# Public Support for Electoral Reform: The Role of Electoral System Experience

Supplementary Appendix

May 6, 2021

#### Appendix 1 Survey Data

For this project, I make use of the British Social Attitudes (BSA) survey, which is a national survey (repeated cross-sections) of adults in England, Wales, and Scotland. Specifically, I utilize the survey results from every year in which the survey was fielded (it was not fielded in 1988 or 1992) that includes a question about electoral reform (the question was excluded in 1983–85, 1989, 1993, 2004, 2006–07, 2009, 2012–14, and 2016; NatCen Social Research 2019).<sup>1</sup> However, when I include the political interest control, I am forced to drop data from 1987 since the relevant question was not asked that year. Thus, the data used in the paper spans 1986–2015, but not all years are included.

There are three variables that are particularly critical for the analysis. The first is the region in which the respondent lives. Unfortunately, the BSA survey has changed the regions they use over time (changed the variables used in addition to occasionally changing the coding used within a single variable). I use these variables to code each respondent as living in London, the Midlands, Northern England, Scotland, Southern England (excluding London), or Wales.

The second critical variable is party identification. The questions used to construct the respondents' party identification (called "partyid1" in the raw data) are identical in every year included in my analysis. First, respondents are asked, "generally speaking, do you think of yourself as a supporter of any one political party?" If yes, they are asked, "which one?" and their response to this open-ended question is their party identification (they are a "supporter" in the language of the BSA survey). If they answer no or don't know to the supporter question, they are asked, "do you think of yourself as a little closer to one political party than to the others?" If yes, they are asked, "which one?" and their response is their party identification (they are a "sympathizer" in the BSA survey language). If respondents

<sup>&</sup>lt;sup>1</sup> If desired, the BSA survey could be supplemented with the Northern Ireland Social Attitudes (NISA) survey. The NISA is a survey of adults in Northern Ireland fielded between 1989 and 1996 (excluding 1992) and an identical electoral reform question to that on the BSA survey was included in 1994 and 1996 (Northern Ireland Social Attitudes 1996).

answer no to the supporter question and no or don't know to the sympathizer question, they are asked, "if there were a general election tomorrow, which political party do you think you would be most likely to support?" These people are "residual identifiers" in the language of the survey and their response to this open-ended question is used as their party identification. I treat all party identifiers (whether supporters, sympathizers, or residual identifiers) as identifiers or supporters (terms which I use interchangeably in the main text).

However, there is one final complication with the party identification. The BSA survey may or may not alter the skip logic slightly in 1996 and later compared to surveys before 1996. Specifically, it is not clear from the documentation prior to 1996 how don't know responses in the supporter or sympathizer questions are treated. My assumption is that don't knows in these questions are always treated in the way described here (which is explicitly the procedure in 1996 and later), but it is not clear from the documentation.

The final critical variable is the electoral reform variable (called "votesyst" in the raw data). Respondents were asked,

"Some people say that we should change the voting system to allow smaller political parties to get a fairer share of MPs. Others say that we should keep the voting system as it is, to produce more effective government. Which view comes closest to your own, that we should change the voting system, or, keep it as it is?" (NatCen Social Research 2019; Northern Ireland Social Attitudes 1996).

While this question does not specify an alternative electoral system, enumerators were instructed to elaborate that the question referred to proportional representation if they were asked. This question text was used in the NISA survey and at the start of the BSA survey, but there were some minor changes to the wording over the course of the BSA survey. The exact question wording for each year (when it differs from the original) is shown below:

1. 1997: changes original to "Some people say we[...]to produce effective government[...]"

- 2. 1998, 1999: changes original to "[...]Others say we should [...]"
- 3. 2000: changes to "Some people say we should change the voting system for general elections to the (UK) House of Commons to allow smaller political parties to get a

fairer share of MPs. Others say we should keep the voting system for the House of Commons as it is, to produce effective government. Which view comes closer to your own, that we should change the voting system for the UK House of Commons, or, keep it as it is?" (If asked, refers to proportional representation)

- 4. 2001: changes the 2000 text to "[...]Others say that we should[...]Which view comes closer to your own, that we should change the voting system for the House of Commons[...]"
- 5. 2002: changes the 2000 text to "[...]Which view comes closer to your own, that we should change the voting system for the (UK) House of Commons[...]"
- 6. 2003, 2005, 2008, 2010, 2011, 2015: change the 2000 text to "[...]to the UK House of Commons[...]Others say that we should[...]Which view comes closer to your own, that we should change the voting system for the House of Commons[...]"

