Online Appendix
for
The Material Issues Vote:
Aysmmetric Partisan Accountability for the Economy

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Abstract

Voters often punish incumbent parties for poor economic performance; whether they treat left and right governments differently has been less clear. We leverage both observational and experimental data to confirm an empirical regularity: voters, on average, punish left-of-center incumbents more severely for economic downturns than their counterparts on the right. A material issues model of voting best explains this regularity. In downturns, voters prioritize short-run economic security over non-material or long-term policies most often associated with the left. We reach this conclusion after running a 'tournament of theories' subjecting plausible rival hypotheses to empirical tests. The data suggest that asymmetric partisan electoral responses to the economy do not arise from left-party reputation for unemployment competence, a right-party reputation for general economic competence, or middle class and affluent voters' fear of taxation but rather from an attraction to material policies and aversion to non-material and long-run policies when the economy weakens.

Contents

Online Appendix

A Objective economic data

We run our observational data analysis with both objective (this appendix) and subjective (in the paper) economic measures to establish that left parties leading governments are indeed punished more severely for downturns. The analyses using subjective economic perceptions are featured in the main text because of the limitations of objective economic measures: (1) the national unemployment rate does not vary across individuals in an election study yielding few independent observations – one per election study – that yield large standard errors and the inability to support election fixed-effects; (2) variation between national-level economic aggregates and individual level experience; and (3) sometimes substantial revisions to macroeconomic indicators over subsequent vintages that can result in different values for historical periods from the real-time measures reported in the press at the time. If the economic vote flows at least partially through media reporting this could matter (see, e.g., Kayser and Leininger, 2015).

We use observational data from two sources – the first three modules of the Comparative Studies of Electoral Systems (CSES) and the Eurobarometer Mannheim Trendfile (*The Comparative Study of Electoral Systems*, 2013; Schmitt and Scholz, 2002). We restrict our sample to major developed democracies with stable party systems. This yields a sample of 51 elections in 20 countries for our base CSES sample.[1] Each dataset has advantages and drawbacks. CSES surveys are conducted only during national elections, providing a glimpse at what voters are paying attention to at a moment when politics is particularly salient. They encompass a wide range of countries with comparable ques-

[1] Australia 1996, 2004, 2007; Austria 2008; Belgium 1999(Flanders), 1999(Wallonia), 2003; Canada 1997, 2004, 2008; Denmark 1998, 2007; Finland 2003, 2007, 2011; France 2002; Germany 1998, 2002, 2005, 2009; Greece 2009; Ireland 2002, 2007; Italy 2006; Japan 1996; Netherlands 1998, 2002, 2006, 2010; Norway 1997, 2001, 2005, 2009; New Zealand 1996, 2002, 2008; Portugal 2002, 2005; Spain 1996, 2000, 2004, 2008; Sweden 1998, 2002, 2006; USA 1996, 2004, 2008.

tions asked in each country in a module. The three CSES modules, however, only cover elections from 1996-2011 and have few repeated surveys within countries.

The Eurobarometer, in contrast, provides us with semi-annual surveys from fewer (eight) countries that have participated since the early 1970s [2] but many more surveys over a longer time period (1970-1999). Since the Eurobarometer conducted two surveys per year in each country, most do not correspond to an actual election period with the attendant increase in the salience and awareness of political issues.

The two datasets complement each other and offer distinct advantages over hypothesis testing with a single dataset. Not only does the the use of two datasets reassure readers that reported results are not an artifact of a single dataset found through atheoretical data-mining but the ability to show an effect with different measures, samples and time periods increases confidence in the generalizability of a finding.

A.1 Variables

We employ vote choice (or, for the Eurobarometer data, intended vote) for the head of government's party as the dependent variable. In most cases this is the prime minister's party but in presidential systems it is the president's party. We do this in order to focus on the party most clearly responsible for economic outcomes. This is consistent with Duch and Stevenson (2008) who conjectured that the most important posts, namely that of the PM's office and the Finance Minister, enable clearer attribution of responsibility, and Duch, Przepiorka and Stevenson (2015) who demonstrate with experimental work that voters primarily punish decision makers with proposal power.[3]

The election-year change in the unemployment rate serves as our key explanatory variable for the first part of our observational data analysis. The election year is defined as the election quarter as well as the three preceding quarters. In order to reduce measurement error – since elections can fall early in a quarter and unemployment can change

[2] The included countries are Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, and the UK.

