Policy or Partisanship: Replicating Results From An Analysis of Quasi-Experimental Evidence From Brexit

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Let's begin by cleaning the data:

```
# Recode EU integration values:

BES8 <- BES8 %>%
  dplyr::mutate(EUIntegrationCon = case_when(EUIntegrationCon == "Unite fully with the European Union" ~
                                        EUIntegrationCon == "1" ~ 1, EUIntegrationCon == "2" ~ 2,
                                        EUIntegrationCon == "3" ~ 3, EUIntegrationCon == "4" ~ 4,
                                        EUIntegrationCon == "5" ~ 5, EUIntegrationCon == "6" ~ 6,
                                        EUIntegrationCon == "7" ~ 7, EUIntegrationCon == "8" ~ 8,
                                        EUIntegrationCon == "9" ~ 9, EUIntegrationCon == "Protect our ind
BES8 <- BES8 %>%
  dplyr::mutate(EUIntegrationLab = case_when(EUIntegrationLab == "Unite fully with the European Union" ~
                                        EUIntegrationLab == "1" ~ 1,
                                        EUIntegrationLab == "2" ~ 2,
                                        EUIntegrationLab == "3" ~ 3,
                                        EUIntegrationLab == "4" ~ 4,
                                        EUIntegrationLab == "5" ~ 5,
                                        EUIntegrationLab == "6" ~ 6,
                                        EUIntegrationLab == "7" ~ 7,
                                        EUIntegrationLab == "8" ~ 8,
                                        EUIntegrationLab == "9" ~ 9,
                                        EUIntegrationLab == "Protect our independence" ~ 10))

BES8 <- BES8 %>%
  dplyr::mutate(EUIntegrationSelf = case_when(EUIntegrationSelf == "Unite fully with the European Union
                                         EUIntegrationSelf == "1" ~ 1,
                                         EUIntegrationSelf == "2" ~ 2,
                                         EUIntegrationSelf == "3" ~ 3,
                                         EUIntegrationSelf == "4" ~ 4,
                                         EUIntegrationSelf == "5" ~ 5,
                                         EUIntegrationSelf == "6" ~ 6,
                                         EUIntegrationSelf == "7" ~ 7,
                                         EUIntegrationSelf == "8" ~ 8,
                                         EUIntegrationSelf == "9" ~ 9,
                                         EUIntegrationSelf == "Protect our independence" ~ 10))

BES9 <- BES9 %>%
  mutate(EUIntegrationCon = case_when(EUIntegrationCon == "Unite fully with the European Union" ~ 0,
```

```
                                    EUIntegrationCon == "1" ~ 1, EUIntegrationCon == "2" ~ 2,
                                    EUIntegrationCon == "3" ~ 3, EUIntegrationCon == "4" ~ 4,
                                    EUIntegrationCon == "5" ~ 5, EUIntegrationCon == "6" ~ 6,
                                    EUIntegrationCon == "7" ~ 7, EUIntegrationCon == "8" ~ 8,
                                    EUIntegrationCon == "9" ~ 9, EUIntegrationCon == "Protect our ind

BES9 <- BES9 %>%
  mutate(EUIntegrationLab = case_when(EUIntegrationLab == "Unite fully with the European Union" ~ 0,
                                    EUIntegrationLab == "1" ~ 1, EUIntegrationLab == "2" ~ 2,
                                    EUIntegrationLab == "3" ~ 3, EUIntegrationLab == "4" ~ 4,
                                    EUIntegrationLab == "5" ~ 5, EUIntegrationLab == "6" ~ 6,
                                    EUIntegrationLab == "7" ~ 7, EUIntegrationLab == "8" ~ 8,
                                    EUIntegrationLab == "9" ~ 9, EUIntegrationLab == "Protect our ind


BES9 <- BES9 %>%
  mutate(EUIntegrationSelf = case_when(EUIntegrationSelf == "Unite fully with the European Union" ~ 0,
                                     EUIntegrationSelf == "1" ~ 1, EUIntegrationSelf == "2" ~ 2,
                                     EUIntegrationSelf == "3" ~ 3, EUIntegrationSelf == "4" ~ 4,
                                     EUIntegrationSelf == "5" ~ 5, EUIntegrationSelf == "6" ~ 6,
                                     EUIntegrationSelf == "7" ~ 7, EUIntegrationSelf == "8" ~ 8,
                                     EUIntegrationSelf == "9" ~ 9, EUIntegrationSelf == "Protect our
```

