BBC Director General Conjoint

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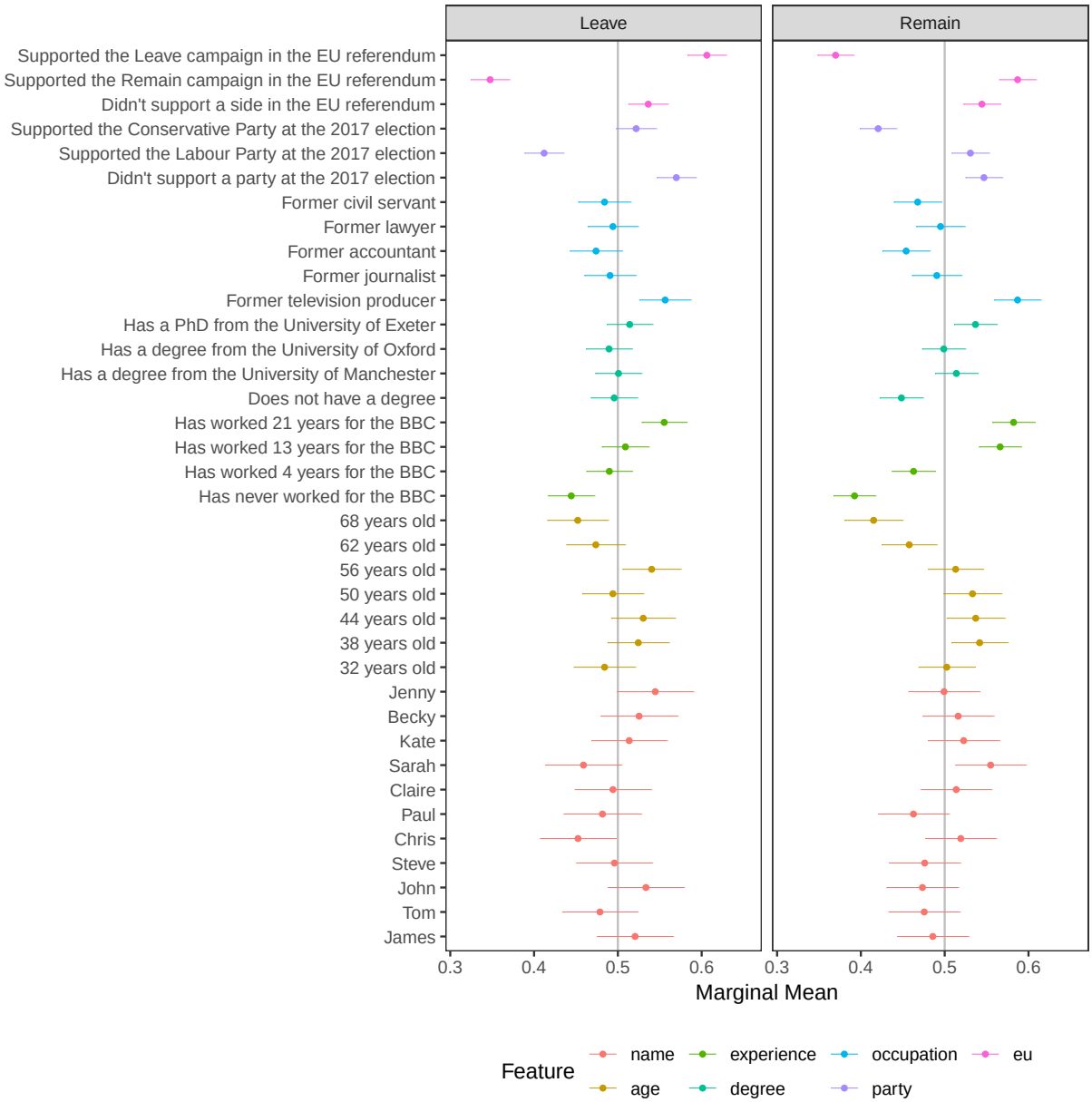
Descriptive Statistics and Main Results

This section provides some descriptive statistics from the study and reproduces the main results. The source code for this document fully reproduces the reported figures.