[3] also see Fisher and Hobolt (2010).

after that – we measure only changes up to the quarter before the election. Thus the difference between unemployment in the quarter preceding the election and the quarter four quarters before the election constitutes our measure.[4]

We choose unemployment as our objective economic indicator because of its direct relevance to voters and high-frequency data availability. The loss (or potential loss) of employment presents a much larger financial burden than does, for example, a slower aggregation of national wealth (i.e., GDP growth).

We further reason that accountability entails reward or punishment for *changes* in the general welfare of the electorate, thus we use the *change in unemployment rate* rather than the unemployment rate. This is consistent with the well-known finding that voters are more attuned to the direction of change in the unemployment rate than the unemployment rate itself (Conover, Feldman and Knight, 1986). Employing the alternative, the level of employment, would also risk measuring cross-national differences more than within-nation differences in our pooled survey data since unemployment usually changes slowly within nations but differs markedly across them.

Note that the use of an objective macroeconomic indicator – change in the unemployment rate – comes with both costs and benefits. It offers the advantage of associating voting with observable economic outcomes at least loosely connected to economic policy and it frees us from the vagaries of question choice in election surveys – for example, only module 1 of the CSES includes a question on economic perceptions. The cost, of course, is the loss of variation within election studies. Every respondent in a given election study or Eurobarometer country-survey is assigned the same economic value. Thus, country- and election-study fixed-effects models are not possible and the economic effects that we estimate with the change in unemployment variable are driven by cross-national and cross-survey variation. Additionally, unemployment is only one component of the macro-economy and three of the mechanisms tested in the main paper relate to the gen-

[4]Models run on CSES data calculate the change in aggregate unemployment using IMF International Financial Statistics quarterly data; unemployment figures in the EB data are calculated from quarterly OECD harmonized unemployment figures.

eral economy. For all of these reasons, economic perceptions, as used in the main paper, is a better measure. We nevertheless include these estimates using unemployment change in this appendix as a robustness check on our claim that the partisan type of the lead party in government conditions the economic vote.

Economic performance is our key independent variable but our theory posits that its influence on the vote is conditioned by the ideological position of the governing party. We recognize that scales differ across countries and adjust for this by measuring the governing party's position as its deviation from the position of the median party in each election on a right-left scale (*LeftDeviation*).[5] This calculation is possible because the CSES surveys ask respondents to locate the parties participating in the recent election on a ten-point left-right scale, which we reverse so that higher values correspond to greater leftness. Our basic measure of perceived lead-party leftness is the difference between the lead party and the party each respondent placed at the median.[6] The CSES also reports parties locations on an ideological scale, as given by a pool of country experts. This enables us to create a second "expert" *LeftDeviation* measure of how far the governing party deviates to the left of the median to contrast with the "perceived" measure.

Party position measures are often, and justifiably, criticized, both on grounds of validity and reliability (Lo, Proksch and Gschwend, 2013). As our research design cannot avoid employing governing party positions, we ameliorate this problem by demonstrating robustness to three measures of party position. Our third measure is used in our Eurobarometer analysis and comes from the Comparative Manifestos Project (CMP) left-right placement (Volkens et al., 2015) which we again reversed so that greater number indicate greater leftness. Again, in order to account for the relative leftness of the lead party,

[5]Other infidelities nevertheless remain with the cross-national comparison of party positions (Lo, Proksch and Gschwend, 2013). Ideally we would estimate a "within" model so that cross-national party position variation does not influence estimates but this is not possible with country-year aggregate economic data (unemployment) that do not vary across subjects within election surveys. We do accomplish this with the perceived economic data later in our analysis.