Let's now do some analyses and replication of figures:

```
# Let's analyze the strength of our assumption that there was a sudden change
# in Conservative party positioning, unaffected by other important omitted
# variables (e.g. a similar change in Labor party positioning).

# Examine perceived Euroskepticism of Conservatives and Labour in Waves 8 and 9
# We're looking at a 0 - 10 scale, with 10 being most Euroskeptic
# Note that Wave 8 is immediately leading up to the referendum; Wave 9 is
# immediately after

con_before <- mean(BES8$EUIntegrationCon, na.rm=TRUE)
con_after <- mean(BES9$EUIntegrationCon, na.rm=TRUE)
lab_before <- mean(BES8$EUIntegrationLab, na.rm=TRUE)
lab_after <-mean(BES9$EUIntegrationLab, na.rm=TRUE)

#  Percentage change in Conservative party positioning:

(con_after - con_before)/con_before
```

```
## [1] 0.08127789
```

```
# From the paper: "Only the conservatives exhibited a sudden change in
# positioning on Brexit"; here, we see the average perceived Euroskepticism
# of the Conservatives increase by 8%.
```

```r
# And now, for some other relevant cleaning:

# Create race variable:

BES8$white <- ifelse(BES8$profile_ethnicity == "White British" | BES8$profile_ethnicity == "Any other wh

BES8$EUIntegrationCon8 <- BES8$EUIntegrationCon
BES8$partyId8 <- BES8$partyId
BES8$EUIntegrationSelf8 <- BES8$EUIntegrationSelf

# Create Conservative partyID, for both Waves 8 and 9:

BES8$Con <- ifelse(BES8$partyId =="Conservative", 1, 0)
BES8$Con8 <- BES8$Con

BES9$Con <- ifelse(BES9$partyId=="Conservative", 1, 0)
BES9$Con9 <- BES9$Con

BES9$EUIntegrationCon9 <- BES9$EUIntegrationCon
BES9$EUIntegrationSelf9 <- BES9$EUIntegrationSelf
BES9$partyId9 <- BES9$partyId

# Let's now answer the main question of the paper: do voters switch their party identification as a
# function of their Euroskepticism?

# Let's subset Wave 8 to Conservatives:

BES8subcons <- BES8[BES8$partyId == "Conservative",]

# Let's merge the Conservatives in Wave 8 to the BE9 (post-referendum) data,
# so we can look at switching:

merge <- merge(BES8subcons, BES9, by= "id")

# And here we go! Table 1:

# Let's create a variable that indicates switching:

merge$partyswitcher <- ifelse(merge$partyId8 != merge$partyId9, 1, 0)

# Table 1:
# Note that the dependent variable here is the respondent's self-reported level
# of Euroskepticism, on a 0 - 10 scale:

table1reg <- lm(merge$partyswitcher ~ merge$EUIntegrationSelf8)
summary(table1reg)
```

Call: lm(formula = merge*partyswitcher* *merge*EUIntegrationSelf8)

Residuals: Min 1Q Median 3Q Max -0.10124 -0.08324 -0.07553 -0.07553 0.92447

Coefficients: Estimate Std. Error t value Pr(>|t|)
(Intercept) 0.101237 0.010894 9.293 <2e-16 ** *merge$EUIntegrationSelf8 -0.002570 0.001299 -1.978 0.048*
— Signif. codes: 0 ‘’ ***0.001*** ’’ *0.01* ’’ 0.05 ‘.’ 0.1 ’ ’ 1

Residual standard error: 0.2722 on 7328 degrees of freedom (197 observations deleted due to missingness) Multiple R-squared: 0.0005336, Adjusted R-squared: 0.0003972 F-statistic: 3.912 on 1 and 7328 DF, p-value: 0.04797

```
# Let's create a variable that represents the change (post-referendum) in
# perceived Euroskepticism of Conservatives:

merge$Conchange <- merge$EUIntegrationCon9 - merge$EUIntegrationCon8

# And include it in our regression as an interaction:

intreg1 <- lm(merge$partyswitcher ~ merge$EUIntegrationSelf8 * merge$Conchange)
summary(intreg1)
```

Call: lm(formula = merge*partyswitcher* *merge*EUIntegrationSelf8 * merge$Conchange)

Residuals: Min 1Q Median 3Q Max -0.19388 -0.07588 -0.07255 -0.06801 0.94735

Coefficients: Estimate Std. Error t value Pr(>|t|) (Intercept) 0.0838146 0.0114044 7.349 2.24e-13 merge$EUIntegrationSelf8 -0.0012157 0.0013567 -0.896 0.3702 *merge*Conchange 0.0110061 0.0044148 2.493 0.0127 merge$EUIntegrationSelf8 : *merge*Conchange -0.0013118 0.0005171 -2.537 0.0112

(Intercept) ** *mergeEUIntegrationSelf8mergeConchange*
merge$EUIntegrationSelf8 : *merge*Conchange *
— Signif. codes: 0 '*** 0.001 ** 0.01 * 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2611 on 6472 degrees of freedom (1051 observations deleted due to missingness) Multiple R-squared: 0.001254, Adjusted R-squared: 0.000791 F-statistic: 2.709 on 3 and 6472 DF, p-value: 0.04357

```
# From the paper (Page 11): the interaction is negative and significant: less
# Euroskeptic Conservatives who perceive that the party has become increasingly
# Euroskeptic are especially likely to reject it.

# And now, let's throw everything in:

intreg1a <- lm(merge$partyswitcher ~ merge$EUIntegrationSelf8 * merge$Conchange
               + merge$age.x + merge$gender.x + merge$white +
                 as.factor(merge$country.x))
summary(intreg1a)
```