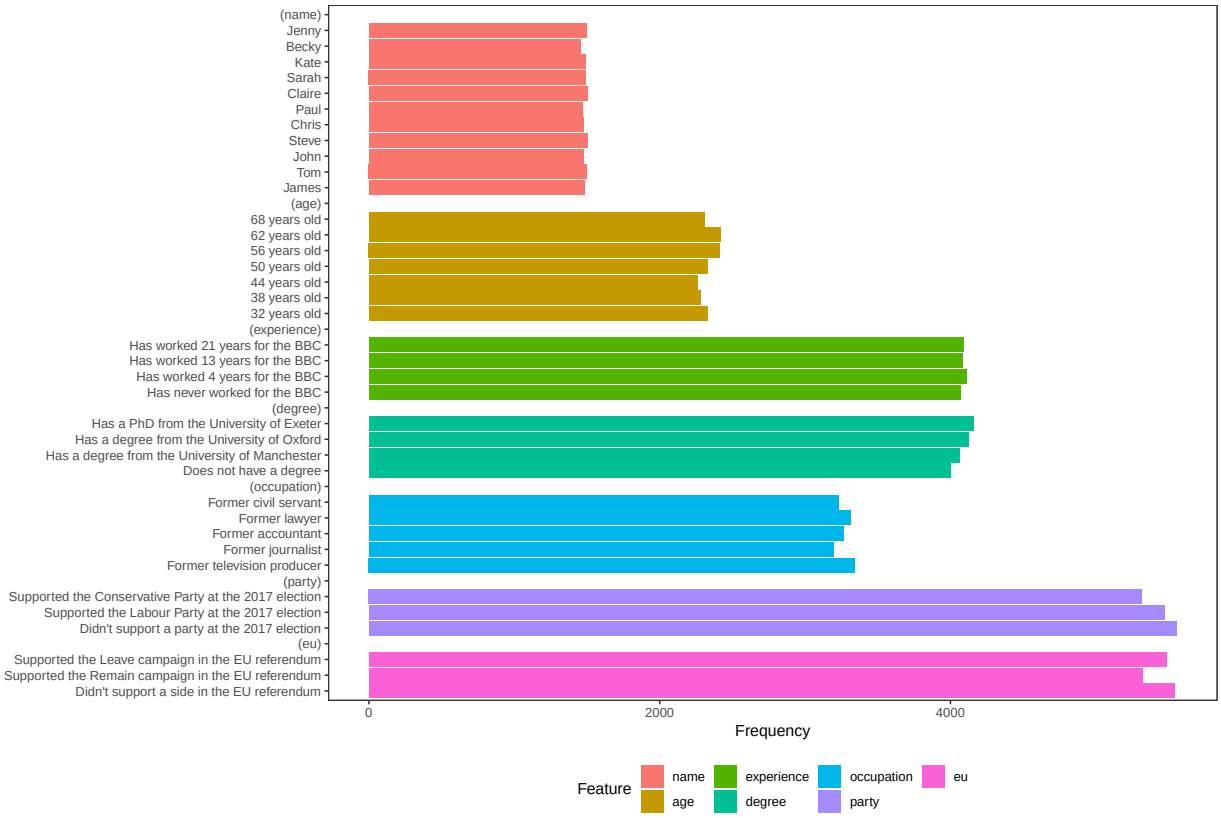


Descriptives

This subsection briefly summarizes the distributions of responses to the main outcome questions. The data here and in all subsequent analyses is a "stacked" dataset, wherein each alternative from each profile pair is a row, such that the dataset has 16350 rows. The levels of features were fully randomized from the following design:

feature	level
name	James
name	Tom
name	John
name	Steve
name	Chris
name	Paul
name	Claire
name	Sarah
name	Kate
name	Becky
name	Jenny
age	32 years old
age	38 years old
age	44 years old
age	50 years old
age	56 years old
age	62 years old
age	68 years old
experience	Has never worked for the BBC
experience	Has worked 4 years for the BBC
experience	Has worked 13 years for the BBC
experience	Has worked 21 years for the BBC
degree	Does not have a degree
degree	Has a degree from the University of Manchester
degree	Has a degree from the University of Oxford
degree	Has a PhD from the University of Exeter
occupation	Former television producer
occupation	Former journalist
occupation	Former accountant
occupation	Former lawyer
occupation	Former civil servant
party	Didn't support a party at the 2017 election
party	Supported the Labour Party at the 2017 election
party	Supported the Conservative Party at the 2017 election
eu	Didn't support a side in the EU referendum
eu	Supported the Remain campaign in the EU referendum
eu	Supported the Leave campaign in the EU referendum

