The Material Issues Vote:
Asymmetry 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. (150 words)

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This financial crisis is for capitalist neo-liberals what Chernobyl was for the nuclear lobby. — Daniel Cohn-Bendit, 2008.[1]

1 Introduction

When the political reckoning arrived after the global financial crisis began in 2008, more people than Daniel Cohn-Bendit, a charismatic and visible leader on the European Parliamentary left, were surprised. Despite the at least partial culpability of large banks operating under the loose regulatory schemes promoted by the right for the crisis, voters in most developed democracies failed to favor the left on election day. Incumbents, in general, fared better than one would expect given the circumstances, but, where governments actually lost office, center-left governments were often replaced by the center-right (LeDuc and Pammett, 2013). What explains the poor performance of the left?

Voters often hold governments accountable for the economy. But are all governments, right and left, treated alike? Or, given partisan differences in economic policy, might voters favor governments of a particular partisan stripe in different economic circumstances? The voluminous literature on the economy and elections has relatively neglected the question of whether and how government partisanship matters for electoral outcomes despite a record of systematic differences in how the left and right behave once in office. Voters retrospectively hold governments accountable for their economic performance but if policy promises and reputations have any predictive power, should not voters also prospectively choose their governing parties? Studies of voter reactions to the Global Financial Crisis and the accompanying Great Recession overwhelmingly conclude that the left failed to benefit and that if any partisan advantage emerged, it was for the right (LeDuc and Pammett, 2013; Lindvall, 2014; Lindgren and Vernby, 2016).

Figure 1 confirms this finding from the literature. When one might expect the left to benefit – given the right's culpability in many cases for the weak regulation that partly enabled the Financial Crisis and the need for social benefits for those most affected –

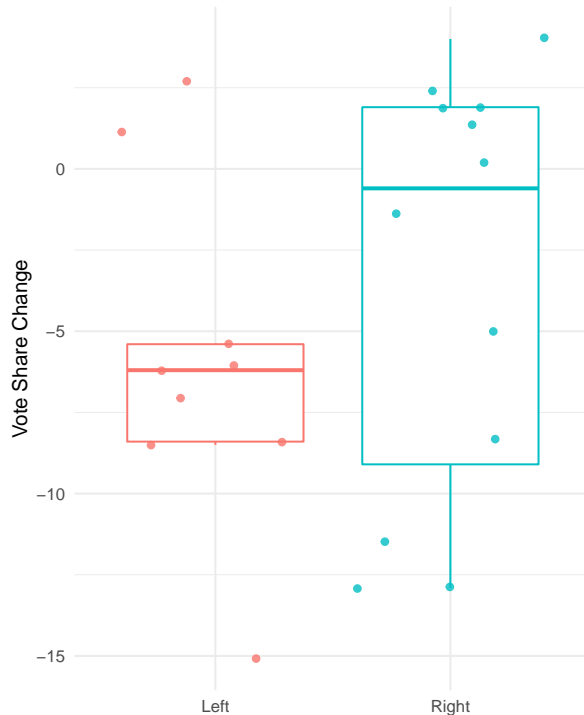[1]As quoted in *The Guardian*, 17 September 2008

Figure 1: *Vote swings for the largest governing party in developed democracies by partisanship. Left parties on the left (red); right parties on the right (blue). 21 elections in 17 countries, 2008-2011.*

the opposite occurred. In the 21 elections in developed democracies during the Great Recession (2008-2011), the median largest governing party on the left lost 6.2 percent of the vote relative to their previous performance, while their median counterpart on the right lost less than 1 percent.[2] If any party group systematically loses from these economic crises, it seems to be parties on the left.

We argue here that voters, in fact, do treat the left and the right differently under given economic circumstances – as a general empirical regularity, not just an artefact of the Great Recession. We do not contest the findings of retrospective economic voting but rather we posit that a second process connecting the economy to partisan vote choice occurs simultaneously. Voters do punish or reward incumbent governments for economic

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[2]Australia, Austria, Canada (two elections), Denmark, Germany, Greece, Iceland, Japan, Luxembourg, Netherlands, New Zealand (two elections), Norway, Portugal (two elections), Spain (two elections), Sweden, UK, USA. Finland and Israel are coded (by Database of Political Institutions) as having centrist governments. Switzerland is, of course, excluded from both sets because of its collective executive.

conditions, albeit imperfectly (Anderson, 2007; Kayser, 2014), regardless of their partisan complexion. They also partially vote prospectively on the basis of parties' expected policies (Kedar, 2005; Macdonald, Listhaug and Rabinowitz, 1991).

Using observational data from the Comparative Study of Electoral Systems project we establish that voters do, on average, punish left incumbents more than right incumbents when the economy weakens and, critically, that the magnitude of this effect increases with the leftness of the governing party. The analysis of subsamples and a survey experiment conducted in November 2018 and June 2019 in the United Kingdom then sort out the mechanism by which this effect emerges. Evaluating four potential mechanisms, we argue that voters associate left parties more with non-material policies that enjoy more support when times are good, such as values-oriented post-material policies that do not directly affect voters' material welfare (e.g., environmental programs, international aid and the protection of minority rights) or policies that only do so in the long-run (e.g., medical research, infrastructure investment, education). Left parties gain from this association in an expanding economy but lose when it contracts.

Scholars have long documented the shift from short-run material concerns to "post-material" values over the long-run as democracies grow wealthier and new generations raised in times of plenty and relative security replace their less fortunate predecessors (e.g., Inglehart, 1971). This long-run shift is perhaps best illustrated by the rise of green parties. Although it receives less attention, the same author, among others, also demonstrates short-run period effects in which respondents shift toward material priorities in times of scarcity (e.g., Inglehart and Abramson, 1994; Singer, 2011; Scruggs and Benegal, 2012; Benegal and Scruggs, 2016; Compton and Lipsmeyer, 2019). We argue here that both shifts – intergenerational and short-term – in voters' priorities have had a profound effect on electoral politics. First, the intergenerational shift matters for party issue platforms. Just as voters' issue priorities have changed over the long-run toward non-material issues, so has the mix of issues espoused by some parties. As the number of working class supporters for parties of the left has declined in recent decades together with deindustrialization and union decline, many parties of the left in particular have compensated

for working class losses by adopting values-oriented (i.e., post-material) issues to attract socio-cultural professionals (Kitschelt, 1994; Gerring, 2001; Kriesi, 1998).

Second, the short-run shifts in voters' issue priorities matter for their party preferences. As an economy slows and contracts, voters shift their policy preferences increasingly toward short-run material security, benefitting those parties most exclusively associated with material issues (the right) and disadvantaging those most associated with non-material issues (the left). Of course, most left parties are associated with both material (unemployment insurance, welfare) and non-material (environment, gender equality) issues targeted at the two components of their base but the association with non-material issues hurts them in downturns. Moreover, issue-ownership is sticky, making attempts to exclusively pivot to material issues ineffectual (Adams, Ezrow and Somer-Topcu, 2011). Thus, left parties leading governments are doubly punished when the economy weakens: once by retrospective accountability for the economy (the economic vote) and once prospectively for their association with non-material policies. When the economy and voters' economic security improves, the non-material issues of the left again attract more votes.