I use this question to construct the main dependent variable for the analyses. *Reform* Support is one if the respondent believes the electoral system should be changed and zero if they answered they preferred to keep the existing electoral system (it is missing if the respondent answered that they don't know or refused to answer, however the main results in the paper are unchanged if those responses are instead coded as support for the status quo). Figure A-1 shows the proportion of respondents in each region who support reform over time. The figure also shows the proportion of respondents in each region who offered an opinion about electoral reform over time. *Reform Opinion* is one if the respondent believes the electoral system should be changed or kept the same and zero if they answered don't know (it is missing if they offered no response, but this is the case for only 81 out of 27,272 respondents). As shown in the figure, very few respondents decline to offer an opinion about electoral reform, which suggests that this is a salient issue about which voters form opinions.<sup>2</sup>

 $<sup>^{2}</sup>$  Figure A-1 excludes Northern Ireland because the electoral reform question was only included in the 1994 and 1996 NISA survey. However, the proportions of respondents in Northern Ireland who supported or offered an opinion about electoral reform in those years are similar to the proportions in other regions.

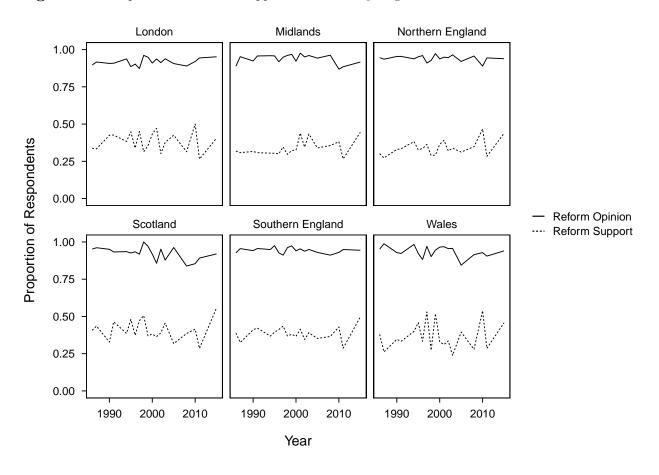


Figure A-1: Opinions About and Support for Reform by Region

Figure A-2 shows the mean support for reform by party identification. In this figure, I disaggregate supporters of "other" parties from the main analysis. The Liberal Democrat, Scottish National Party (SNP), and Green parties are by far the largest parties in "other" in the main analysis in terms of number of supporters among the BSA survey respondents. In Figure A-2, "other" includes supporters of the Alliance, the British National Party, the Liberal Party, Respect, the Social Democratic Party, and other (not specified in the BSA survey data).

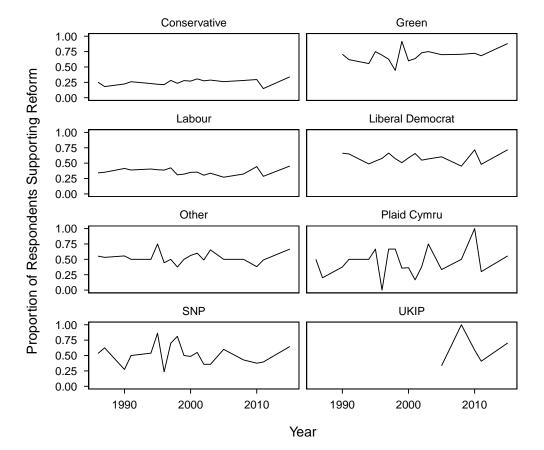


Figure A-2: Support for Reform by Party

### Appendix 2 Party Cues

Political parties have many methods by which they communicate with voters. However, one of the most clearly observable methods of communication is the election manifestos produced by parties that explain what they will do if elected. Therefore, I examine the General Election manifestos of the three main UK parties — Labour, the Conservatives, and the Liberal Democrats — between 1983 and 2015 (in other words, the manifestos that cover the entire time period of the survey data) to track the cues these parties were giving regarding the electoral system.

Table A-1 summarizes the commitments regarding the electoral system(s) made in the parties' election manifestos. The Liberal Democrats are relatively consistent because the single transferable vote (STV) is itself a proportional system. Thus, the 1997 Liberal Democrat manifesto is not actually a departure from their other manifestos, simply less specific about the type of proportional system they prefer. Moreover, the Liberal Democrats have always been explicit in their cues to supporters about the electoral system.

One can think of no explicit mention of the electoral system in a party's election manifesto as tacit support for the status quo. Conceptualizing no mention of the electoral system in this way, the Conservatives are consistent across the entire time period in their support for single member district plurality (SMDP). However, although consistent, the Conservatives are not always explicit about the cues they are giving to supporters — they are less likely than the other two parties to explicitly reference the electoral system in their manifesto.

