure 5
- Tables S7 - S9 report coefficient values for additional logistic regression models which replace actual congruence with perceived congruence, an analysis referenced in the text in the section "Objections and limitations".
- Table S10 report coefficient values for regression models of incumbent voting for a subset of Conservative-held seats where we have pre-2014 measures of the incumbent's stance on Europe. This analysis is referenced in the text in the section "Objections and limitations".
- Table S11 reports a logistic regression where the outcome variable is whether or not the incumbent MP elected in the 2015 election stood down before the 2017 election. This analysis is referenced in footnote 8.
- Tables S13 and S14 provide further analysis of our MP data, respectively removing certain types of responses and specific vignettes.

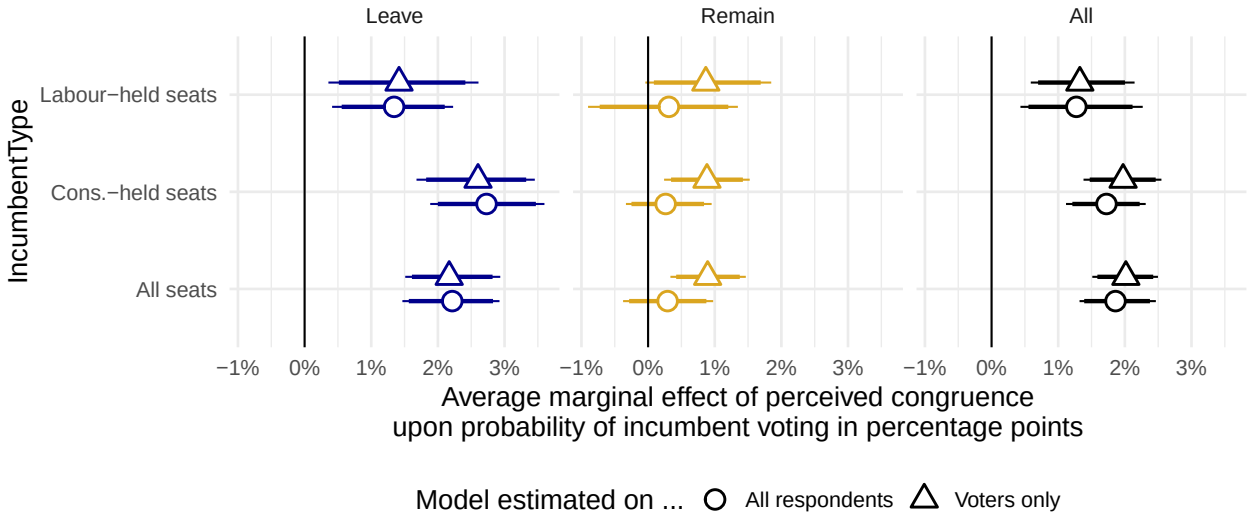
Note that continuous variables in the data have been standardized to have zero mean and unit standard deviation; the coefficient values therefore represent the effects of a one standard deviation change on the original scale.

TABLE 1. Summary statistics

var	Min	Max	Mean	SD	Missing
Import shock	0.06	0.75	0.33	0.13	0.01
(Shadow) cabinet member	0.00	1.00	0.10	0.30	0.00
R voted for incumbent	0.00	1.00	0.46	0.50	0.00
Congruence	0.00	1.00	0.46	0.50	0.00
Incumbent is Cons	0.00	1.00	0.63	0.48	0.00
Incumbent supported Leave	0.00	1.00	0.28	0.45	0.00
Incumbent undeclared	0.00	1.00	0.02	0.14	0.00
Two-term incumbent	0.00	1.00	0.38	0.49	0.00
Three-term incumbent or more	0.00	1.00	0.38	0.48	0.00
Lab PTV	-1.08	1.46	0.01	1.01	0.47
Cons PTV	-0.96	1.51	0.04	1.00	0.47
UKIP PTV	-0.80	1.83	0.06	1.02	0.46
Green PTV	-0.91	2.20	-0.03	0.99	0.47
LibDem PTV	-0.95	2.23	0.01	1.00	0.47
Perceived MP Brexit stance	1.00	5.00	3.16	1.25	0.35
Census: % unemployed	2.10	9.53	4.22	1.31	0.00
Sample weight	0.06	19.71	1.04	0.94	0.00
Census: % aged 18 to 24	5.73	32.68	9.30	3.73	0.00
UKIP share in 2015	1.22	33.79	14.17	5.37	0.00
LibDem share in 2015	1.26	38.18	7.85	7.67	0.00
Census: % w/ L4+ qualifications	12.07	57.39	27.04	8.07	0.00
Cons share in 2015	6.60	65.88	40.06	14.25	0.00
Leave support in 2014	18.96	71.94	51.74	9.04	0.00
Census: % nonwhite	1.02	76.91	11.71	14.22	0.00
Lab share in 2015	5.43	78.12	32.12	16.10	0.00