Call: lm(formula = merge*partyswitcher* *merge*EUIntegrationSelf8 * merge*Conchange* + *merge*age.x + merge*gender.x* + *merge*white + as.factor(merge$country.x))

Residuals: Min 1Q Median 3Q Max -0.21030 -0.07924 -0.06616 -0.05662 0.96608

Coefficients: Estimate Std. Error t value Pr(>|t|) (Intercept) 0.1806646 0.0233013 7.753 1.04e-14 merge$EUIntegrationSelf8 0.0001252 0.0013901 0.090 0.928225 *merge*Conchange 0.0093961 0.0044643 2.105 0.035355 merge*age.x* −0.0008836 0.0002357 −3.749 0.000179 *merge*gender.xFemale -0.0069737 0.0066110 -1.055 0.291525 merge*white* − 0.0582121 0.0185071 − 3.145 0.001667 *as.factor*(*merge*country.x)Scotland 0.0022983 0.0117389 0.196 0.844783 as.factor(merge*country.x*)*Wales* 0.0205728 0.0137128 1.500 0.133597 *merge*EUIntegrationSelf8:merge$
-0.0011463 0.0005226 -2.193 0.028311

(Intercept) ** *mergeEUIntegrationSelf8mergeConchange*
merge*age.x* * * * *merge*gender.xFemale
merge*white* * *as.factor*(*merge*country.x)Scotland

as.factor(merge$country.x$)Wales$merge$EUIntegrationSelf8:merge$Conchange *
— Signif. codes: 0 ‘’ ***0.001*** ’’ *0.01* ’’ 0.05 ‘.’ 0.1 ’ ’ 1

Residual standard error: 0.2575 on 6207 degrees of freedom (1311 observations deleted due to missingness) Multiple R-squared: 0.005835, Adjusted R-squared: 0.004553 F-statistic: 4.554 on 8 and 6207 DF, p-value: 1.522e-05

```
# NOTE FOR TRISHA: You need to change the names of the variables in the table
# to match the paper!

stargazer(table1reg, intreg1, intreg1a,
          title = "Euroskepticism and Defection from the Conservatives",
          no.space = TRUE,star.cutoffs = c(0.05, 0.01, 0.001))
```

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
% Date and time: Wed, Mar 31, 2021 - 12:36:03

Table 1: Euroskepticism and Defection from the Conservatives

	Dependent variable:		
	partyswitcher		
	(1)	(2)	(3)
EUIntegrationSelf8	−0.003*	−0.001	0.0001
	(0.001)	(0.001)	(0.001)
Conchange		0.011*	0.009*
		(0.004)	(0.004)
age.x			−0.001***
			(0.0002)
gender.xFemale			−0.007
			(0.007)
white			−0.058**
			(0.019)
country.x)Scotland			0.002
			(0.012)
country.x)Wales			0.021
			(0.014)
Conchange		−0.001*	−0.001*
		(0.001)	(0.001)
Constant	0.101***	0.084***	0.181***
	(0.011)	(0.011)	(0.023)
Observations	7,330	6,476	6,216
R^2	0.001	0.001	0.006
Adjusted R^2	0.0004	0.001	0.005
Residual Std. Error	0.272 (df = 7328)	0.261 (df = 6472)	0.258 (df = 6207)
F Statistic	3.912* (df = 1; 7328)	2.709* (df = 3; 6472)	4.554*** (df = 8; 6207)
Note:			*p<0.05; **p<0.01; ***p<0.001

```
# How do I get rid of the weird author caption being produced with the table?

# From the paper (Page 11): "of those who identified as Conservative before the
# referendum, 9.0 percent of respondents with pre-referendum Euroskepticism
```

```r
# scores of 4-5 (on a ten-point scale), 9.8 percent of those with scores of 2-3,
# and 9.9 percent of those with scores of 0-1 turned their backs on the party.
# The less Euroskeptic a voter was before the referendum, the more likely they
# were to disaffiliate from the party in the aftermath of its embrace of
# Brexit."

merge45 <- merge[merge$EUIntegrationSelf8=="5" | merge$EUIntegrationSelf8=="4",]
merge23 <- merge[merge$EUIntegrationSelf8=="3" | merge$EUIntegrationSelf8=="2",]
merge01 <- merge[merge$EUIntegrationSelf8=="1" | merge$EUIntegrationSelf8=="0",]

mean(merge45$partyswitcher,na.rm=TRUE)
```

[1] 0.09011264

```r
mean(merge23$partyswitcher,na.rm=TRUE)
```

[1] 0.09815951

```r
mean(merge01$partyswitcher,na.rm=TRUE)
```

[1] 0.09933775