The primary contributions of this paper are (1) the clear establishment of a fundamental empirical regularity – left parties, at least those associated with non-material policies, lose support during economic downturns – and (2) the elucidation of how this comes about. We are not the first to claim that the economy exercises a systematic partisan effect on the vote – advantages for both the left and the right have been previously claimed – nor even the first to argue that the right benefits from downturns. We are, however, the first to demonstrate a systematic partisan electoral regularity in individual voting behavior in response to the economy in a large set of developed democracies. We attribute this pattern, by running a "tournament of theories", to a novel hypothesis about "material issues voting". A consequence, we argue, is our final contribution, (3) a more holistic understanding of the economy's effect on voting that bridges two literatures that rarely connect to each other retrospective accountability or prospective issue voting.[3]

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[3] See Alvarez, Nagler and Willette (2000) and Blais et al. (2004) for a rare interaction between the two literatures.

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2 Four Partisan Models of Voting

Four broad models of voter behavior connect parties' partisan position and the vote, each with a varying degree of empirical support. Voters may simply choose the party with the strongest reputation for delivering the macroeconomic outcome they care about – low unemployment or low inflation. As downturns are usually associated with a rise in unemployment but not in inflation, we will refer to this as *unemployment competence*. They also could choose the party with the best reputation for competence in managing the overall economy (*economic competence*) or the party most likely to benefit their income group through fiscal policy (*class interests*). Finally, in times of scarcity, they might both prioritize material over non-material issues and discount the future (*material issues*). All of these models of behavior are plausible and find some amount of support in the literature. We evaluate each of these models with observational data below and summarize their predictions in Table 1. Where their predictions are observationally equivalent, we add a survey experiment to distinguish between them as summarized in Table 2. Let us first, however, explain the models.

2.1 Three alternative models

Unemployment competence. Parties of the left and right govern differently. A key difference arises from the tendency of parties to privilege the interests of their core constituencies while in office (Bartels, 2010; Gilens and Page, 2014). One means toward this end could be macroeconomic policy, with left governments presiding over lower unemployment and the right keeping inflation better in check (Hibbs, 1977; Alesina, 1987). Informed voters thus might have a material incentive to prefer left or right governments. The economy, in addition to being a valence issue – (nearly) all voters prefer a growing economy – can be considered a "positional" issue about which voters have different preferences – e.g., lower unemployment vs. lower inflation. If voters support the party most likely to implement policies that benefit them, then one should expect the left to gain vote share from increases in unemployment and the right from inflation.

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Stigler (1973) followed by Kiewiet (1981) and Swank (1993) first formulated a voting model based on parties' reputations for competence in dampening components of the Philips curve. Using aggregate-level data from US presidential elections, Swank (1993) found that increases in unemployment benefit the Democrats while increases in inflation bolster the Republicans. More recently, Wright (2012), using more recent US data, has found a similar unemployment result. Theoretically, two different mechanisms could obtain: those directly affected by unemployment might simply vote in their own self-interest (Margalit, 2013) or individuals at risk of unemployment might prefer the left as an "insurance policy" (Moene and Wallerstein, 2001). Either way, outcomes are explained by the left (right) "owning" the issue of unemployment (inflation) and a reputation for suppressing it (Carlsen, 2000; Wright, 2012). Because unemployment (but usually not inflation) increases in economic downturns, this model predicts an overall increase in support for the left. Because wealthy voters are less threatened by unemployment, we also expect this effect to be concentrated among the less well off.

Growth competence. A second model, like the competence reputation for unemployment (or inflation) above, also posits that voters draw on parties' competence reputations but focuses on aggregate economic management rather than unemployment and/or inflation components. Issue ownership obviously extends beyond economic policy but specific parties do obtain reputations for economic competence that can matter when the economy is salient (Bélanger and Meguid, 2008; Neundorf and Adams, 2016). Such reputations are not static, and data measuring them are incomplete and intermittent but, on average, we can venture that right parties enjoy a better reputation for overall management of the economy (Clarke et al., 2004; Green and Jennings, 2017). By this framework, voters would turn to the party most associated with economic competence (usually the right) when the economy falters. Moreover, this effect would emerge among both the poor and wealthy.

Class interests. Last, before we turn to the material issues model, it is also possible that voters pursue their own self-interest, like in the unemployment competence model, but rather than focusing on Philips-curve trade-offs, they focus on what governments

better control: fiscal policy. Peltzman (1992) famously proclaimed (US) voters to be fiscal conservatives, punishing any party that increases spending. A variant to his argument might assert that sensitivity to spending increases in recessions when budgets are tight and results in punishment for those parties that are most associated with greater spending (the left). In economic downturns when their income is least secure, middle and upper class voters may fear tax increases to finance redistribution and vote for the right to preclude this. So long as middle and upper class voters outnumber poor voters, one would expect that downturns suppress support for the left. Lindvall (2014, 2017) best advances this argument.

2.2   The material issues model

One quite distinct model of partisan voting behavior – and to preview our results, the one most substantiated by the data – stands out from the three above. When the economy weakens, rather than maximizing welfare through choosing the party (a) most likely to lower unemployment (*unemployment competence*), (b) with the best reputation for managing the economy (*economic competence*) or (c) with the most advantageous fiscal policy (*class interests*), voters might (d) increase the importance they assign to material policies at the expense of non-material policies.

Economic downturns, per this *material issues* model, hurt the left because they are more strongly associated with non-material issues. Parties of the left do hold reputations for providing material goods that meet immediate financial (e.g., unemployment benefits) and physical (e.g., public health insurance) needs but left parties in recent decades have also been more strongly associated with many non-material and values-oriented policies (e.g., international aid, environmental protection, gender equality, minority rights). In contrast, parties of the right have most often, albeit not exclusively, limited themselves to promoting policies associated with financial and physical security (e.g., tax cuts, policing). It is difficult to find a non-material policy strongly associated with the right on most "most important problem" survey lists (EuropeanCommission, 2017; Heffington, Park

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and Williams, 2017), although less salient right-party non-material issues do exist (see, e.g., "preserving heritage" and "teaching history" in Figure 5). Party scholars have long documented this expansion of many social democratic and other left parties' policy profile intended to attract the support of urban sociocultural professionals (e.g. Kitschelt, 1994; Gingrich and Häusermann, 2015; Sassoon, 2010, pp. 647-90) as well as the dilemma they face when trying to reconcile the different priorities of their working class and middle class supporters (Rennwald and Evans, 2014).

Of course, the electorate has also undergone a slow shift toward non-material issues as younger generations raised in circumstances of material abundance and physical security replace less fortunate older generations (Inglehart and Welzel, 2005). This matters because it makes appeals to "post-material" issues possible in the first place. It is not the long-run economic development, however, that matters for voting in downturns (Easterlin, 1974) but short-run economic change that drives the assessments of economic wellbeing that influence vote choice (Healy and Lenz, 2014; Wlezien, 2015).