SUMMARY STATISTICS

FIGURE 1. Average marginal effect of a unit increase in perceived congruence upon incumbent voting.



EFFECTS OF PERCEIVED CONGRUENCE

Figure 1 shows the effects of a *unit* change in perceived congruence. Perceived congruence is a variable with a range of four units and a standard deviation of 1.25 units. In order to make this estimate comparable to a change in a binary variable of one unit (or two standard deviations, given that the standard deviation of a dichotomous variable is ≈ 0.5), multiply the coefficient value by $2 \times 1.25 = 2.5$. The effect of a two standard deviation change in perceived congruence upon all voters is therefore around 2.50.0205 = 0.0513 (95% CI = 0.037 to 0.066), or two times the effect of actual congruence.

STATEMENT ON MISSINGNESS

Our imputed data-set includes more variables that were used in the models of vote choice. In this section, we describe the variables featured in the multiple imputation, and their rates of missingness. We also describe the rationale for including these variables in the multiple imputation but not in the final model.

- **Propensity to vote variables, wave 7**. We include in our model of vote choice and in our imputation model respondents' propensity to vote for the five electorally relevant parties which compete nationwide: the Conservatives, Labour, the Liberal Democrats, the UK Independence Party, and the Green Party. For each of these parties the proportion of missing responses was 47% to two significant figures. Respondents were randomly allocated to see propensity to vote questions, and so this missingness is at random.
- **Propensity to vote variables, earlier waves**. We include in our imputation model (but not in our final model) respondents' propensity to vote for the five parties just mentioned, and also respondents' propensity to vote for the British National Party. The proportion of missing responses across waves was as follows: wave 1, 81%; wave 2, 80%; wave 3; 80%; wave 4, 77%; wave 5, 77%; wave 6, 76%.
- **Fixed respondent characteristics**. We include in our imputation model (but not in our final model) selected demographic characteristics of respondents: their age group, their gender, ethnicity, and their highest educational qualification. There were no missing values for gender, ethnicity, qualifications or age group. We include these variables in our imputation model but not our vote choice model because (a) these variables are useful in imputing weights (see below); and because (b) we believe these variables to matter for vote choice only through their effect on propensity to vote.
- **Constituency characteristics** We include a large range of constituency characteristics in our model. With one exception, there were no missing values. The sole exception was the value of import shock for four constituencies which saw minor boundary changes (Milton Keynes North; Milton Keynes South; Dumfriesshire, Clydesdale & Tweeddale; Edinburgh South)
- **Challenger position** 35% of values for this variable were missing. Relative to the baseline party (Conservative challengers), rates of missingness were significant for only two parties: the Liberal Democrats and the UK Independence Party. Since these parties had very strong Remain and Leave positions, we judge the risk of faulty inference due to inaccurate imputation to be minimal.