[6]Since many respondents only placed a single party and that to be included in our analysis they had to place the lead party on the right-left scale, a nontrivial proportion of lead (and only lead) parties are placed at the median, as can be seen in the histogram in the first panel of Figure A1. Nevertheless, this method improves comparisons between elections.

right-left placement is measured as the distance from the parliamentary median party. This could theoretically range from -100 to +100. In order to make the coefficients more easily comparable to the CSES results above, we divided the right-left scores by 10 so that the possible range goes from -10 to +10.[7] While this party placement measure, as well as the CSES expert placement measure, offer us additional means of testing our hypothesis, it is important to note a substantial drawback with both of them: CMP and expert placement measures are at the party-level, so do not vary across respondents, which deprives us of within-panel-unit variation and subjects these measures to some of cross-national comparability problems discussed in Lo, Proksch and Gschwend (2013).

Rounding out our specification, and with one notable exception, we have a set of control variables that are likely orthogonal to our unemployment and party placement measures but included out of convention. The exception is *PolicyDistance* which measures the perceived ideological distance between each respondent and the governing party. Respondents in the CSES surveys placed both the lead party and themselves on the same scale. The remaining control variables are largely self-explanatory and found in both the CSES and EB datasets: *Unemployed*, a dummy intended to capture egotropic rather than sociotropic effects, *Age*, *Female*, *Education*, and *Income*.

A.2 Analysis

Table A1 presents our results. Models (1) through (5) rely on CSES data and respondent-reported vote as the dependent variable. Model (6) employs Eurobarometer Trendfile data and, since most of its semiannual surveys do not correspond with elections, vote intention rather than vote as the dependent variable. In all models, we estimate simple binary logistic regressions of voting (vote intention) for the lead party, with standard errors clustered by election survey. To avoid arbitrarily giving more weight to election surveys with more respondents, we weight our models by election survey sample size.

[7] The observed range goes from about -7.5 to +7.5.

Model (1) estimates a minimalistic economic voting model and shows results characteristic of cross-national election research with aggregate economic measures: while correctly signed, the effect of the change in the unemployment rate on voting for the lead party is far from statistically significant. This is unsurprising, well documented in the literature (Paldam, 1991; Anderson, 2007; Kayser, 2014), and the grounds for a shift to individual-level perceived economic measures in much research (Lewis-Beck and Stegmaier, 2000; Duch and Stevenson, 2008). Cross-national economic voting results are highly context dependent (Powell and Whitten, 1993). The variance in $\Delta\, Unemployment$ is largely cross-national in the CSES data since there are few elections in each country, given the short (1996-2011) timespan of the data. In contrast, the Eurobarometer data have more within-country (but between surveys within each country) variation than cross-national variation given the small number of countries but large number of surveys within each.

Models (2) through (6) consider the conditional effect of change in unemployment on the vote. Not only do they test for an effect of the economy on the vote for the incumbent party but they probe the possibility that voters hold left and right governments differently accountable for the economy. Both effects can theoretically exist simultaneously, a sort of double jeopardy for the left from economic downturns. Voters can punish left incumbents like most other incumbents for a poor economy but additionally punish them because they are associated with non-material issues.

The main relationship of interest to us is the *conditional* effect of the economy on the vote for lead parties at different degrees of leftness. The simple (not conditional) standard errors on the interaction coefficients in models (2) to (6) show no evidence of a statistically significant relationship. Logit interaction coefficients, however, are often misleading (Ai and Norton, 2003) and do not report whether a variable in an interaction has a significant effect at some value of the conditioning variable. To evaluate this relationship, we plot out the marginal effect of a one-point change in our unemployment variable on the probability of voting for the lead governing party at all values of leftness (*LeftDeviation*) in our sample, using three different measures of party placement.