On the other hand, the Labour Party has been both inconsistent and, at times, not explicit, about the cues they give supporters regarding the electoral system. Labour has been by far the least consistent of all three parties — at the level of the House of Commons, they have alternated between tacit support for SMDP, supporting the creation of a working group or independent commission on the electoral system, support for proportional representation (PR), and support for an alternative vote (AV) referendum. In addition to being inconsistent,

Election	Labour	Conservative	Liberal Democrat
1983	No explicit mention	No explicit mention	$NA^*$
1987	No explicit mention	No explicit mention	NA*
1992	HoC: Electoral system work- ing group; Scot.: MMP	No explicit mention	HoC: STV; Local: STV; EP: STV
1997	HoC: Commission to recom- mend PR, referendum; Scot.: MMP; Wales: MMP; EP: PR	HoC: Keep SMDP	HoC: PR; Scot.: PR; Wales: PR; NI: PR; EP: PR
2001	HoC: Review report of Inde- pendent Commission	HoC: Keep SMDP	HoC: Commission recommen- dation of AV referendum, ulti- mately STV; Local: STV; EP: STV
2005	No explicit preference $^{\dagger}$	No explicit mention	HoC: STV; Local: STV; Scot.: STV; Wales: STV
2010	HoC: AV referendum	HoC: Keep SMDP	HoC: STV
2015	No explicit mention	HoC: Keep SMDP	HoC: STV; Local: STV

 Table A-1:
 Electoral System Manifesto Commitments

*Note:* HoC is the House of Commons. Scot. refers to the Scottish Parliament. Wales refers to the Welsh National Assembly. EP is the European Parliament. NI refers to the Northern Ireland Assembly. The table uses abbreviations to refer to the following electoral systems: the alternative vote (AV), mixed member proportional (MMP), proportional representation (PR), single member district plurality (SMDP), and the single transferable vote (STV). \* The Liberal Democrats were not formed until after the 1987 election. <sup>†</sup> Manifesto makes no specific comment on preferred electoral system but supports reviewing the systems in use and states that the HoC electoral system should only be changed via a referendum. Manifestos from Kimber (2015) and Pack (2017).

they have at times been publicly divided. While the Conservatives and Liberal Democrats campaigned in the 2011 alternative vote referendum in a unified way that was also broadly consistent with their manifesto commitments (the Conservatives campaigned against the reform and the Liberal Democrats campaigned for AV while noting that they would prefer to switch to STV eventually), the Labour Party was split. Despite being the only party that supported AV in their 2010 election manifesto, the Labour leader, Ed Miliband, and others campaigned for AV while other prominent Labour members campaigned for SMDP (BBC 2011; White 2011; Whiteley et al. 2012). Thus, Labour has been less than explicit in their electoral system cues as well as being inconsistent over time and at times, divided.

### Appendix 3 Additional Results and Tables

In this section, I present several additional results discussed in the paper as well as result tables. The majority of these tables correspond to figures in the paper. However, the results for the models that make use of *Co-partisan MP* are also presented in this section and those results do not have a corresponding figure in the paper.

To begin, I present result tables that correspond to Figure 2 in the paper. For each of these tables, the first column presents the results of the models using the full time sample. In other words, the first column shows the results presented in Figure 2 in the paper. The other columns show the results using smaller subsets based on year of the survey — results which are referenced in the paper, but not shown in a figure.

Table A-2 presents the coefficients and standard errors that correspond to the left panel of Figure 2, specifically, the results for supporters of the Labour Party. The table shows the effect of the introduction of MMP on the probability of support for electoral reform using the Scotland/Northern England sample. *Region* is an indicator for whether the respondent lives in the treated region (it is one if the respondent lives in Scotland and zero if they live in Northern England), while *Period* is an indicator that is one in the years after MMP has been introduced in the region (1999 and later) and zero prior to the introduction of MMP. The causal quantity of interest or the treatment effect is given by the interaction of the *Region* and *Period* variables. Table A-2 includes the results of models run on the full sample as well as subsets based on the year of the survey (e.g., one year on either side of the reform, two years on either side of the reform, etc.). Additionally, all results are from models with year fixed effects (except for the one-year sample) and controls for interest in politics.