This plot displays numbers of appearances of each level indicates that within each feature this randomization was successful:

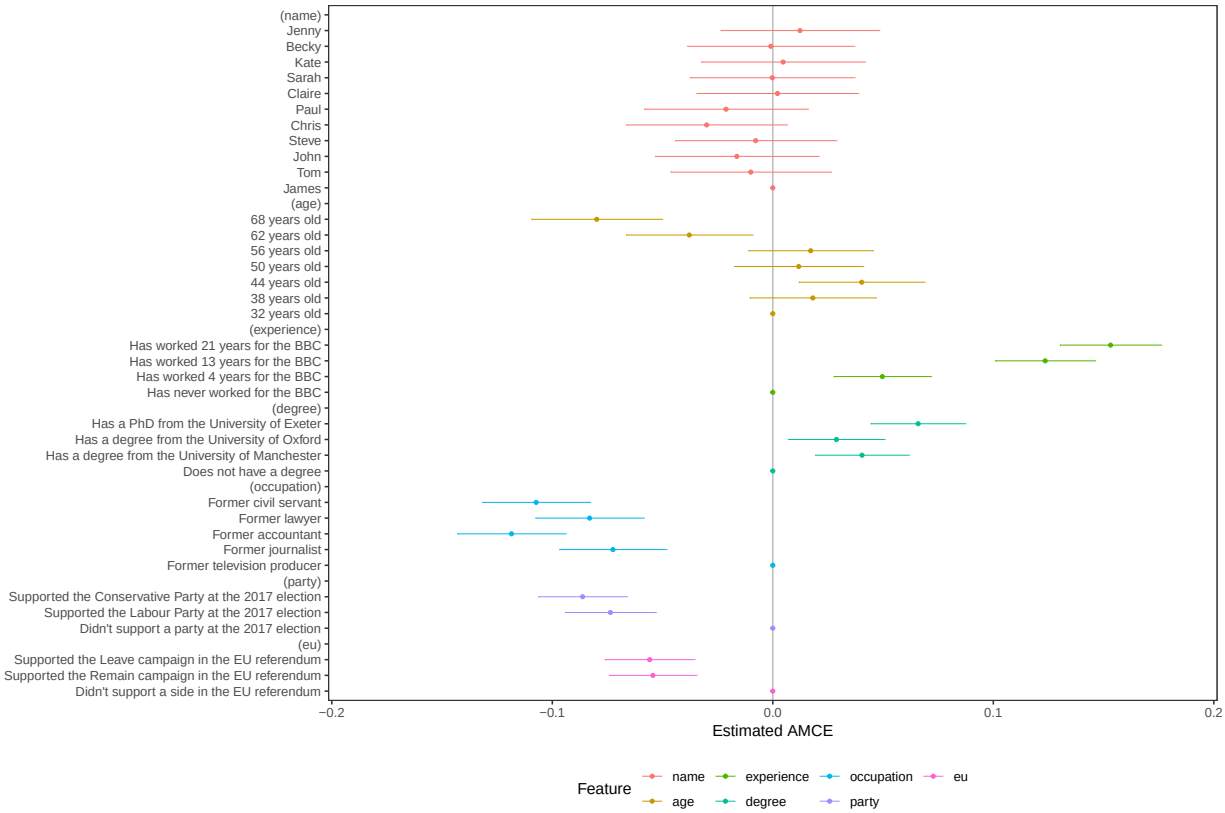


We now turn to distributions of outcome measure. Given the forced choice nature of the design, this means that there are 8175 0's and 8175 1's for Q1. Respondents were about 2% less likely to select the righthand option (diff=-0.02 (se=0.01)).