	(1)	(2)	(3)	(4)	(5)	(6)
$\Delta Unemployment$	-0.039	-0.063	-0.061	-0.101	-0.030	-0.253***
	(0.072)	(0.077)	(0.069)	(0.079)	(0.090)	(0.066)
$Left\ Deviation$		0.010	0.003	0.031	0.040	0.013
		(0.016)	(0.016)	(0.018)	(0.046)	(0.015)
$\Delta Unem * LeftDeviation$		-0.013	-0.010	-0.028	-0.041	-0.021
		(0.018)	(0.018)	(0.018)	(0.041)	(0.019)
$Unemployed$	-0.099	-0.093	-0.090	-0.091	-0.134	-0.290***
	(0.109)	(0.110)	(0.090)	(0.103)	(0.105)	(0.045)
Age			0.006***	0.009***	0.008***	0.001
			(0.002)	(0.002)	(0.002)	(0.003)
$Female$			0.069*	0.092**	0.104***	-0.032*
			(0.032)	(0.032)	(0.031)	(0.015)
$Education$			-0.115***	-0.118***	-0.119***	-0.062***
			(0.023)	(0.024)	(0.028)	(0.005)
$Income$			0.084*	0.069	0.067	0.054***
			(0.037)	(0.036)	(0.040)	(0.006)
$Policy\ Distance$				-0.386***	-0.372***	
				(0.111)	(0.111)	
$Constant$	-0.698***	-0.730***	-0.737**	0.094	0.037	-1.241***
	(0.081)	(0.082)	(0.246)	(0.358)	(0.387)	(0.072)
$Data$	CSES	CSES	CSES	CSES	CSES	EB
$DependentVar.$	Vote	Vote	Vote	Vote	Vote	Vote Intent
$Party\ Placement$	–	Perceived	Perceived	Perceived	Expert	CMP
$N.Obs.$	71617	57891	50483	49278	47181	158196
$N.Elections$	51	48	48	48	46	205†
$N.Countries$	20	18	18	18	18	8
$CorrectPred.(\%)$	66.91	67.66	68.01	71.72	71.49	76.11
BIC	90934	72855	62717	55124	52837	171733

Table A1: *Unemployment change, party placement and lead-party vote. Dependent variable is vote for the largest governing party. OECD only. Binary logit. Standard errors, in parentheses, clustered by election.* * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. †*Country surveys, not elections, in the Eurobarometer (EB) sample.*

The three panels in Figure A1 are based on Models (4) to (6) in Table A1. All interval-level covariates other than that for lead-party leftness (*LeftDeviation*) are set at their sample means and categorical covariates are set at their modes. Thus, the marginal predicted probabilities in the first two (CSES) panels are estimated for a 48 year old, employed male with middle-category income who has completed secondary education and

estimates that he is 2.6 points away from the lead party on a ten-point ideological scale. The histograms show the sample distribution of the lead party "leftness" (*LeftDeviation*) – its deviation from the median party in parliament as assessed by respondents, CSES experts and CMP experts, respectively.

The panels depict graphically what we already observed about the non-partisan economic vote in Table A1. When the lead party is at the median of parliamentary parties (*LeftDeviation*=0), the economic vote is insignificant in the CSES sample but substantively large and significant in the Eurobarometer sample that is less dependent on cross-national variation. All three models, however, estimate an increasingly negative effect of a unit rise in unemployment on the change in the probability of voting for the incumbent governing party as incumbent party leftness increases. This is consistent with our assertion that leftness magnifies the economic vote for lead governing party. The first panel (Model 4 in Table A1) employs CSES data and a party position variable based on the individual-level perceptions of survey respondents. A one point increase in the change in the unemployment rate corresponds to a statistically significant decrease in the probability of voting for the lead governing party once it is more than two points to the left of the parliamentary median. For a lead party two points to the left of the median, this corresponds to an approximately 2.5 point drop in the probability of receiving our mean respondent's vote; at 10 points to the left of the median, this figure increases to an 8-point drop.

We have already discussed the measurement problems with cross-national party location variables and the problem of no within-panel-unit variation with objective economic measures (we address both of these in the next section) but one other possible source of estimation bias arises in Model (4). The conditioning variable for the perceived party position (*LeftDeviation*) might be endogenous to the respondent's vote choice. Objective measures of party position certainly introduce measurement error and rely even more heavily on cross-national variation but they are certainly exogenous to respondent's vote choice. Model (5), shown in the second panel of Figure A1, replicates Model (4) but sub-