Table A-3 presents the coefficients and standard errors that correspond to the left panel of Figure 2, but in this case, it shows the results for supporters of the Conservative Party. Again, the table shows the effect of the introduction of MMP on the probability of support for electoral reform using the Scotland/Northern England sample. The treatment effect is

	Dependent variable:								
	Reform Support								
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	0.088***	$0.168^{*}$	0.026	0.059	0.100**	0.055			
	(0.028)	(0.087)	(0.057)	(0.046)	(0.040)	(0.035)			
Period	$0.132^{***}$	0.034	-0.053	-0.051	-0.006	-0.040			
	(0.043)	(0.056)	(0.042)	(0.051)	(0.042)	(0.051)			
Region $*$ Period	$-0.075^{**}$	-0.182	-0.018	-0.065	$-0.110^{**}$	-0.035			
	(0.036)	(0.117)	(0.075)	(0.062)	(0.052)	(0.047)			
Constant	$0.227^{***}$	$0.299^{***}$	$0.351^{***}$	$0.344^{***}$	$0.281^{***}$	$0.334^{***}$			
	(0.039)	(0.082)	(0.059)	(0.055)	(0.048)	(0.048)			
Sample	Full	1 year	2 years	3 years	4 years	5 years			
Region	Scotland	Scotland	Scotland	Scotland	Scotland	Scotland			
Observations	3,885	339	940	1,314	1,895	2,257			
$\mathbb{R}^2$	0.037	0.087	0.036	0.032	0.034	0.032			

**Table A-2:** Effect of Experience with MMP on Support for Electoral Reform AmongLabour Supporters, Scotland/Northern England Sample

again given by the interaction of the *Region* and *Period* variables. As before, the results of models run on the full sample as well as subsets based on the year of the survey are included and the models include year fixed effects (except for the one-year sample) and controls for interest in politics.

Similarly, Table A-4 presents the coefficients and standard errors corresponding to the left panel of Figure 2, however, it shows the results for supporters of parties other than Labour and the Conservatives, using the Scotland/Northern England sample. Once again, the treatment effect is given by the interaction of the *Region* and *Period* variables. The results of models run on the full sample as well as subsets based on the year of the survey are shown and year fixed effects (except for the one-year sample) and controls for interest in politics are included.

	Dependent variable:								
		Reform Support							
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	$0.072^{*}$	$0.258^{**}$	0.279***	$0.135^{**}$	0.086	0.111**			
	(0.037)	(0.124)	(0.082)	(0.068)	(0.061)	(0.055)			
Period	$0.087^{*}$	0.034	$0.108^{*}$	$0.147^{**}$	$0.120^{*}$	0.033			
	(0.052)	(0.090)	(0.062)	(0.073)	(0.071)	(0.075)			
Region $*$ Period	-0.042	-0.151	$-0.331^{***}$	$-0.195^{**}$	-0.087	-0.084			
	(0.051)	(0.169)	(0.108)	(0.092)	(0.081)	(0.074)			
Constant	$0.218^{***}$	0.095	$0.223^{**}$	$0.188^{*}$	$0.267^{***}$	$0.284^{***}$			
	(0.060)	(0.165)	(0.098)	(0.096)	(0.088)	(0.084)			
Sample	Full	1 year	2 years	3 years	4 years	5 years			
Region	Scotland	Scotland	Scotland	Scotland	Scotland	Scotland			
Observations	1,881	146	409	569	763	918			
$\mathbb{R}^2$	0.019	0.059	0.035	0.019	0.017	0.017			

**Table A-3:** Effect of Experience with MMP on Support for Electoral Reform Among Con-servative Supporters, Scotland/Northern England Sample

	Dependent variable:							
			Reform	Support				
	(1)	(2)	(3)	(4)	(5)	(6)		
Region	-0.021	-0.0001	0.038	-0.012	0.019	0.004		
	(0.043)	(0.167)	(0.101)	(0.082)	(0.068)	(0.061)		
Period	$0.162^{**}$	$-0.298^{*}$	-0.152	$0.230^{**}$	$-0.165^{*}$	0.088		
	(0.067)	(0.155)	(0.100)	(0.101)	(0.088)	(0.094)		
Region $*$ Period	-0.015	0.174	0.035	0.011	-0.009	-0.021		
	(0.054)	(0.212)	(0.124)	(0.102)	(0.085)	(0.077)		
Constant	$0.438^{***}$	$0.604^{**}$	$0.579^{***}$	$0.372^{***}$	$0.592^{***}$	$0.426^{***}$		
	(0.067)	(0.261)	(0.129)	(0.116)	(0.105)	(0.094)		
Sample	Full	1 year	2 years	3 years	4 years	5 years		
Region	Scotland	Scotland	Scotland	Scotland	Scotland	Scotland		
Observations	1,426	93	290	409	590	710		
$\mathbb{R}^2$	0.067	0.124	0.059	0.057	0.056	0.054		

**Table A-4:** Effect of Experience with MMP on Support for Electoral Reform AmongOther Party Supporters, Scotland/Northern England Sample

Table A-5 shows the results corresponding to the right panel of Figure 2 — the effect of MMP on the probability of support for electoral reform among Labour Party supporters using the Wales/Midlands sample. Here, the treated region is Wales, but otherwise the results are analogous to those presented above. Again, the causal quantity of interest is the coefficient on the interaction term and the models include year fixed effects and controls for interest in politics.