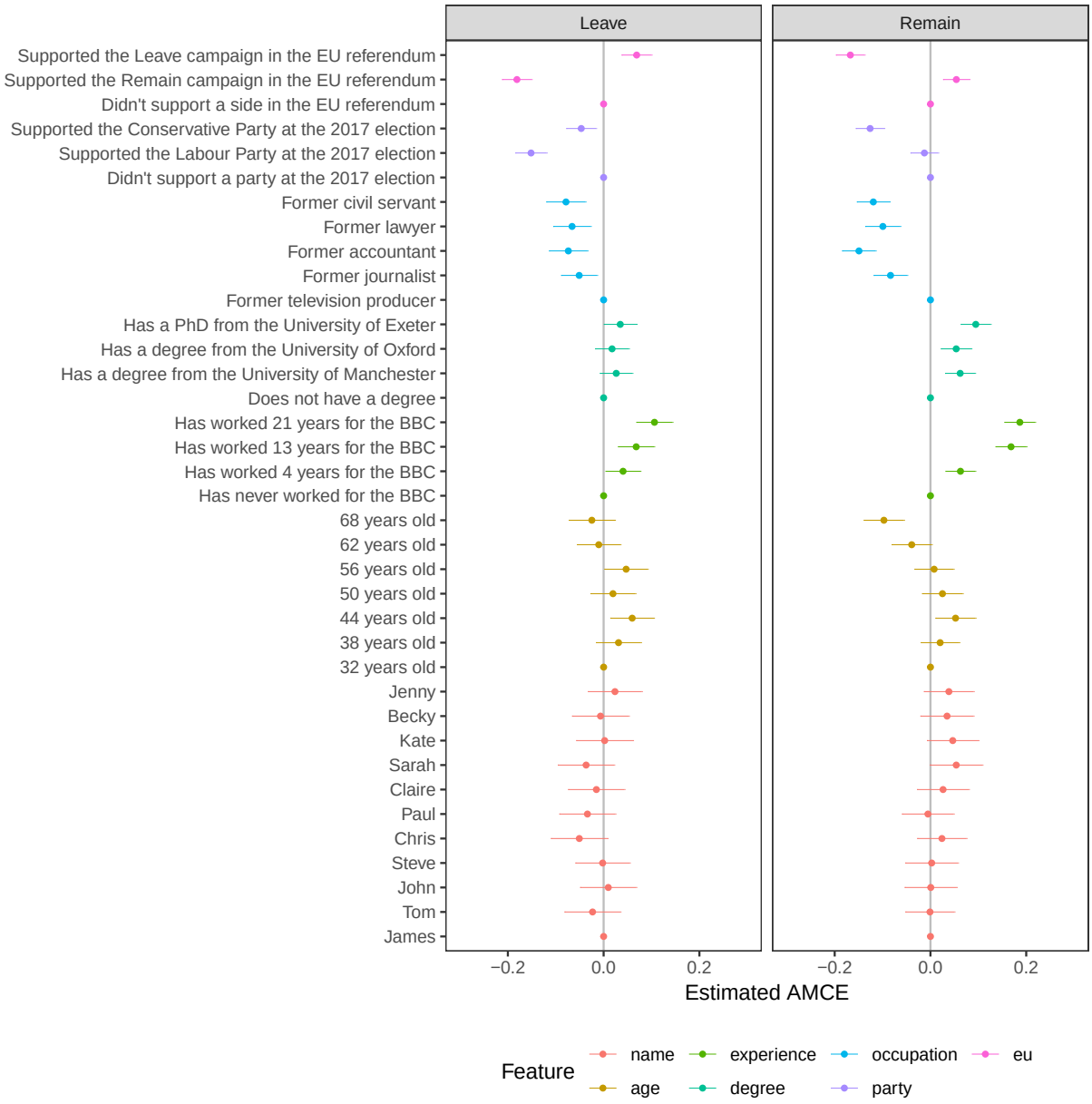
Main Results

Effects are estimated using ordinary least squares regresion, with standard errors clustered by respondent.