In times of scarcity when voters' economic security diminishes, they (a) shift their preferences toward material security (Maslow, 1943; Inglehart, 1971; Singer, 2011; Compton and Lipsmeyer, 2019) and (b) discount the future more (Shah, Mullainathan and Shafir, 2012).[4] The consequence, we argue, is a partisan asymmetry in electoral accountability for the economy. Governments of all partisan compositions are punished for a weak economy (Lewis-Beck and Stegmaier, 2015) but left parties are additionally punished for their association with non-material issues.

Why do not parties simply shift away from post-material issues when the economy weakens? Parties' officers and members have ideological beliefs, commitments and connections to interest groups. Even if parties could change policies quickly, voters would be slow to notice. Parties hold longstanding and persistent reputations for competence in and commitment to particular issues (Budge and Farlie, 1983) and short-run attempts to reposition a party often fail to make an impression on voters (Adams, Ezrow and

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[4]For simplicity, we use the term "non-material" to refer to a set of issues that include post-material issues as defined by citetinglehart1971silent, other non-material issues, and material issues that have a long-run pay off (e.g., education, medical research).

Somer-Topcu, 2011). Parties "own" issues and cannot easily shirk these associations when circumstances change.

Intriguingly, a small literature related to public opinion – specifically, "policy mood" – rather than to voting has explored how the issue preferences in the public shift with the economy. In the early 1990s, Stimson (1991) collected a mass of US public opinion data and constructed an index of "policy mood" that demonstrated alternating cycles of public support for policies associated with the left or the right. A few years later, Robert Durr (1993), using Stimson's data, recognized that economic conditions explain variation in such policy sentiment. Stevenson (2001) confirmed this regularity in 14 European countries showing that aggregate policy mood shifts to the left (right) when the economy expands (contracts), as did Markussen (2008) in 20 developed countries, DeNeve (2014) more recently in the United States and Anderson and Hecht (2014) for 11 European countries during the Great Recession. Of course, policy mood is distinct from actual voting.

The exposition for each of the previous models ended with its predicted partisan vote effects for three groups of voters – all, poor and wealthy – independent of incumbency so as not to confound partisan responses to the economy with the economic vote. Because a weakening economy induces economic concern, albeit in different forms, for nearly all actors in the economy and because economic change rather than wealth level matters most for voting behavior, the *material issues* mechanism predicts that voters should shift their support toward the right regardless of their wealth level. The following section will provide an overview of each model's predictions that can then be used to test them against the data.

3   Empirical Strategy

Our empirical strategy is two-fold. Observational data establish the empirical regularity showing that left governments are indeed punished more in downturns and evaluate the predictions of the four rival models. In order to distinguish between two observationally

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equivalent models and strengthen the causal claims of the *material issues* vote, we then turn to a survey experiment.

We begin with an analysis of cross-national election-surveys from the Comparative Study of Electoral Systems (CSES) datasets – to identify differences in voter responses to the economy under governments with varying right-left orientation. The individual-level perceived economic observations in these data offer many advantages such as the ability to explore subsets of voters and use fixed effects due to variation in the economic perception variables within election-studies. As some readers might hold concerns about the possible endogeneity of economic perceptions to vote preferences, we also run models in the Online Appendix using CSES and Eurobarometer data combined with objective economic data – changes in the unemployment rate – but, by necessity, without fixed effects. Both types of analyses demonstrate that waxing support for the right in downturns is a common and widespread empirical regularity not only found in severe recessions.

	Observational Data		
Sample:	All	Poor	Wealthy
Unemployment Competence	L+	L+	0
Economic Competence	R+	R+	R+
Class Interests	R+	L+	R+
Material Issues	R+	R+	R+

Table 1: *Observational data tests. Predicted electoral gain for the Left (L+), the Right (R+) or neither (0) following an economic downturn under four hypotheses.*

Of course, the observational data also allow for an evaluation of possible mechanisms. Table 1 presents the predictions for each rival mechanism for three groups – all, poor and wealthy respondents – as explained in the exposition for each of these models in the previous section. Careful observation of Table 1, however, reveals a limit in its ability to distinguishing between two mechanisms. *Economic competence* and *material issues* yield identical predictions in the observational data.

This observational equivalence as well as a desire to better establish causality motivated us to conduct a survey experiment with participants from the micro-tasking platform Prolific in the United Kingdom. We vary the policy associations of parties conducted in order to distinguish between the *economic competence* and *material issue* voting mech-

anisms. Table 2 shows the different vote preference predictions. To validate the specific policies used in the experiment and to confirm the left's greater association with non-material policies, we also asked participants to score each of ten issues on the degree they thought it was a priority for the left and the right. Details are provided in each section.

			Experiment		
Treatment:	Control	R Non-mat	L Non-mat	RightMat	LeftMat
Economic Competence	R+	R+	R+	R+	R+
Material Issues	0	L+	R+	R+	L+

Table 2: *Experimental tests. No incumbency effects. Predicted gain in vote intention for the Left (L+), the Right (R+) or neither (0) following an economic downturn under two hypotheses.*

4 Observational study

4.1 Data

For our observational data analysis, we employ Module 1 of the CSES (1996-2001) which yields 14,328 observations in twelve election-studies in eleven countries.[5] Subsequent modules, unfortunately, did not include the economic perceptions question. The alternative would be to pair objective economic measures with data from all of the CSES modules in order to get coverage over a longer time period but the cost would be the loss of the ability to analyze subsets of voters (e.g., poor vs. rich) and the loss of election fixed-effects because the same unemployment change value would be repeated for every respondent in each election study. Moreover, the national level of aggregation also maps poorly onto individual economic experiences (Healy and Lenz, 2017) and revisions across data vintages often result in a objective economic measures that deviate from the economic figures the media reported on at the time (Stevenson and Duch, 2013; Kayser and Leininger, 2015).

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[5]Australia 1996, Canada 1997, Germany 1998, Denmark 1998, Great Britain 1997, Netherlands 1998, Norway 1997, New Zealand 1996, Portugal 2002, Spain 1996, Spain 2000, Sweden 1998. Note: Module 1 includes the spring 2002 election in Portugal despite nominally ending in 2001. No other elections from 2002 are included.

We nevertheless do repeat the analysis with an objective economic measure (unemployment change) as a robustness and endogeneity check. The results, reported in the Online Appendix, are unsurprisingly less precisely estimated but nevertheless confirm the basic results with the subjective economic measure.

4.2 Variables

We employ vote choice for the head of government's party, the "lead 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 or responsibility and Duch, Przepiorka and Stevenson (2015) who demonstrate with experimental work that voters primarily punish decision makers with proposal power.[6]

A 5-point scale of economic perceptions serves as our key explanatory variable: "Would you say that over the past twelve months, the state of the economy in [country] has gotten better, stayed about the same, or gotten worse?" We reverse the scale so that it measure economic deterioration.

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 (Lo, Proksch and Gschwend, 2013) 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*). We further sidestep this problem by using economic data with individual-level variation. It permits fixed-effects estimation "within" elections surveys so that cross-national party position variation does not influence estimates.