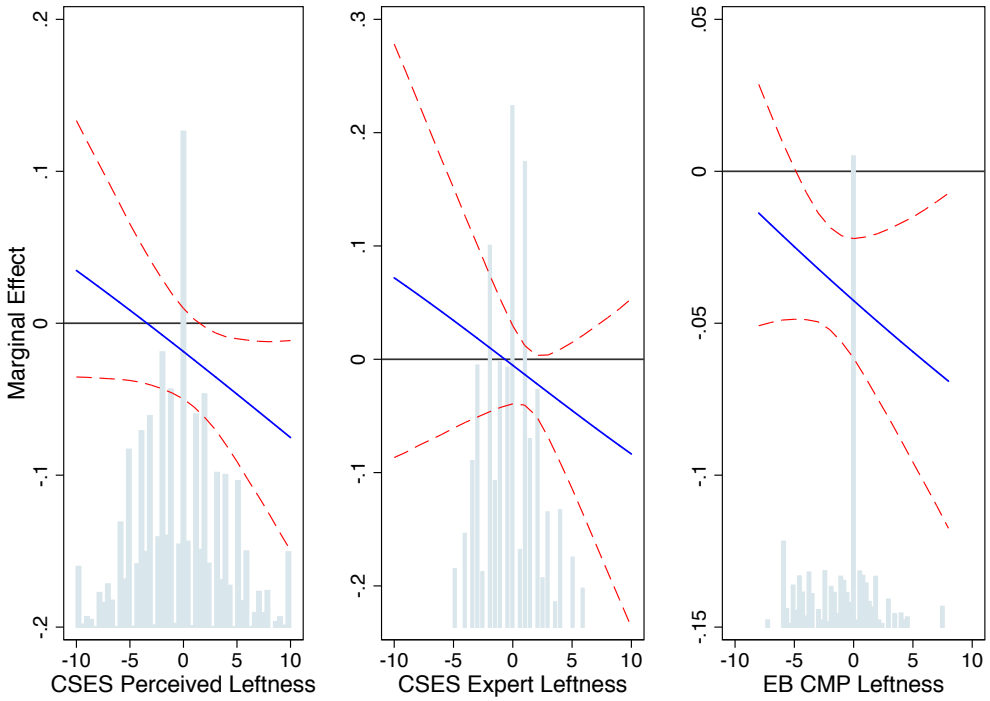

Figure A1: *Marginal effect of a one-point increase in the unemployment rate on respondents' probability of voting for the lead party at different leftward deviations of the lead party from the parliamentary median party. Estimated from the Models (4), (5) & (6), respectively, in Table A1. Figures estimated at covariate means; categorical variables set to mode.*

stitutes in (exogenous) CSES expert party placements in place of respondent placements. Changes in unemployment appear statistically insignificant regardless of governing party leftness but the estimated marginal effects are notably similar to those from Model (4). It seems that the shift to exogenous expert party placement primarily has an effect on the uncertainty of our estimates – unsurprisingly given the aggregate-level data assigned to individuals and cross-national variation – but only a modest effect on the estimates themselves. Endogeneity bias, at most, has a modest effect in Model (4).

The third panel in Figure A1, based on Model (6), offers a third test of the same relationship, again using objective economic data, but a wholly different dataset, the Eurobarometer Mannheim Trendfile. Whereas the three merged CSES modules used in the previous models offer relatively broad coverage (18-20 countries) with few election

surveys (mean of 2.6) within each, the Eurobarometer data offer narrower coverage (8 countries) but with many surveys (mean of 25.6) within each. This frequency of coverage is, of course, only possible by conducting surveys regularly (semi-annually) regardless of the proximity of elections, with the consequence that the dependent variable is now *vote intention* for the lead governing party. Unlike the CSES modules, the Eurobarometer also does not ask respondents to place themselves and parties on an ideological scale. The *Policy Distance* variable therefore falls out of the model.

Testing our relationship of interest on a completely different dataset offers several advantages. It is less likely that the results are an artifact of a given dataset discovered by atheoretical data fishing, so readers enjoy greater confidence that the hypothesis tests are valid. Additionally, the use of a second dataset with markedly different sample coverage increases confidence in the generalizability of the findings.