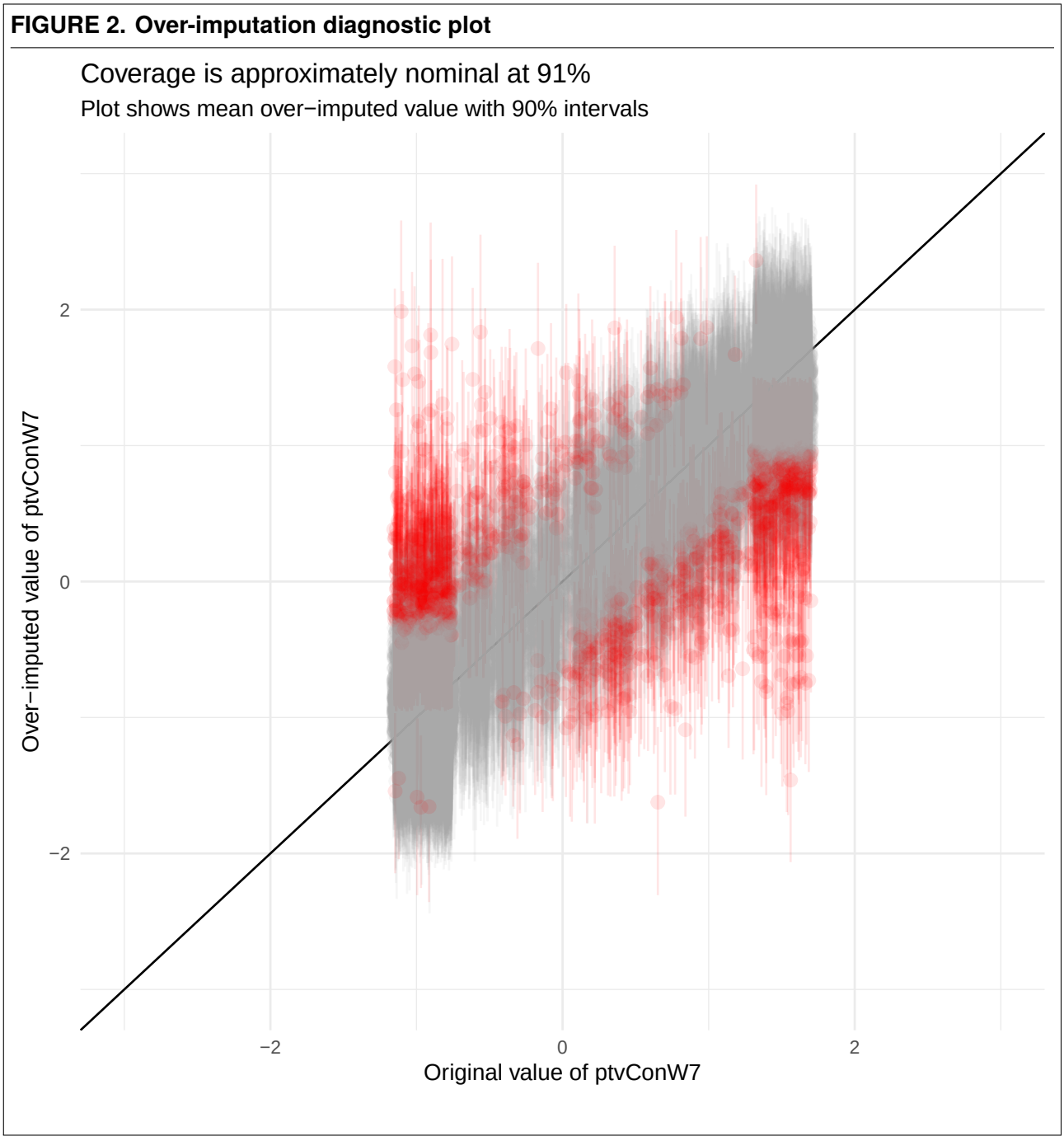
TABLE 2. Missingness of challenger position by challenger party

	Observed	Missing
Conservative and Unionist Party	87	68
Green Party	3	0
Labour Party	118	80
Liberal Democrats	42	12
Other	0	2
Plaid Cymru - The Party of Wales	3	2
Scottish National Party (SNP)	1	1
UK Independence Party (UKIP)	82	23

In order to diagnose our imputation, we over-impute one of our key control variables, the propensity

to vote Conservative in wave 7. By over-imputing and creating imputations for observed values, we can judge whether the imputed values are, in some sense, accurate. Figure 2 shows scaled values of variable 'ptvConW7' against 100 over-imputations (20 draws from an approximate normal distribution for each imputed data-set). Each plotted point is surrounded by a line showing the 90% prediction interval. Intervals which fail to encompass the observed value are shown in red. The solid line shows the ordinary least squares fit between the original and imputed values.