This party-position 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,

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[6]also see Fisher and Hobolt (2010) and Debus et al. (2014).

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.

We readily concede that ideological measures of party placement are not conceptually interchangeble with a party associations with non-material issues. It is wholly possible for even extreme left parties to focus on, say, redistribution rather than on they type of non-material issues that would cause respondents to place them on the farther left. We take this distinction seriously and distinguish between leftness and non-material issue association in the experimental section of the paper.

Rounding out our specification, and with one notable exception, we have a set of control variables that are likely orthogonal to our economic performance 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 taken from the CSES dataset: *Unemployed*, a dummy intended to capture egotropic rather than sociotropic effects, *Age*, *Female*, *Education*, and *Income*.

4.3   Analysis

Table 3 presents estimates from three models. The first model uses pooled survey data, the second, country fixed-effects, and the third, election fixed-effects. The first model is estimated with binary logit, the last two with conditional (fixed-effects) logit. The response variable in all models is vote for the lead party in the government.

The main relationship of interest is the conditional effect of the economy on the vote for lead parties at different degrees of leftness. It is this relationship that tests for asymmetric effects conditioned on the partisanship of the government and can begin to distinguish between the rival hypotheses expounded in Section 2 and Table 1. The coefficient signs

	(1)		(2)		(3)	
$EconDecline$	-0.547***	(0.130)	-0.520***	(0.025)	-0.516***	(0.025)
$LeftDeviation$	0.045	(0.070)	0.081***	(0.022)	0.083***	(0.022)
$EconDecline * LeftDeviation$	-0.002	(0.025)	-0.022**	(0.008)	-0.022**	(0.008)
$PolicyDistance$	-0.306	(0.172)	-0.362***	(0.011)	-0.363***	(0.011)
Age	0.007*	(0.003)	0.006***	(0.001)	0.006***	(0.001)
$Female$	0.136*	(0.056)	0.144***	(0.040)	0.143***	(0.040)
$Education$	-0.137***	(0.033)	-0.107***	(0.013)	-0.108***	(0.013)
$Unemployed$	-0.119	(0.122)	-0.265*	(0.112)	-0.258*	(0.112)
$Income$	0.077	(0.047)	0.077***	(0.016)	0.076***	(0.016)
$Constant$	1.475***	(0.326)				
$Fixed\,Effects$	–		Country		Election	
$N.Obs.$	14328		14328		14328	
$N.Elections$	12		12		12	
$N.Countries$	11		11		11	
BIC	15880		15153		15145	

Table 3: *Effect of economic perceptions on the vote for the lead party. CSES data. Binary logit (model 1) and conditional (fixed-effects) logit (models 2 & 3). Perceived economic performance is reverse coded so that higher values represent greater economic deterioration. $* p < 0.05$, $** p < 0.01$, $*** p < 0.001$. Standard errors in parentheses and clustered by country in model 1. Within-panel-unit variation in economic perceptions allows fixed-effects in models 2 and 3.*

on both the interaction term in each model and its constituent terms are at first glance consistent with an asymmetric voter response to economic change under left and right lead governments. Logit interaction coefficients, however, can be misleading (Ai and Norton, 2003) and we are interested in the conditional rather than the simple standard errors to test for statistical significance at various values of the lead party leftness. To evaluate this relationship and to render substantive magnitudes more apparent, we plot out the marginal effect of a one-point change in our economic variable on the probability of voting for the lead governing party at all values of lead party leftness (*LeftDeviation*) in our sample. Figure 2 presents the conditional marginal effects graphically, setting continuous covariates at their means and categorial covariates at their modes.

All three models reveal a clear economic vote. The marginal effect of a unit deterioration in the economy on the probability of the mean voter supporting the lead governing party is consistently negative at all values of lead party leftness. Voters punish both right and left lead parties for a downturn. Of greater interest for our analysis, however, is whether left parties are punished more severely. Figure 2 demonstrates that this is indeed the case. The drop in the probability of voting for the lead party in response to
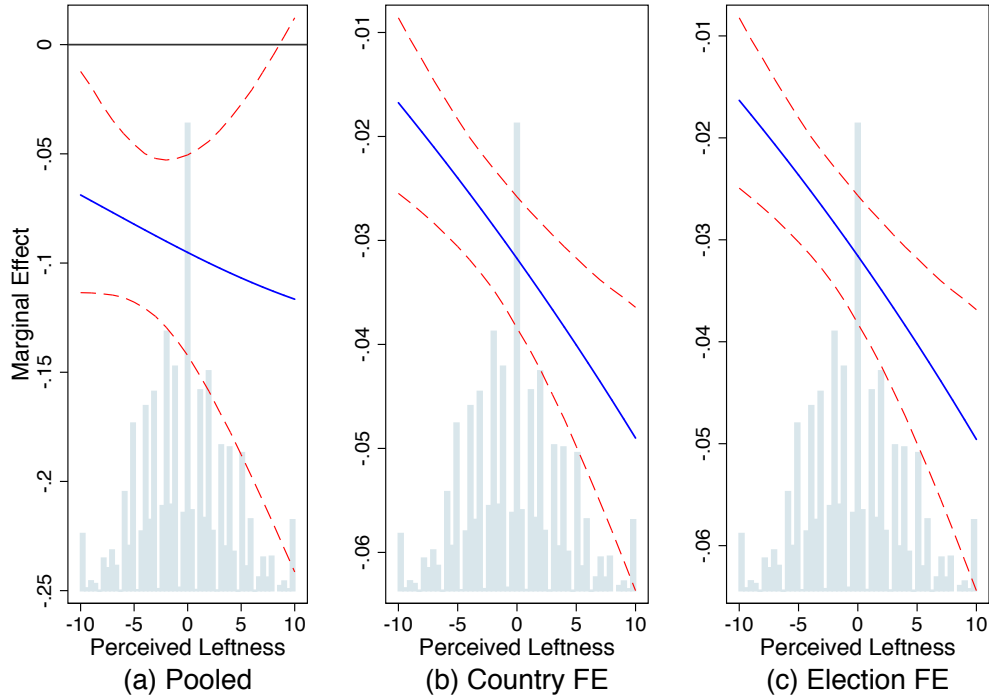
Figure 2: *Marginal effects of economic perceptions on the probability of voting for the lead party conditioned on the perceived ideological position of the lead party. 95% confidence intervals. The histogram shows the distribution of the LeftDeviation variable.*

a unit deterioration in perceived economic performance increases in magnitude with the perceived leftness of the lead governing party. This effect is statistically significant at all levels of leftness in both fixed-effect models and nearly all levels in the pooled model. Moreover, in the fixed-effect models – which have the advantage of subtracting out the influence of all omitted covariates that do not vary within the panel unit – the confidence intervals show that the marginal punishment for governments of the far right and left are also significantly different from each other.