In addition to strengthening the robustness and generalizability of our findings, the Eurobarometer data also offer a third advantage for our purposes: a third distinct measure of party placement. Models (4) and (5) placed parties via respondent estimates and expert opinions, respectively. The Eurobarometer data used for Model (6) places parties on an ideological scale based on party manifestos, as estimated in the comparative manifestos project Volkens et al. (2015). As with expert placements, the manifesto placements provide no individual-level variation but a third measure should increase confidence that results are robust to variation in party-placement methods.

The third panel in Figure A1 provides such reassurance. It displays the predicted marginal effects on the probability of voting for the lead governing party for an individual with sample mean values for the model covariates (and modal values for categorical variables): A middle-aged (40-44 year old), middle-income, employed (unemployed=0) female who stopped full-time education between the ages of 17 and 18. Despite the expectation that the salience of the economy for voting might be lower in surveys that do not correspond with elections, Panel 3 shows a substantively similar result for far-left parties and a stronger effect for centrist and even right-of-center incumbents. A double effect — both

the conventional economic vote and what we argue is the material issues vote – is most evident here: Voters punish nearly all lead parties for a deteriorating economy but they punish parties of the left more. A party located at the parliamentary median can expect a four-point lower probability of receiving the vote of our simulated average voter when the change in unemployment increases by a point; a party at the extreme left would see its probability drop by over six percentage points; while even a lead party of the middle-right would expect a two-point drop.

A.3 Assessment

Considered together, the model estimates in Table A1 and Fig A1 suggest that voters do punish left-of-center lead parties more severely than their counterparts on the right when the economy deteriorates. Moreover, the change in unemployment is the only macroeconomic component in the model it will pick up the effects of other omitted components with which it is correlated. The farther to the left a party is positioned, the greater its punishment – although, in the case of model (5) with the expert party placements, the effect of the change in unemployment on the vote is never statistically significant. The substantive magnitude of the effect for the left parties placed farthest from their parliamentary medians is similar regardless of whether the model was estimated with CSES data and respondent placement of parties, CSES data and expert placement of parties or Eurobarometer data and party manifesto (CMP) placement of parties. A governing lead party of the far-left can expect a drop of eight, five, and six percentage points, respectively, in the probability of receiving the average respondent's vote when the change in the unemployment rate increases by one point. Voters punish left governments more than right governments in downturns.

B Experiment

B.1 Survey text

[Randomize into 5 groups, no incumbent]
[Randomize order in which Left and Right positions are presented in each group]

****

Group 1 (Control): Status Quo

(1) Two political parties are competing in a national election. In the past, the Right Party has usually promoted a smaller role for government and the Left Party has usually promoted more social protections. Neither party has deviated from their traditional policy priorities in recent times. Thus, their current policy platforms emphasize:

RIGHT PARTY: No new policy proposals

LEFT PARTY: No new policy proposals

On the scale below, please indicate your vote preference.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

(2) Suppose the economy goes into a DEEP RECESSION. You earn enough to meet the needs of your family but you are not wealthy and have to monitor your budget closely. The economic slowdown has reduced your income and a friend of yours has lost his job as the unemployment rate has increased. The parties both discuss the economy more but neither advocates any new policies.

RIGHT PARTY: No new policy proposals

LEFT PARTY: No new policy proposals

Given the new economic situation, please indicate your current vote preference on the scale below.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

****

Group 2 Treatment: RightLux.

(1) Two political parties are competing in a national election. In the past, the Right Party has usually promoted a smaller role for government and the Left Party has usually promoted more social protections. More recently, the Right Party has been advocating increasing the teaching of national history in state schools and increasing

subsidies for the preservation of national culture. The Left Party has been avoiding promises of policy change and favors leaving things as they are. Thus, their current policy platforms emphasize:

RIGHT PARTY: Increase teaching of national history, subsidise preservation of national culture

LEFT PARTY: No new policy proposals

On the scale below, please indicate your vote preference.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

(2) Suppose the economy goes into a DEEP RECESSION. You earn enough to meet the needs of your family but you are not wealthy and have to monitor your budget closely. The economic slowdown has reduced your income and a friend of yours has lost his job as the unemployment rate has increased. The parties discuss the economy more but you still recall their policies:

RIGHT PARTY: Increase teaching of national history, subsidise preservation of national culture

LEFT PARTY: No new policy proposals

Given the new economic situation, please indicate your current vote preference on the scale below.