Table A-6 shows the results corresponding to the right panel of Figure 2 for supporters of the Conservative Party. It shows the effect of MMP on the probability of support for electoral reform among Conservative supporters using the Wales/Midlands sample. Once again, the treatment effect is the coefficient on the interaction term and the models include year fixed effects and controls for interest in politics.

Table A-7 shows the results corresponding to the right panel of Figure 2 for supporters of parties other than Labour or the Conservatives. The table shows the effect of MMP on the probability of support for electoral reform using the Wales/Midlands sample. Again, the treatment effect is the coefficient on the interaction term and the models include year fixed effects and controls for interest in politics.

	Dependent variable:								
		Reform Support							
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	0.088***	0.041	$0.124^{*}$	0.063	$0.085^{*}$	0.091**			
	(0.033)	(0.094)	(0.071)	(0.055)	(0.048)	(0.043)			
Period	$0.128^{**}$	0.065	$-0.137^{**}$	0.057	-0.050	-0.009			
	(0.061)	(0.077)	(0.064)	(0.068)	(0.057)	(0.066)			
Region $*$ Period	$-0.110^{**}$	0.057	-0.084	-0.070	-0.105	$-0.133^{**}$			
	(0.045)	(0.146)	(0.095)	(0.077)	(0.064)	(0.059)			
Constant	0.232***	$0.199^{*}$	$0.318^{***}$	$0.173^{**}$	$0.295^{***}$	$0.274^{***}$			
	(0.056)	(0.115)	(0.086)	(0.071)	(0.068)	(0.066)			
Sample	Full	1 year	2 years	3 years	4 years	5 years			
Region	Wales	Wales	Wales	Wales	Wales	Wales			
Observations	2,045	187	465	680	1,013	1,225			
$\mathbb{R}^2$	0.039	0.039	0.059	0.047	0.045	0.044			

**Table A-5:** Effect of Experience with MMP on Support for Electoral Reform Among<br/>Labour Supporters, Wales/Midlands Sample

			Dependent	t variable:		
			Reform a	Support		
	(1)	(2)	(3)	(4)	(5)	(6)
Region	-0.043	-0.199	-0.049	-0.045	-0.029	-0.023
	(0.048)	(0.154)	(0.100)	(0.088)	(0.071)	(0.065)
Period	$0.101^{*}$	0.038	-0.015	0.075	$0.154^{**}$	$0.171^{**}$
	(0.054)	(0.089)	(0.061)	(0.080)	(0.062)	(0.070)
Region $*$ Period	0.057	0.398	0.111	0.070	0.025	-0.009
	(0.062)	(0.270)	(0.126)	(0.111)	(0.091)	(0.084)
Constant	$0.192^{***}$	-0.038	0.202	0.060	-0.015	-0.020
	(0.071)	(0.426)	(0.143)	(0.116)	(0.095)	(0.093)
Sample	Full	1 year	2 years	3 years	4 years	5 years
Region	Wales	Wales	Wales	Wales	Wales	Wales
Observations	1,643	108	357	479	688	837
$\mathbb{R}^2$	0.026	0.098	0.011	0.010	0.019	0.025

**Table A-6:** Effect of Experience with MMP on Support for Electoral ReformAmong Conservative Supporters, Wales/Midlands Sample

		Dependent variable:							
		Reform Support							
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	0.058	0.340	0.153	0.161	0.155	0.072			
	(0.069)	(0.311)	(0.149)	(0.124)	(0.104)	(0.088)			
Period	$0.161^{*}$	0.285	0.054	0.115	0.071	0.089			
	(0.093)	(0.179)	(0.130)	(0.126)	(0.108)	(0.115)			
Region $*$ Period	-0.129	-0.415	-0.186	-0.213	-0.193	-0.144			
	(0.083)	(0.358)	(0.182)	(0.152)	(0.126)	(0.108)			
Constant	$0.374^{***}$	$0.400^{*}$	$0.282^{*}$	$0.401^{***}$	$0.351^{***}$	$0.369^{***}$			
	(0.093)	(0.210)	(0.163)	(0.142)	(0.130)	(0.127)			
Sample	Full	1 year	2 years	3 years	4 years	5 years			
Region	Wales	Wales	Wales	Wales	Wales	Wales			
Observations	785	57	151	220	337	419			
$\mathbb{R}^2$	0.073	0.186	0.126	0.106	0.083	0.083			