The substantive effects in the pooled model (Panel a) are approximately twice those in the country and election fixed-effects models (Panels b and c), suggesting the magnitude of the omitted variable bias present when within-panel-unit invariant confounders are not excluded. Substantively, interpreting the fixed-effect models, a unit decrease in the perceived performance of the economy corresponds to an approximately 1.6 percentage point drop in the probability of voting for the lead governing party when it is perceived to be extremely right-wing but a nearly 5 percentage point drop when it is extremely left-

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wing. Voters punish all lead parties in government for a poor economy but they punish left parties more.

Might these results be driven by endogeneity bias? The conditioning variable – perceived party position (*LeftDeviation*) – might be influenced by the respondent's vote choice, as might economic perceptions. Similar models in the Online Appendix using change in unemployment and and two similarly exogenous measures of party placement (expert placement and party manifestos) show broadly similar results. If endogeneity bias is present, it is insufficiently large to change the basic finding that voters punish left lead parties more for downturns. Moreover, by testing for asymmetric partisan accountability for the economy in different time-periods (CSES, 1996-2011) and with different datasets (Eurobarometer Trendfile, 1970-1999) the supplementary results in the online appendix suggest robustness.

So what do these first results suggest about the rival partisan voting hypotheses? The *unemployment competence* hypothesis predicts that voters should increase support for left governing parties when unemployment rises, so is refuted by the data. Voters faced with an increase in general unemployment do not, on average, increase their support for parties that are most likely to prioritize reducing unemployment (i.e., the left). Personal experience of unemployment, in contrast, does increase support for the left as shown elsewhere (Margalit, 2013, and, looking ahead, in Section 4.4), but this effect is insufficiently large to outweigh the contrary turn toward the right of the more numerous employed voters.

The *economic competence*, *class interests* and *material issue* hypotheses, in contrast, all correctly predict a decrease in support for the left. Such observational equivalence will require different tests in the following sections. At this point, however, we can tentatively conclude two things: Voters do seem to punish left incumbents more than their counterparts on the right during downturns and all potential mechanisms except for *unemployment competence* are compatible with this finding.

4.4 Who votes how?

Up to this point we have simply spoken of voters but not distinguished among them. It is valuable in itself to observe which types of voters respond most strongly. Certain hypotheses, however, most notably *class interests*, suggest a differential response by different voters.

The *class interest* mechanism implies distinct behavior in different income categories. Middle and upper income voters – but not their lower income counterparts – should avoid supporting the left during economic downturns in order to reduce the probability of higher taxes and redistribution when their economic security is most at risk. In contrast, low-income voters should increase their support of left parties in order to benefit from greater redistribution. So long as middle and upper class voters outnumber low-income voters, the net effect should favor the right.

In contrast to *class interests*, the other remaining mechanisms – *economic competence* and *material issues* voting – do not offer clearly falsifiable hypotheses with respect to voters subsets. Neither of these two potential mechanisms is particularly class based and both predict a shift away from the left for voters *in general* during downturns.

Table 4 estimates the logit models and Figure 3 plots out the marginal effects of perceived economic deterioration in sample subsets defined by income, ideology, education and employment status.[7] Only the first (income) is relevant to our test of the *class interests* hypothesis but we include the others for exploratory purposes. The first eight models use economic perceptions and election-study fixed effects like in Table 3. Models (9) and (10), however, use objective aggregate employment data because no CSES election studies have data on both employment status and economic perceptions. The price for this is the loss of fixed effects because there is no variation in aggregate unemployment

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[7]Low, middle and high income correspond to income categories 1-2, 3, and 4-5, respectively; right, centrist and left ideology correspond to left-right self-placement categories of 7-10, 4-6 and 1-3, respectively; Low and high education correspond to education categories 1-3 (completed primary or less) and 8 (completed undergrad degree), respectively; and unemployed and employed correspond to employment status (D2010) categories 5 (unemployed) and 1 (employed full-time, >32 hrs/week), respectively.

within election studies but better estimation across employment status subsamples is not possible given our data.

	(1) Income-low	(2) Income-mid	(3) Income-high	(4) Right	(5) Centrist	(6) Left	(7) Educ-low	(8) Educ-high	(9) Unemployed	(10) Employed
EconDecline	-0.556***	-0.504***	-0.480***	-0.495***	-0.401***	-0.174**	-0.400***	-0.479***		
	(0.042)	(0.054)	(0.038)	(0.055)	(0.037)	(0.065)	(0.064)	(0.069)		
LeftDeviation	0.082*	0.075	0.072*	-0.034	0.085*	0.147*	0.015	0.069	-0.052*	0.014
	(0.036)	(0.050)	(0.036)	(0.047)	(0.037)	(0.061)	(0.060)	(0.068)	(0.025)	(0.030)
*EconDecline * LeftDeviation*	-0.019	-0.023	-0.019	-0.019	-0.029*	-0.018	0.008	-0.009		
	(0.012)	(0.017)	(0.013)	(0.015)	(0.012)	(0.020)	(0.020)	(0.026)		
PolicyDistance	-0.285***	-0.394***	-0.427***	-0.403***	-0.378***	-0.529***	-0.555***	-0.505***	-0.360***	-0.569***
	(0.018)	(0.025)	(0.019)	(0.035)	(0.025)	(0.044)	(0.034)	(0.034)	(0.055)	(0.036)
Age	0.011***	0.008**	0.000	-0.002	0.003	0.011**	0.007	0.003	-0.006	0.008***
	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.004)	(0.004)	(0.007)	(0.002)
Female	0.271***	0.065	0.070	0.331***	0.098	-0.098	0.084	0.015	0.051	0.100
	(0.068)	(0.085)	(0.062)	(0.085)	(0.058)	(0.103)	(0.107)	(0.103)	(0.121)	(0.054)
Education	-0.061*	-0.100***	-0.126***	-0.067*	-0.072***	-0.171***			-0.142**	-0.100**
	(0.025)	(0.029)	(0.019)	(0.028)	(0.019)	(0.034)			(0.051)	(0.031)
Income				0.043	0.058*	0.155***	0.035	0.057	0.080	0.029
				(0.033)	(0.023)	(0.040)	(0.047)	(0.042)	(0.051)	(0.047)
$\Delta Unemployment$									-0.060	-0.020
									(0.100)	(0.109)
$\Delta Unem * LeftDeviation$									0.049***	-0.007
									(0.015)	(0.026)
Constant									0.800	0.353
									(0.454)	(0.254)
Fixed Effects	Election	Election	Election	Election	Election	Election	Election	Election	–	–
N.Obs.	5089	3220	6072	4359	6560	3462	2017	2621	1364	16467
N.Elections	12	12	12	12	12	12	11	12	36	36
N.Countries	11	11	11	11	11	11	10	11	18	18
CorrectPred.(%)	74.99	74.63	71.89	80.82	72.71	84.20	73.48	78.52	71.19	73.24
BIC	5429	3504	6613	3804	7300	2588	2279	2587	1608	17092

Table 4: *Subsets. Perceived economic performance. Perceived economic performance is reverse coded so that higher values represent greater economic deterioration. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors, clustered on election study, in parentheses. CSES Module 1. All observations for models (1) to (8) are subsets of those used in model (3) of Table 3. Models (9) and (10) are subsets of model (4) in Table 1 in the online appendix.*