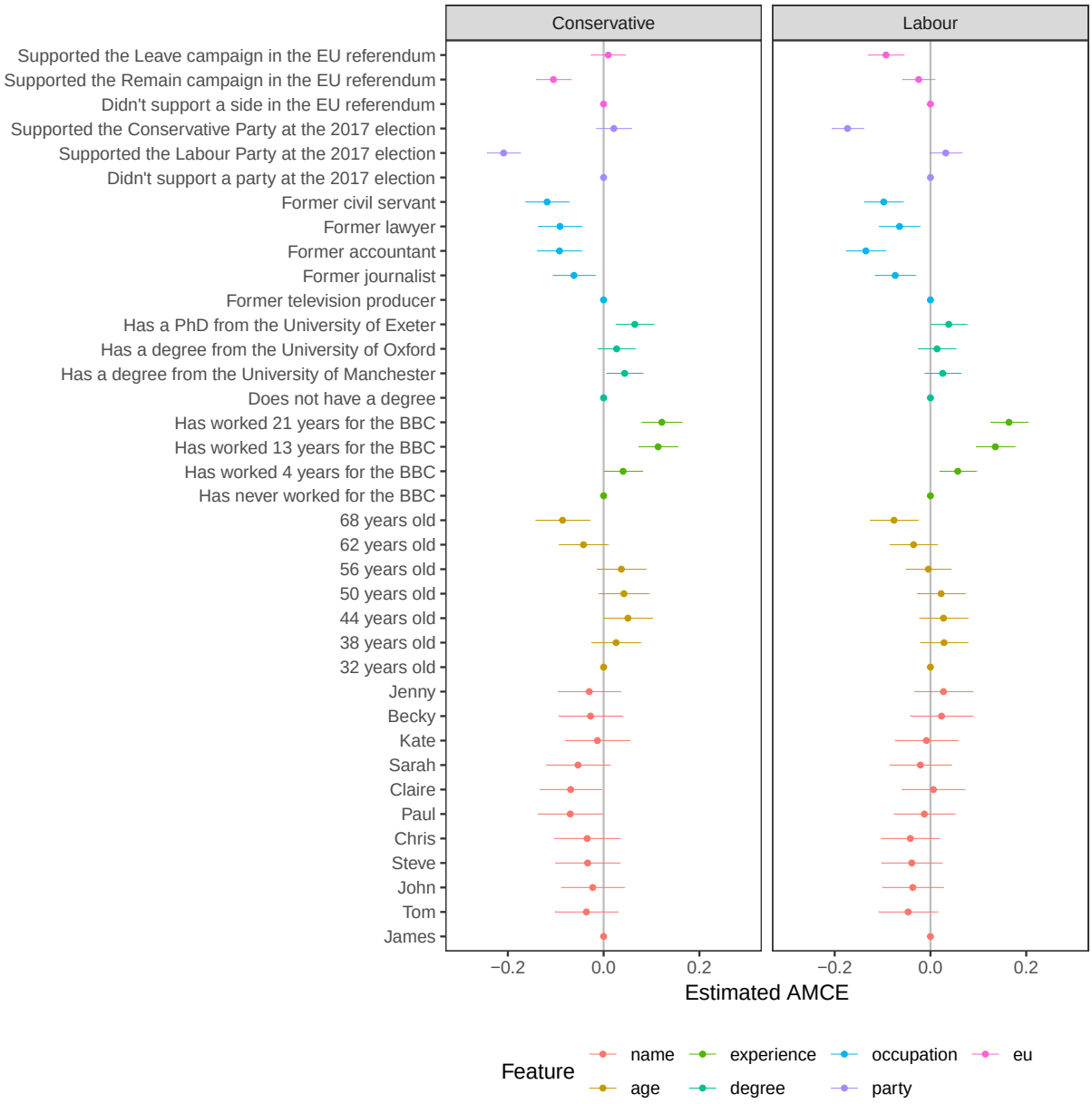
The figure below shows the main results for the entire sample of respondents (unweighted):