**Table A-7:** Effect of Experience with MMP on Support for Electoral Reform AmongOther Party Supporters, Wales/Midlands Sample

In the paper, I discuss diagnostics from models including treatment leads and lags. There, I focus on the diagnostics for the full sample models, but here I provide additional details regarding the diagnostics for the smaller time samples as well. The diagnostics present somewhat mixed results. For the models comparing Scotland and Northern England, most treatment leads are insignificant, but we must sometimes reject the null hypothesis that the coefficients on the treatment leads are jointly equal to zero. For the models run on the Labour Party subset, as expected, the longer time samples are more likely to show evidence of violations of the parallel trends assumption. In the four-year, five-year, and full samples, F-tests lead us to reject the null hypothesis that the leading treatment coefficients are jointly equal to zero. However, we cannot reject the null hypothesis for the three-year sample and in the two-year sample, the treatment lead is significant only at the 90% confidence level. Similarly, for the Conservative Party subsets, F-tests suggest we reject the null hypothesis that the treatment leads are jointly equal to zero for the three-year, four-year, five-year, and full samples. However, in the two-year sample, the treatment lead is not significant at any traditional confidence level. Reassuringly, for the models with the other parties sample, all treatment leads are insignificant except for the 1990 lead in the full sample (significant at the 90% confidence level). Moreover, for all models with the other parties sample, we cannot reject the null hypothesis that the treatment leads are jointly equal to zero.

More promisingly, for the models comparing Wales and the Midlands, all treatment leads are individually insignificant except in the Labour Party subset run with the three-year sample, the 1997 lead is significant at the 90% confidence level. However, in that model and all others, F-tests indicate that we cannot reject the null hypothesis that the leading treatment coefficients are jointly equal to zero at any conventional confidence level. In other words, these results present some concerns about violations of the parallel trends assumption in some of the models using the Scotland/Northern England data (although, as expected, the assumption seems to hold when using shorter time samples), but provide confidence that the assumption holds with the Wales/Midlands samples.<sup>3</sup>

Table A-8 shows the results of the difference-in-differences (DID) analyses using the full time sample when *Co-partisan MP* is included as a control. This table does not have a corresponding figure in the paper. As discussed in the paper, due to data limitations, whether an individual has a co-partisan MP can only be coded for a subset of respondents, which is why the sample sizes are significantly smaller than the sample sizes for the full samples in the main models. The models show the treatment effect (given by the interaction term) of experience with MMP and include year fixed effects and controls for interest in politics and having a co-partisan MP.

Table A-9 shows the results of the DID analyses when subsetting on the basis of whether or not the individual has a co-partisan MP instead of based on party identification. Again, this table does not have a corresponding figure in the paper. The models show the treatment effect of experience with MMP (given by the interaction term) and include year fixed effects and controls for interest in politics. If a control for respondent party identification is included, the results are largely the same, with the exception that the treatment effects in the Scotland samples are significant at the 90% confidence level (results not shown, but available in the replication code).

 $<sup>^{3}</sup>$  See the replication code for full results.

	Dependent variable:								
	Reform Support								
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	0.145***	0.067	-0.049	0.074	-0.082	0.101			
	(0.040)	(0.048)	(0.059)	(0.047)	(0.065)	(0.104)			
Period	0.048	0.064	0.040	0.034	0.067	-0.002			
	(0.049)	(0.067)	(0.084)	(0.068)	(0.067)	(0.103)			
Region $*$ Period	$-0.117^{**}$	-0.055	0.007	$-0.128^{**}$	0.040	-0.126			
	(0.051)	(0.073)	(0.078)	(0.062)	(0.085)	(0.122)			
Constant	$0.278^{***}$	$0.231^{***}$	$0.438^{***}$	$0.231^{***}$	$0.152^{*}$	0.144			
	(0.048)	(0.077)	(0.081)	(0.069)	(0.090)	(0.118)			
Region	Scotland	Scotland	Scotland	Wales	Wales	Wales			
Party Subset	Labour	Conservative	Others	Labour	Conservative	Others			
Observations	1,930	925	680	1,040	779	356			
$\mathbb{R}^2$	0.037	0.016	0.054	0.029	0.020	0.159			