The marginal effects plots in Figure 3 show how the predicted probability of voting for the governing party changes for the mean respondent (interval covariates set to means, factor covariates set to modes) in eight subsets in response to a unit deterioration in economic perceptions at different levels of governing party leftness.
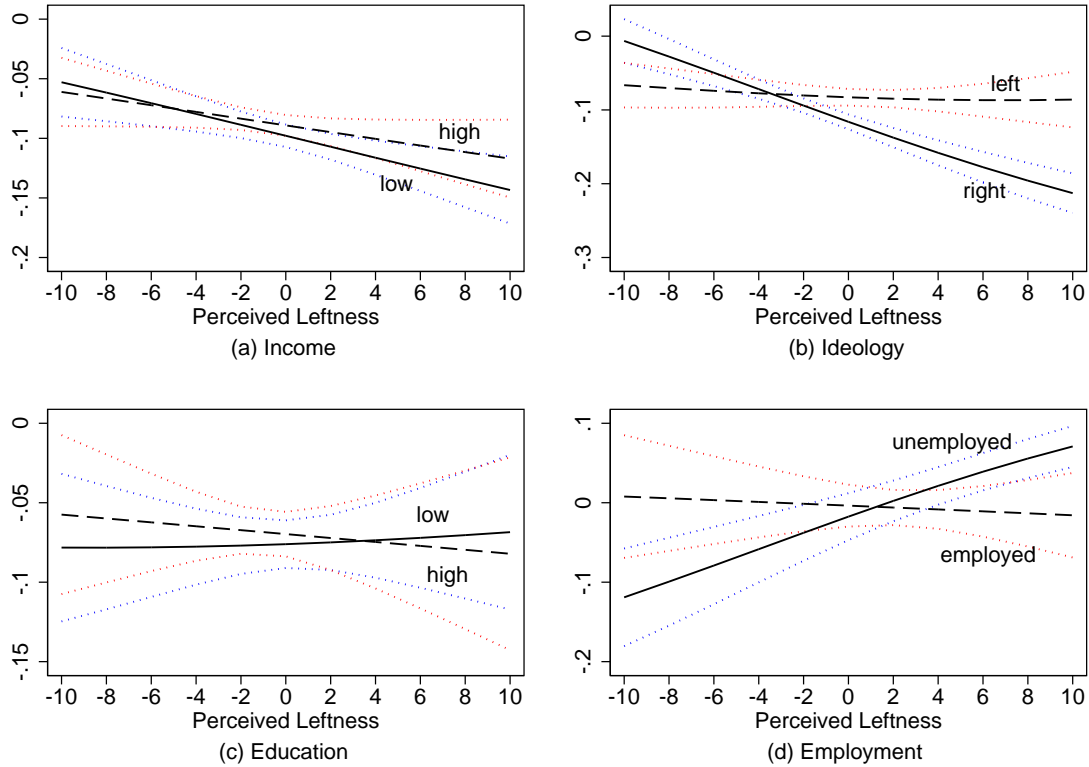

Figure 3: *Marginal effects of an economic downturn on probability of voting for the lead governing party at perceived government positions relative to the median party. Covariates set at means. Figures based on estimates in corresponding models in Table 4. Panels (a) to (c) use economic perceptions. Panel (d) uses aggregate unemployment data because no CSES election studies have data on both employment status and economic perceptions. We use 83.5% confidence intervals to facilitate comparison of the conditional marginal effects from each of the models. 83.5% confidence intervals are the equivalent of 95% intervals for the comparison of two distributions (Maghsoodloo and Huang, 2010).*

For the *class interests* mechanism to function, poor and affluent voters would have to respond differently to economic shocks. If lead parties of the left lose more support than those of the right during downturns because middle and upper income voters shift support to the right in order to avoid higher taxes and redistribution, we would expect to see a difference among the three income groups in Table 4 and the two in Figure 3. We do not. High, middle and low income voters all respond similarly. Even the two

most extreme income groups, high and low income, show no statistically significant or substantively noteworthy difference.

Employment status (panel d), in contrast, does show a difference in voting behavior between the full time employed and the unemployed actively seeking work. Although the difference in the responses between the unemployed and full-time employed are only statistically significant when the governing party is extremely left, the point estimates suggest self-interested behavior. Unemployed respondents are 12% less likely to vote for a governing party of the far right and 8% more likely to vote for a governing party of the far left, following a unit increase in the unemployment rate. This result parallels that of Margalit (2013) who shows that even right-of-center voters in the U.S., are more likely to vote for the left while receiving unemployment benefits but revert to their previous electoral behavior once they are again employed. Respondents do seem to pursue their direct interests, consistent with one variant of the *unemployment competence* hypothesis, in the most directly tangible circumstance – personal unemployment – but not when they simply have low income. The modest magnitude of the unemployed subsample effect, however, and the relatively small number unemployed in all but the most dire economic circumstances yield an overall effect that is outweighed by the rest of the sample. The data refute the *class interests* mechanism. Addressing the remaining mechanisms, however, will require experimental data.

5 Experiment

Up to here, all of our analyses have relied on observational data. Such data enjoy some advantages, most notably external validity, but they also suffer from drawbacks. Violations of mean independence between covariates and errors – endogeneity – may bias results and, no less problematically, some mechanisms can only be tested with difficulty, if at all. The observational data have shown that economic deterioration (a) shifts voter support toward the right, refuting the *unemployment competence* hypothesis, and (b) prompts similar responses among poor and wealthy respondents, rejecting the *class inter-*

ests hypothesis. Left party vote, however, our dependent variable with the observational data, cannot distinguish between types of left governing parties resulting in observational equivalence between the general *economic competence* and *material issue* mechanisms. Both predict weakening support for left incumbents when the economy falters. The observational data that we have also cannot discern differences in the change in support for specific policies when the economy sours. We recognize the limits of these data for differentiating between mechanisms and consequently turn to an experiment.

We strengthen the internal validity of our previous finding and better identify the causal paths driving this regularity with the help of a survey experiment. The experiment suggests that parties' association with *material issues*, not a reputation for general *economic competence*, drives asymmetric partisan accountability during downturns.

5.1 Data

We conducted an online (Qualtrics) survey experiment on 1000 subjects in the United Kingdom recruited via the British micro-tasking platform, Prolific, in November 2018 and June 2019.[8] As discussed in more detail below, we have four treatment groups, each of which we wish to distinguish statistically from the control group. Based on the recentered mean and variance of the control group in the pilot (1.85; .73), we calculate that a sample size of 200 respondents in the control group and in each treatment group would allow us to detect an approximately 0.2 point difference on a seven point scale between the control and treatment group means with a type II (false negative, β) probability of .2 and type I error (false positive, α) probability of .05 (Rosner, 2015).[9]

We excluded three groups from participating: potential participants outside of the UK, those younger than 18 (because they cannot vote) and full-time students (because they are less sensitive to economic conditions). Consistent with our preregistration plan, we

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[8]201 respondents took part in the first wave, 819 in the second and 20 participants were omitted due to incomplete data or implausibly fast completion as outlined in the pre-registered analysis plan. The dual dates reduce the risk that responses were influenced by a common temporal event or context. The first group also served as the pilot.