-3 certain to vote for the LEFT Party . +3 certain to vote for the RIGHT Party
[7 point scale]

****

Group 3 Treatment: LeftLux

(1) Two political parties are competing in a national election. In the past, the Left Party has usually promoted more social protections and the Right Party has usually promoted a smaller role for government. More recently, the Left Party has been advocating programmes to address discrimination against minorities and women and increasing international development aid. The Right Party has been avoiding promises of policy change and favors leaving things as they are. Thus, their current policy platforms emphasize:

LEFT PARTY: Funding programmes to address race and sex discrimination, increase international development aid

RIGHT PARTY: No new policy proposals

On the scale below, please indicate your vote preference.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

(2) Suppose the economy goes into a DEEP RECESSION. You earn enough to meet the needs of your family but you are not wealthy and have to monitor your budget closely. The economic slowdown has reduced your income and a friend of yours has lost his job as the unemployment rate has increased. The parties discuss the economy more but you still recall their policies:

LEFT PARTY: Funding programmes to address race and sex discrimination, increase international development aid

RIGHT PARTY: No new policy proposals

Given the new economic situation, please indicate your current vote preference on the scale below.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

****

Group 4 Treatment: RightMat.

(1) Two political parties are competing in a national election. In the past, the Right Party has usually promoted a smaller role for government and the Left Party has usually promoted more social protections. More recently, the Right Party has been advocating lowering income tax and increasing funding for job retraining programmes. The Left Party has been avoiding promises of policy change and favors leaving things as they are. Thus, their current policy platforms emphasize:

RIGHT PARTY: lower income tax and increase funding for job retraining programmes

LEFT PARTY: No new policy proposals

On the scale below, please indicate your vote preference.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

(2) Suppose the economy goes into a DEEP RECESSION. You earn enough to meet the needs of your family but you are not wealthy and have to monitor your budget closely. The economic slowdown has reduced your income and a friend of yours has lost his job as the unemployment rate has increased. The parties discuss the economy more but you still recall their policies:

RIGHT PARTY: lower income tax and increase funding for job retraining programmes

LEFT PARTY: No new policy proposals

Given the new economic situation, please indicate your current vote preference on the scale below.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

****

Group 5 Treatment: LeftMat

(1) Two political parties are competing in a national election. In the past, the Left Party has usually promoted more social protections and the Right Party has usually promoted a smaller role for government. More recently, the Left Party has been advocating increasing the job-seekers allowance and welfare benefits for the poor. The Right Party has been avoiding promises of policy change and favors leaving things as they are. Thus, their current policy platforms emphasize:

LEFT PARTY: increasing the job-seekers allowance and welfare benefits for the poor

RIGHT PARTY: No new policy proposals

On the scale below, please indicate your vote preference.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

(2) Suppose the economy goes into a DEEP RECESSION. You earn enough to meet the needs of your family but you are not wealthy and have to monitor your budget closely. The economic slowdown has reduced your income and a friend of yours has lost his job as the unemployment rate has increased. The parties discuss the economy more but you still recall their policies:

LEFT PARTY: increasing the job-seekers allowance and welfare benefits for the poor

RIGHT PARTY: No new policy proposals

Given the new economic situation, please indicate your current vote preference on the scale below.

-3 Strongly prefer LEFT . +3 Strongly prefer RIGHT
[7 point scale]

****

[Demographic and political questions follow . See summary stats below.]

B.2 Sample and covariate balance for Prolific UK sample

B.2.1 Data preparation and sample statistics

Our pre-analysis plan pledged to remove two types of observations. The first is incomplete survey responses. 8 observations dropped out because of missing responses on the dependent variable and another 8 were removed because of missing responses on the variables listed in Table B1 that we use in Figure B1 to show covariate balance for key demographic and political variables across the control and treatment groups. Second, four observations are removed because they were completed in an implausibly fast time, as set as the cut-off in the pre-analysis plan: less than two minutes in a survey in which the mean completion time was slightly over six minutes. This leaves a sample of precisely 1000 observations distributed across the control and four treatment groups (202, 202, 196, 198 and 202, respectively).