**Table A-8:** Effect of Experience with MMP on Support for Electoral Reform with Co-partisanMP Control

*Note:* Coefficients and standard errors from linear probability models. All models include year fixed effects (excluding one year due to collinearity), controls for interest in politics, and a control for having a co-partisan MP. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

	Dependent variable:								
		Reform Support							
	(1)	(2)	(3)	(4)					
Region	0.126***	0.073**	0.065	0.010					
	(0.040)	(0.033)	(0.043)	(0.051)					
Period	0.077	0.034	$0.124^{**}$	0.005					
	(0.048)	(0.046)	(0.060)	(0.056)					
Region $*$ Period	-0.075	-0.050	$-0.114^{*}$	-0.053					
	(0.051)	(0.046)	(0.059)	(0.064)					
Constant	$0.258^{***}$	$0.254^{***}$	$0.174^{***}$	$0.308^{***}$					
	(0.045)	(0.039)	(0.065)	(0.051)					
Region	Scotland	Scotland	Wales	Wales					
Subset	Co-partisan MP	No Co-partisan MP	Co-partisan MP	No Co-partisan MP					
Observations	1,916	2,207	1,174	1,384					
$\mathbb{R}^2$	0.027	0.018	0.023	0.032					

Note: Coefficients and standard errors from linear probability models. All models include year fixed effects (excluding one year due to collinearity) and controls for interest in politics. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

For the first placebo test discussed in the paper, I use the same DID design as in the main analyses, but the dependent variable is now support for abolishing the monarchy — something that should be unaffected by the treatment. Therefore, I compare the difference in the probability an individual supports abolishing the monarchy among respondents living in Scotland/Wales before and after 1999 when MMP was introduced to the difference among respondents living in Northern England/the Midlands before and after 1999.

For this test, I use a question on the BSA survey that asked respondents,

"How important or unimportant do you think it is for Britain to continue to have a monarchy... very important, quite important, not very important, not at all important, or, do you think the monarchy should be abolished?" (NatCen Social Research 2019)

While it is not in the same format as the electoral reform question (as would have been ideal), it is a question about a similar constitutional issue where respondents are given the choice to indicate support for the status quo or support for reform.<sup>4</sup> Although this question was asked on some surveys in which the electoral reform question was *not* asked, I limit the analysis to those surveys where the electoral reform question was also asked to keep the sample as consistent as possible across analyses.<sup>5</sup> Using this question, I construct the dependent variable for this analysis, *Abolish Monarchy*, which takes a value of one if the respondent indicated they support abolishing the monarchy and zero if the respondent answered by rating the importance of the monarchy.<sup>6</sup> To be consistent with the main analysis, I run the models on subsets according to party identification and include controls for political interest as well as year fixed effects (although the results are unchanged if the controls for interest in politics are excluded).

Experience with MMP should have no effect on support for the monarchy so we should

 $<sup>\</sup>overline{}^{4}$  The BSA survey has very few questions on constitutional issues. Ideally, I would also run a placebo test using support for reforming the House of Lords, but the relevant question was changed significantly over time, precluding its use.

<sup>&</sup>lt;sup>5</sup> However, there are years in which the monarchy question was not asked even though the electoral reform question was asked so the sample is not identical.

<sup>&</sup>lt;sup>6</sup> As with *Reform Support*, don't know and no answer responses were both coded as missing for this analysis, but the results are robust to coding those responses as support for keeping the monarchy.

expect the "treatment effect" to be insignificant. Table A-10 presents the full results corresponding to left panel of Figure 3 in the paper (with the "treatment effect" given by the interaction of the *Region* and *Period* variables). Models 1 through 3 show the results using the Scotland/Northern England comparison while columns 4 through 6 use the Wales/Midlands comparison. As expected, the "treatment effect" is always insignificant. The results of this test increase confidence that the treatment effects in the main DID analyses are capturing the effect of electoral system experience as opposed to some other factor correlated with region or time.

Finally, Table A-11 shows the results of the final placebo test described in the paper (corresponding to the right panel of Figure 3). For this test, observations from the real treatment period (1999 and later) have been excluded. A placebo "treatment" occurring prior to the 1995 survey wave in both Scotland and Wales has been assigned. The "treatment effect" is again given by the interaction of the *Region* and *Period* variables and, as expected, is largely insignificant. Columns 1 through 3 show the results using the Scotland/Northern England subset while Columns 4 through 6 display the results using the data from Wales/the Midlands. Again, the models are run on subsets based on the party identification of the respondent (the other parties subset excludes those who do not support a party) and each model includes year fixed effects and controls for interest in politics (but the results are unchanged if the interest in politics controls are excluded).