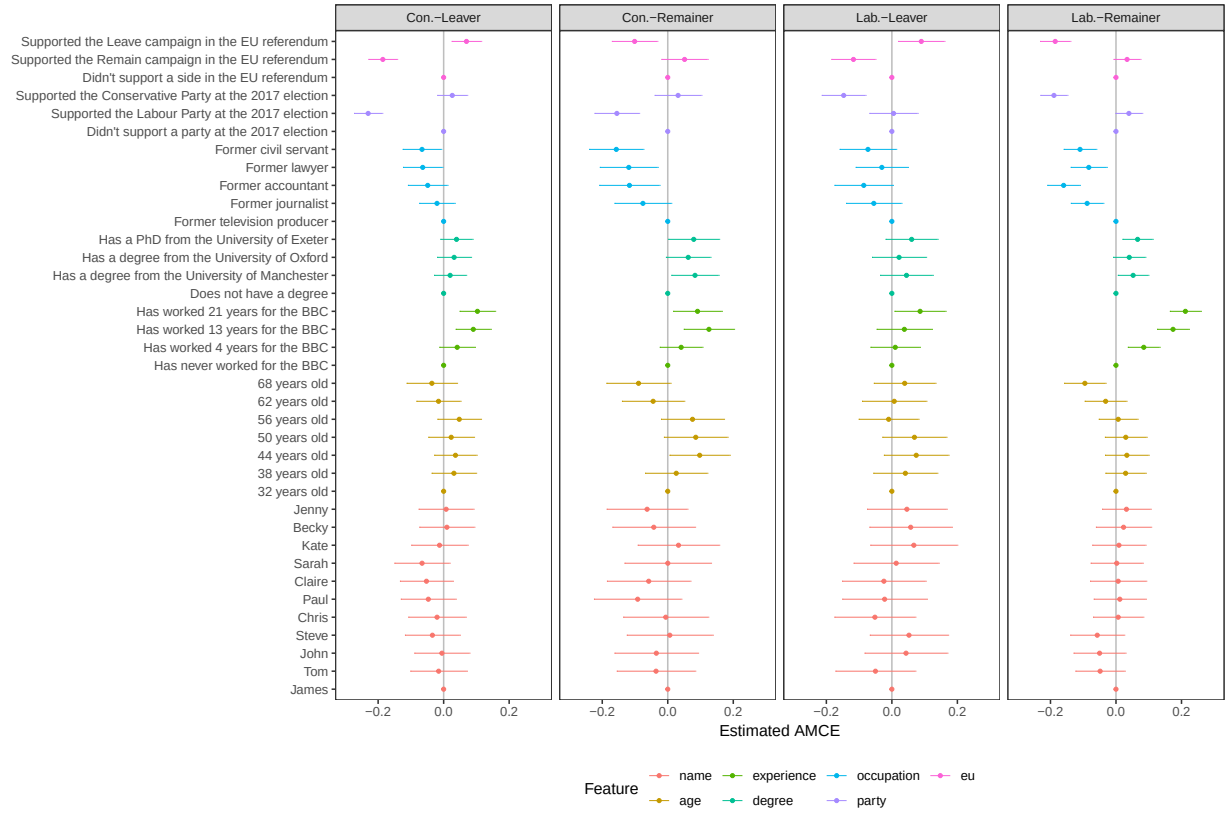
Full numerical results, split by Leave and Remain identity, are as follows:

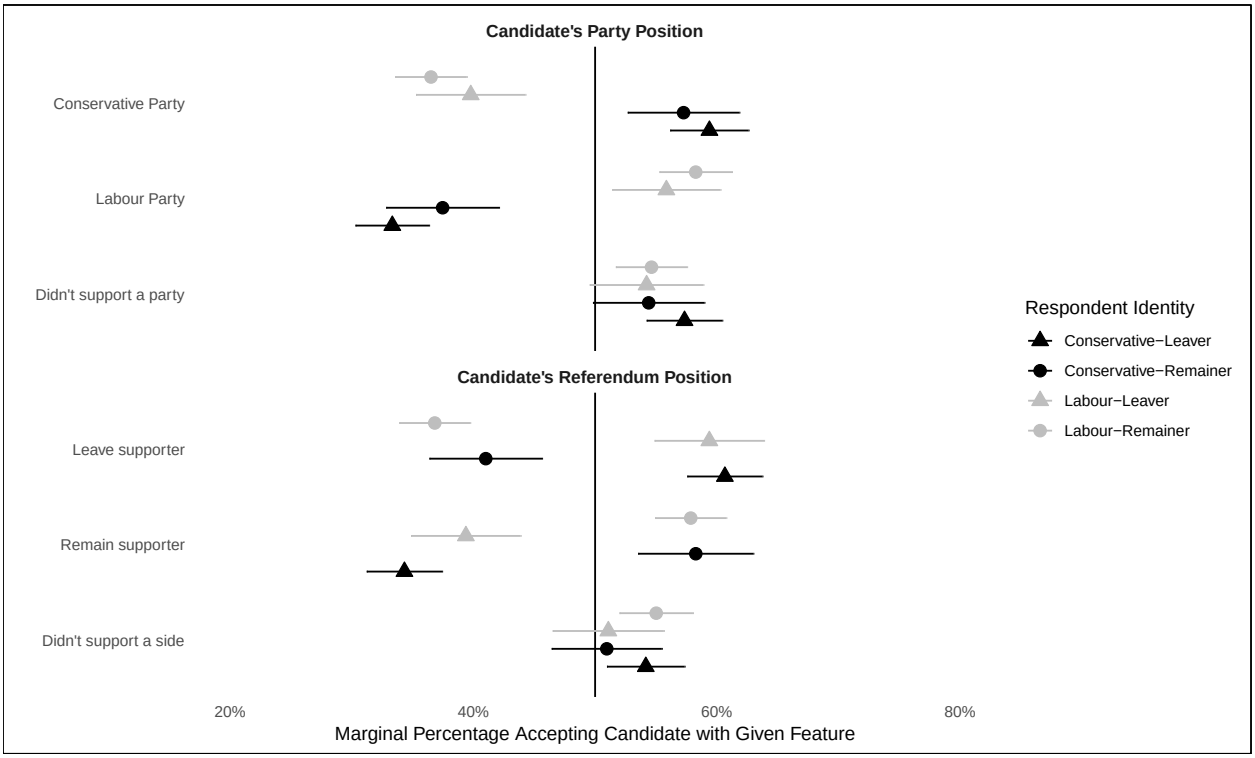


Full numerical results, split by Conservative and Labour partisan identity, are as follows:



Full numerical results, split by both partisan and Brexit identity, are as follows:




Candidate's Party Position
Conservative Party
Labour Party
Didn't support a party
Candidate's Referendum Position
Leave supporter
Remain supporter
Didn't support a side
20%
40%
60%
80%
Marginal Percentage Accepting Candidate with Given Feature
Respondent Identity
Conservative−Leaver
Conservative−Remainer
Labour−Leaver
Labour−Remainer

Results Holding Conjoint Features Constant

The results in this section analyze the conjoint data while holding each feature of the conjoint at a given level. Effectively, this yields conditional effects of each attribute for each level of the attribute being fixed (i.e., interaction effects). The experiment is underpowered in some of these analyses given the ratio of attribute levels to respondents.

Coming Soon!

Analytic Details

This report was built with rmarkdown, using the following software versions:

```
## R version 3.5.1 (2018-07-02)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 7 x64 (build 7601) Service Pack 1
##
## Matrix products: default
##
## locale:
## [1] LC_COLLATE=English_United Kingdom.1252
## [2] LC_CTYPE=English_United Kingdom.1252
## [3] LC_MONETARY=English_United Kingdom.1252
## [4] LC_NUMERIC=C
## [5] LC_TIME=English_United Kingdom.1252
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
## [1] cregg_0.2.3 rio_0.5.11
##
## loaded via a namespace (and not attached):
##  [1] zip_1.0.0         Rcpp_0.12.17      bindr_0.1.1
##  [4] pillar_1.2.3      compiler_3.5.1    cellranger_1.1.0
##  [7] plyr_1.8.4        forcats_0.3.0     tools_3.5.1
## [10] digest_0.6.15     lattice_0.20-35   ggstance_0.3
## [13] evaluate_0.10.1   tibble_1.4.2      gtable_0.2.0
## [16] pkgconfig_2.0.1   rlang_0.2.1       Matrix_1.2-14
## [19] openxlsx_4.1.0    curl_3.2          yaml_2.1.19
## [22] haven_1.1.2       bindrcpp_0.2.2    stringr_1.3.1
## [25] dplyr_0.7.6       knitr_1.20        hms_0.4.2
## [28] lmtest_0.9-36     tidyselect_0.2.4  rprojroot_1.3-2
## [31] grid_3.5.1        glue_1.2.0        data.table_1.11.4
## [34] R6_2.2.2          survival_2.42-4   readxl_1.1.0
## [37] foreign_0.8-70    rmarkdown_1.10    purrr_0.2.5
## [40] ggplot2_3.0.0     magrittr_1.5      codetools_0.2-15
## [43] splines_3.5.1     backports_1.1.2   scales_0.5.0
## [46] htmltools_0.3.6   assertthat_0.2.0  xtable_1.8-2
## [49] colorspace_1.3-2  labeling_0.3      sandwich_2.4-0
## [52] survey_3.33-2     stringi_1.1.7     lazyeval_0.2.1
## [55] munsell_0.5.0     zoo_1.8-2
```