Table B1: Summary statistics

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**
birthyear	1979.527	11.251	1943	2000
edu	4.752	1.743	1	8
ethnic	1.261	0.896	1	6
lrs	3.558	1.28	1	7
sex	1.635	0.482	1	2
N		1000		

Table B2: **Ethnic**

Category	Freq.	Per cent
White	893	89.30
Black	34	3.40
Asian	42	4.20
Middle Eastern	1	0.10
Other	10	1.00
Multiple	20	2.00
Total	1000	100.00

Table B3: **Education**

Category	Freq.	Per cent
No qualifications	13.00	1.30
GCSE level	136.00	13.60
A-level	137.00	13.70
Vocational	161.00	16.10
Some undergrad	59.00	5.90
Degree (e.g., BSc, BA)	342.00	34.20
Post-graduate	151.00	15.10
Foreign qualifications	1.00	0.10
Total	1,000.00	100.00

B.2.2 Covariate balance

Figure B1 presents the covariate balance for four exogenous covariates plus left-right self-placement. The y-axes display the differences between the mean of the control group (SQ) and each of the four treatment groups (T1-T4) for each covariate. T1 = right-wing, non-material; T2 = left-wing, non-material; T3 = right-wing, material; T4 = left-wing, material; SQ = status quo (control group). None of the treatment group means are statistically significantly different ($p < .05$) from the mean of the control group for any of the covariates, although one comes close. The comparison of means test for the SQ and T4 groups for the sex variable yields a t-value of 1.958 and p-value of .0508. The bottom right panel shows the sample size for the control and treatment groups, which range from 196 to 202.

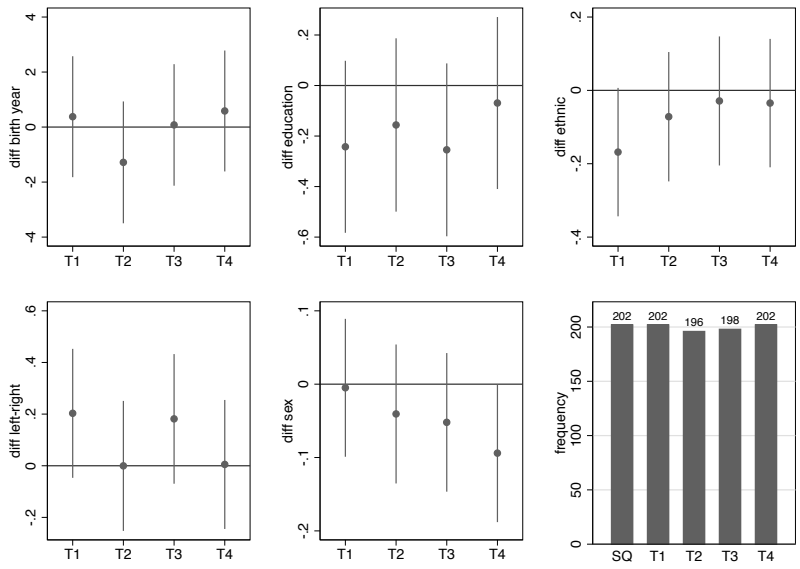

Figure B1: *Balance for four pre-treatment covariates plus left-right self-placement.*

B.3 Regression coefficients

Because the pre-post differences in vote preferences in the control group cancel out to zero, despite individual-level variance, we get identical coefficients for the simple difference model (1) and difference in differences model (2) in Table B4 below. It is rare for control group differences to cancel out perfectly but we have checked the data and this is indeed the case.

	(1)		(2)	
	Diff from pre-recession		Diff from control group diff	
Left Non-material	0.551***	(0.074)	0.551***	(0.104)
Left Material	-0.208**	(0.073)	-0.208**	(0.103)
Right Non-material	-0.609***	(0.073)	-0.609***	(0.103)
Right Material	0.394***	(0.074)	0.394***	(0.104)
Control (constant)			0.000	(0.073)
N	1000		1000	
R^2	0.139		0.139	

Table B4: *Pre- vs. post-recession shift toward the right party in four experimental conditions and the control group (status quo). Standard errors in parentheses.* * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. *Individual-level differencing.*

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