	Dependent variable:								
			Abolish M	onarchy					
	(1)	(2)	(3)	(4)	(5)	(6)			
Region	$0.047^{*}$	-0.005	$0.105^{**}$	0.024	0.008	0.074			
	(0.028)	(0.022)	(0.049)	(0.029)	(0.025)	(0.058)			
Period	$-0.124^{***}$	-0.013	0.045	0.013	-0.014	-0.096			
	(0.040)	(0.026)	(0.064)	(0.044)	(0.024)	(0.070)			
Region $*$ Period	0.022	-0.014	-0.039	0.038	-0.024	0.024			
	(0.035)	(0.027)	(0.056)	(0.038)	(0.031)	(0.068)			
Constant	0.206***	$0.101^{***}$	0.029	$0.149^{***}$	0.003	0.069			
	(0.034)	(0.031)	(0.066)	(0.041)	(0.033)	(0.068)			
Region	Scotland	Scotland	Scotland	Wales	Wales	Wales			
Party Subset	Labour	Conservative	Others	Labour	Conservative	Others			
Observations	2,291	1,008	802	1,232	927	467			
$\mathbb{R}^2$	0.027	0.030	0.040	0.026	0.012	0.075			

 ${ { { Table A-10:}} } \ { Placebo \ Test: \ Effect \ of \ Experience \ with \ MMP \ on \ Support \ for \ Abolishing \ the \ Monarchy }$ 

Note: Coefficients and standard errors from linear probability models that include both year fixed effects (excluding one year due to collinearity) and controls for interest in politics. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

	Dependent variable:							
			Reform S	Support				
	(1)	(2)	(3)	(4)	(5)	(6)		
Region	0.084**	0.063	-0.042	$0.086^{*}$	-0.044	-0.046		
	(0.039)	(0.046)	(0.056)	(0.046)	(0.060)	(0.094)		
Period	0.003	0.016	0.098	$-0.117^{*}$	-0.057	$-0.242^{*}$		
	(0.049)	(0.064)	(0.102)	(0.068)	(0.067)	(0.130)		
Region * Period	0.017	0.028	0.052	-0.0003	0.006	$0.260^{*}$		
	(0.056)	(0.074)	(0.087)	(0.067)	(0.091)	(0.142)		
Constant	$0.158^{***}$	$0.282^{***}$	$0.387^{***}$	$0.267^{***}$	$0.176^{*}$	$0.278^{**}$		
	(0.047)	(0.076)	(0.087)	(0.068)	(0.097)	(0.117)		
Region	Scotland	Scotland	Scotland	Wales	Wales	Wales		
Party Subset	Labour	Conservative	Others	Labour	Conservative	Others		
Observations	1,682	831	517	906	680	261		
$\mathbb{R}^2$	0.047	0.014	0.108	0.057	0.036	0.109		

Table A-11: Placebo Test: Support for Electoral Reform with Placebo "Treatment" Period

*Note:* Coefficients and standard errors from linear probability models that include both year fixed effects (excluding one year due to collinearity) and controls for interest in politics. Observations from real treatment period have been dropped and placebo "treatment" occurs prior to the 1995 survey wave. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## References

- BBC. 2011. AV Referendum: Where Parties Stand. Visited on 03/18/2019. https://www.bbc.co.uk/news/uk-politics-11609887.
- Kimber, Richard. 2015. UK General Elections: Party Manifestos. Visited on 09/26/2015. http://www.politicsresources.net/area/uk/man.htm.
- NatCen Social Research. 2019. British Social Attitudes Survey. [Data collection]. UK Data Service. https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id= 200006.
- Northern Ireland Social Attitudes. 1996. *Main Questionnaire*. Visited on 04/26/2017. http://doc.ukdataservice.ac.uk/doc/4130/mrdoc/pdf/4130userguide1.pdf.
- Pack, Mark. 2017. Liberal Democrat General Election Manifestos. Visited on 04/25/2019. https://www.libdemnewswire.com/liberal-democrat-general-election-manifes tos/.
- White, Isobel. 2011. AV and Electoral Reform [Standard Note SN/PC/05317]. London: House of Commons Library.
- Whiteley, Paul, Harold D. Clarke, David Sanders, and Marianne C. Stewart. 2012. "Britain Says NO: Voting in the AV Ballot Referendum". *Parliamentary Affairs* 65 (2): 301–322.