[9]Assuming both groups have the same size, $n = \frac{(\sigma_1^2 + \sigma_2^2)(z_{1-\alpha/2} + z_{1-\beta})^2}{(|\mu_2 - \mu_1|)^2} = \frac{(.73^2 + .73^2)(1.96 + .84)^2}{.204^2} = 201$.

then removed observations from participants with missing responses on the response variable (8) or the key pre-treatment variables used for covariate balance tests in the online appendix (8). Four further respondents were removed because of an implausible completion time of less than two minutes, a cut-off stipulated in the pre-registration plan.[10] The sample of 1000 remaining participants shows considerable variation in key exogenous covariates (age, education, race/ethnicity and sex) as well as in geographic location (IP address) and ideological self-placement (see summary statistics in the online appendix). This is consistent with research that has found participants on a similar US-based platform, Amazon Mechanical Turk, to be more representative of the US population than both (a) the modal convenience sample in political science experiments (Berinsky, Huber and Lenz, 2012) and (b) at least one commonly used survey panel (Huff and Tingley, 2015). An explicit comparison of Prolific to other micro-tasking platforms has also found it to produce data quality comparable to MTurk's with a more diverse participant pool (Peer et al., 2017). A covariate balance analysis (online appendix) shows that the randomization across the control and treatment groups worked, with the mean of no treatment group statistically significantly deviating from that of the control group for each of four pre-treatment variables plus one political variable of interest.

5.2 Design

Participants were randomly assigned to one of four treatment groups or to the control group. In all groups, they first read a vignette describing two parties, Left and Right, and the policies they proposed. One of the two parties always proposed the status quo and the other either material or non-material policies. Neither party was identified as the incumbent so that we could isolate policy effects from incumbency effects. Given that one party always proposes the status quo, the treatment groups can be identified by the partisanship and type of policies proposed by the other party: (1) Left non-material, (2) Left material, (3) Right non-material and (4) Right material. In a fifth group, the

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[10]An anonymized copy of the preregistration is attached to the appendix. A version with author names will be made available online after publication.

control group, (5) both parties proposed the status quo. We deemed it unrealistic that participants would have no prior associations with parties so we tried to minimize these effects by avoiding specific party names. We nevertheless provided identical baseline (i.e., status quo) policy orientations in all five groups for each party (Left and Right) that accord with typical mainstream left and right parties. As neither party proposes any specific policies in the control group, only the baseline tendencies differentiate them.

We chose the material and non-material policies, which we list in Table 5, for plausibility and to match the partisanship of the party proposing them. The wording that combines the baseline party positions and the treatment policies runs as follows in the example from the pre-recession vignette for the Left non-material treatment group. The full text for all groups is provide in the online appendix.

> (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 boosting 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.

We then remind the participants of the parties' policy proposals and ask them to indicate their vote preference on a 7-point scale ranging from "Strongly prefer LEFT" to "Strongly prefer RIGHT". The order in which the parties are mentioned in the text is randomized.

Next, we informed participants with a second vignette that the economy had deteriorated, ask them a second time for their vote preference on an identical scale, and then take the difference.

> (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

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parties discuss the economy more but you still recall their policies. [Repeat policies]

In an actual election campaign during a recession it is unlikely that a party would emphasize its non-material issue agenda. Parties, however, have longstanding and slow-changing reputations for positions on issues that voters only update very slowly (Adams, Ezrow and Somer-Topcu, 2011). Parties likely shift their emphasis to material issues during a downturn but cannot free themselves from their previous policy associations in the voters' minds. Association with non-material issues, as argued above and also suggested in Figure 5 below, is also stronger for left parties. We also take care to ensure that the type of policy (non-material vs. material) rather than the extremity of the policies drives the results. All of the proposed policies are relatively moderate. Thus, this experiment addresses an ambiguity in the observational studies in the previous section, i.e., whether more extreme left parties are more severely punished during economic downturns because of (a) the extremity of their positions, for example, redistribution or disarmament, or (b) their association with non-material issues. In our experiment, the parties' proposals remain moderate and only the type changes.

Treatment group	Policy
Right non-material	increase teaching of national history
	subsidise preservation of national culture
Left non-material	fund programmes to address race and sex discrimination
	increase international development aid
Right material	lower income tax
	increase funding for job retraining programmes
Left material	increase the job-seekers allowance
	increase welfare benefits for the poor

Table 5: *Treatment group policies*

In sum, we vary the policy proposals associated with left and right governments – material v. non-material policies – and measure the difference in how participants respond to these policies before and after the recession vignette in each of the four treatment conditions and in the control (status quo policies) group. The pre-post difference in each

respondent's vote preference, i.e., how much their preferences shifted toward the right party, is our dependent variable.

5.3 Results

Recall that the primary motivation for this experiment is to discriminate between two rival explanations for the right's electoral advantage in economic downturns that could not be distinguished with observational data in Section 4. Both the *economic competence* and the *material issues* voting hypotheses predict the patterns that emerge in the observational data. As Table 2 in Section 2 lays out, however, the two explanations yield different predictions for our experiment. If voters associate the right with greater economic competence, i.e., if the right "owns" general economic competence as an issue, then respondents' vote intention for the right after the recession vignette should increase regardless of the material vs. non-material policy treatment. The material issues thesis, however, predicts five specific outcomes after respondents are exposed to the recession vignette: no change when the status quo (SQ) is proposed (control group); a shift toward the left party when the right proposes non-material policies; a shift toward the right when the left proposes non-material policies; a shift toward the right when the right proposes material policies and a shift toward the left when the left proposes material policies.

Figure 4 reports the results as the mean first difference in the shift in vote intention toward the right party in each of the four treatment groups and in the control group. Difference-in-differences estimates are identical because the difference in the control group is zero (see the online appendix). The variation in the post-recession direction of the shifts in vote preference – sometimes toward the left, sometimes toward the right – quickly contradicts the predictions of the right *economic competence* hypothesis. The control group shows an effect of precisely zero, not a shift to the right, and two of the four treatment groups also show a leftward shift. We interpret these results as evidence that either the right does not own the issue of general economic competence (which is partly contradicted by Figure 5 below) or that such a reputation is insufficient to outstrip (non)material issue
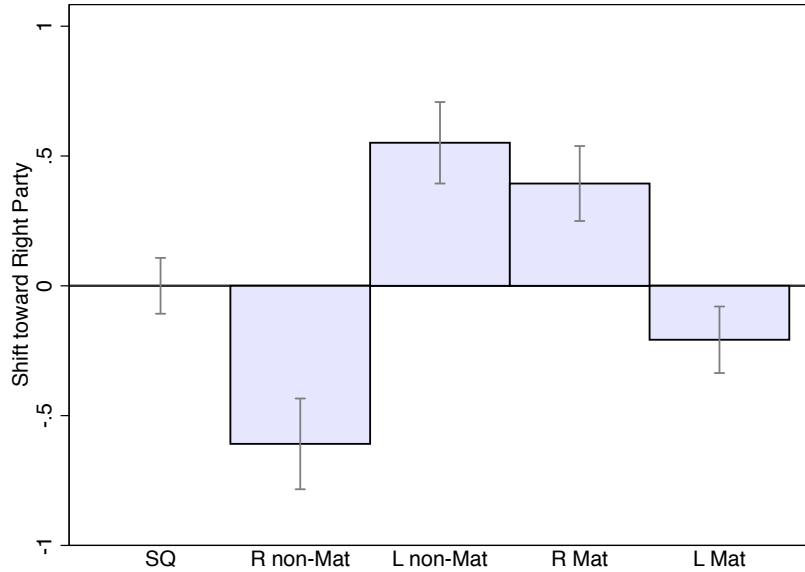
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Figure 4: *Mean change in preference for the Right party following recession vignette across a control and four treatment groups: Status quo (control condition), Right non-material, Left non-material, Right material and Left material. 95% confidence intervals.*