FIGURE 2. Over-imputation diagnostic plot



The plot shows that the imputed values are accurate and a good guide to the original values. The coverage of the imputed values is slightly better than nominal. Additionally, the OLS fit has a slope close to one and an intercept close to zero, indicating that the imputed values are not attenuated versions of the original values.

SURVEY OF MPS

Below we report the questions asked of the MPs in our survey:

Preface:

We would now like to ask you some hypothetical questions about Brexit and the 2017 election.

Please try and answer these questions setting aside your own views on Brexit.

Q1:

An estimated 62% of voters in Enfield Southgate voted to Remain in the 2016 referendum. The sitting MP, David Burrowes (Con.), campaigned for Leave in that referendum.

His main opponent, Bambos Charalambous (Lab.), supported Remain.

In the 2017 general election, Burrowes won 20,634 votes, or 42.7%, compared to Charalambous who won 51.7%.

Now suppose that Burrowes had campaigned for Remain instead.

How many votes would Burrowes have won had he switched to support Remain? Please give your answer as a percentage.

Q2:

An estimated 50% of voters in Colne Valley voted to Leave in the 2016 referendum. The sitting MP, Jason McCartney (Con.), campaigned for Leave in that referendum.

His main opponent, Thelma Walker (Lab.), supported Remain.

In the 2017 general election, McCartney won just under 28,000 votes, or 46.1%, compared to Walker who won 47.8%.

Now suppose that McCartney had campaigned for Remain instead.

How many votes would McCartney have won had he switched to support Remain? Please give your answer as a percentage.

Q3:

An estimated 61% of voters in Peterborough voted to Leave in the 2016 referendum. The sitting MP, Stewart Jackson (Con.), campaigned for Leave in that referendum.

His main opponent, Fiona Onasanya (Lab.), supported Remain.

In the 2017 general election, Jackson won 22,343 votes, or 46.8%, compared to Onasanya who won 48.1%.

Now suppose that Jackson had campaigned for Remain instead.

How many votes would Jackson have won had he switched to support Remain? Please give your answer as a percentage.

Q4:

An estimated 61% of voters in Leeds East voted to Leave in the 2016 referendum. The sitting MP, Richard Burgon (Lab.), campaigned for Remain in that referendum.

His main opponent, Matthew Robinson (Con.), supported Leave.

In the 2017 general election, Burgon won over 25,000 votes, or 61.4%, compared to Robinson who won 30.6%.

Now suppose that Burgon had campaigned for Leave instead.

How many votes would Burgon have won had he switched to support Leave? Please give your answer as a percentage.

Q5:

An estimated 50% of voters in Bromley and Chislehurst voted to Leave in the 2016 referendum. The sitting MP, Bob Neill (Con.), campaigned for Remain in that referendum.

His main opponent, Sara Hyde (Lab.), supported Remain.

In the 2017 general election, Neil won just over 25,000 votes, or 54%, compared to Hyde who won 33.4%.

Now suppose that Neill had campaigned for Leave instead.

How many votes would Neill have won had he switched to support Leave? Please give your answer as a percentage.

Q6:

An estimated 62% of voters in Reading East voted to Remain in the 2016 referendum. The sitting MP, Rob Wilson (Con.), campaigned for Remain in that referendum.

His main opponent, Matt Rodda (Lab.), supported Remain.

In the 2017 general election, Wilson won over 23,000 votes, or 42.3%, compared to Rodda who won 49%.

Now suppose that Wilson had campaigned for Leave instead.

How many votes would Wilson have won had he switched to support Leave? Please give your answer as a percentage.