effects.

The pattern of shifts, in contrast, does match the predictions of the *material issues voting* hypothesis. When, as in the status quo control group, neither a new material nor non-material policy is proposed, the post-recession shift is zero. When either the right or left propose non-material policies, they are punished by a meaningfully large (-.61 and +.55 on a 7-point scale, respectively) and statistically significant shift toward the other party. When parties propose material policies, their post-recession-treatment support increases. All of these results are consistent with the expectation of the *material issues voting* hypothesis.

5.4 Issue associations

We tested hypotheses about four potential mechanisms in this paper – *employment competence*, general *economic competence, class interests and material issue voting.* Only the final mechanism is consistent with the data. Yet for *material issue voting* to yield a systematic advantage for the right in downturns, we would need to see that non-material

issues are more associated with the left than with the right. A naïve thought exercise suggests that this is so: it is difficult to think of many non-material issues associated with the right, other than those associated with physical security, a different sort of material well-being. Because most issues associated with the right pertain to material (e.g., economic growth, investment, taxes) or physical security (law and order, military security) they do not qualify as non-material policies. Nor do policies with delayed, long-term benefits (e.g., infrastructure spending, medical research) qualify.

Figure 5 reports on a more systematic approach undertaken later in the survey experiment in which all respondents were asked to indicate (but not rank) how high a priority they considered each of 10 issues on a 10-point scale for the Conservative Party and the Labour Party.[11] We selected six non-material issues that at least occasionally appear in "most important problem" surveys (EuropeanCommission, 2017; Heffington, Park and Williams, 2017) and then added two material issues (economic growth and unemployment benefits). We additionally chose two non-material issues explicitly because they are likely more associated with the right (the preservation of national heritage & culture and the teaching of British history in schools) in order to validate their use in the right non-material treatment group above.

So do respondents associate the left with a higher priority for non-material policies? The respondents assessed six of the eight non-material issues as a higher priority for the Labour Party than for the Conservatives. Only the two that were explicitly chosen for a stronger association with the right and used in the vote preference experiment were rated as having a higher priority for the Conservatives (heritage and history). Neither of these two appear on the most important problem lists.

The material issues in Figure 5 are split between the two parties. The participants, on average, considered the economy a higher priority for the Conservatives and, by an even larger margin, considered welfare a greater priority for the Labour Party. Each party is associated with material policies, albeit different ones, but economic downturns

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[11]The order was randomized: Economic prosperity, social welfare, preserving national heritage and culture, international development aid, arts & culture funding (music, museums, etc.), gender equality, environmental protection, education, teaching British history in state schools, minority rights.
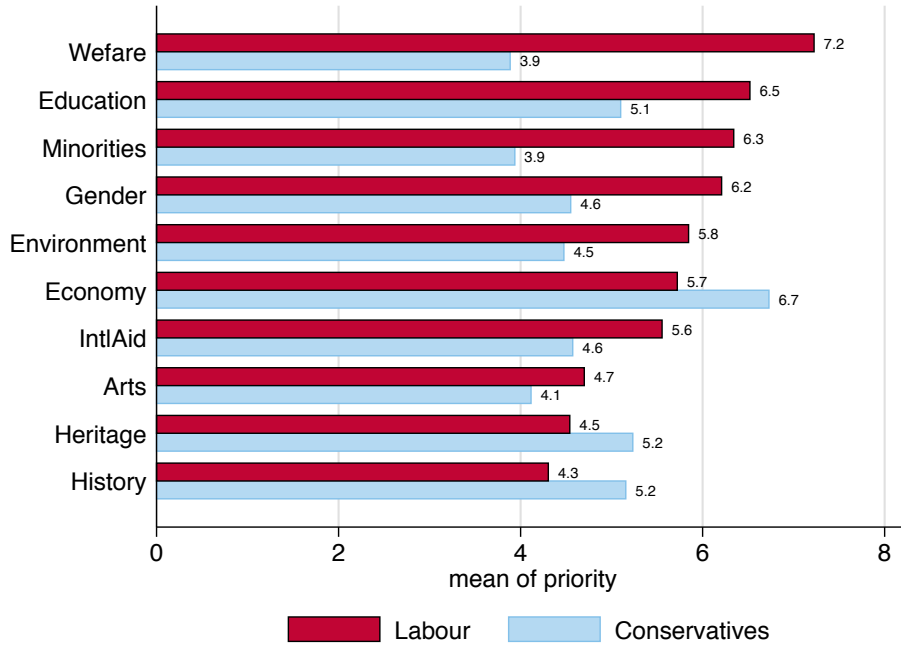
Figure 5: *Respondent mean associations of policy priorities with left (Labour) and right (Conservative) parties.*

shift voters toward parties on the right because the left, unlike the right, is also strongly associated with non-material policies. Conversely, these same policy associations explain the electoral advantage of the left during an expanding economy that is suggested by the same coefficients in the observations data analysis. When voter prosperity increases, concerns about material sustenance attenuate, economic issues lose salience (Singer, 2011) and parties associated with post-material and long-run issues gain.

6   Conclusion

This paper, employing both observation and experimental data, offers the first individual-level evidence to demonstrate across multiple countries that voters drift away from the left in economic downturns. We find evidence for this phenomenon in a model of *material issue* voting but not in rival mechanisms such as a left party reputation for *unemployment competence*, a right party reputation for general *economic competence* or fear of taxation and pursuit of *class interests* by middle and upper class voters. When combined with

the economic vote, this mechanism implies double jeopardy for left governments: they are punished once retrospectively via the economic vote and once prospectively via the material issues vote. During expansions, however, our results imply just the opposite. The implication for politics is not only asymmetric accountability for governments of the right and left for the economy but, given international business cycles, co-movement in government partisanship across countries over time (Kayser, 2009). The implication for research is that studies of the effect of the economy on voting yield an incomplete understanding when they employ economic variation or economic perceptions but neglect party issue associations, as has been the standard practice.

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