

# Supplemental Materials for “What Moves Parties? The Role of Public Opinion and Global Economic Conditions in Western Europe”

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This paper contains supplemental materials for “What Moves Parties? The Role of Public Opinion and Global Economic Conditions in Western Europe” (hereafter Adams-Haupt-Stoll 2007). We initially discuss the substantive significance of the variables from the original Model 1 from Adams-Haupt-Stoll 2007 and provide the variance–covariance matrix of the coefficients for this model. We then both present and discuss additional results. With respect to the latter, most (but not all) build upon Model 1. Models 7–11 and 32–35 are alternative model specifications. Models 12–13 employ a different measure of the public opinion shift variable. (These models must be fit using reduced sets of cases relative to the original due to missing data on the alternative measure.) Models 14–16 re-code the Dutch D66 as a non-leftist (specifically, a liberal) party. Model 17 employs three year running averages of the global economy variables instead of election year values in Model 4. Finally, Models 18–31 are estimated using different sets of cases, including multiply imputed instead of list-wise deleted data sets.

Country–election cycle clustered robust standard errors are reported in parentheses throughout unless otherwise noted. Two significant digits are always carried. Levels of significance are indicated in the tables as follows: significant at the  $\alpha = 0.01$  level, \*\*\*; significant at the  $\alpha = 0.05$  level, \*\*; significant at the  $\alpha = 0.10$  level, \*. All reported significance levels are for two-sided tests and were calculated prior to rounding. Note that a  $t$ -distribution with  $C - 1$  degrees of freedom was employed in hypothesis tests, where  $C$  is the number of clusters (country–election cycles).

## 1 Models Reported in the Original Paper

### 1.1 Substantive Significance

We first provide more information about the substantive significance of the public opinion and global economic conditions variables based on Model 4. Figure 1 displays the predicted conditional effects of the public opinion, total trade, foreign direct investment, and capital flows variables for both leftist and non-leftist parties. The former are plotted in red and the latter in blue. Hatching in the respective colors indicates 95% confidence intervals for the expected party positions. Following standard practice, all other variables are held at their medians. Predictions are shown over the non-outlying range of the observed data for each variable, and the vertical lines indicate their

interquartile ranges.<sup>1</sup> It is apparent from this figure that for centrist and right-wing parties, the estimated effects of changes in public opinion are similar to changes in global economic conditions, at least over the more standard range of the observed data (i.e., the inter-quartile ranges). By contrast, our estimates suggest that neither public opinion nor global economic conditions exert substantively significant effects on left-wing parties' ideological positions over the more standard range of the observed data.

## 1.2 Additional Tables

In Table 1, we present the robust country–election cycle clustered variance-covariance matrix of the coefficients for Model 1.

## 2 Additional Models Discussed in the Original Paper

In this section, we report and discuss the results from various sensitivity analyses and diagnostic tests.

### 2.1 Alternative Model Specifications

We first explore several alternative model specifications.

***Country-specific Intercepts.*** Model 7 in Table 2 reports the results from adding fixed effects (dummy variables) for countries to the pooled model (Model 1). None of the individual country dummies are statistically significant (see footnote *a* of Table 2). Regardless, the parameter estimates for this model support conclusions about our hypotheses that are identical to those reported in Adams-Haupt-Stoll 2006. The one minor difference worth noting is that non-leftist parties are predicted to shift to the right instead of to the left in response to increases in trade. Similar results and hence conclusions to those reported in Adams-Haupt-Stoll 2007 are also obtained from country fixed effects versions of Models 4, 5 and 6, reported as Models 8, 9, and 10 in Table 2. More specifically, minor differences in Model 4 after including country fixed effects (Model 8) are: left-wing parties appear much less responsive than non-leftist parties to public opinion (the coefficient on public opinion is now effectively zero for left-wing parties instead of  $-0.17$ ); non-leftist parties are no longer responsive to trade flows at close to conventional levels of significance; and the responsiveness of leftist and non-leftist parties to changes in capital flows are no longer statistically significant at conventional levels (instead, close to conventional levels of statistical significance are obtained). Hence, including country fixed effects in Model 4 provides stronger support for the public opinion version of the leftist exceptionalism hypothesis but somewhat weaker support for the economic effects version of the leftist exceptionalism hypothesis; however, our overall conclusions remain unaltered. In Model 9, social democratic parties are no longer responsive to changes in capital flows at statistically significant levels, whereas in Model 10, mainstream centrist and right-wing parties are now responsive to changes in capital flows. Hence, including country fixed effects in Models 5 and 6 yields stronger support for our hypotheses.

***Past Election Results.*** Both Budge (1994) and Adams et al. (2004) explore the hypothesis that parties tend to shift their positions in the same direction as they did the last time if they gained

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<sup>1</sup>Using the most common definition of an outlier, this range extends from the first quartile minus 1.5 times the interquartile range to the third quartile plus 1.5 times the interquartile range.

votes in the previous election and in the opposite direction if they lost votes in the previous election. To control for this hypothesized effect, we assigned a party a score of ‘1’ if the party gained votes in the previous election (i.e.,  $t-1$ ) compared to the election before that (i.e.,  $t-2$ ) and a score of ‘-1’ if the party lost votes in the previous election. By interacting this vote gain variable,  $VOTEGAIN_{t-1}$ , with the lagged dependent (previous party shift) variable, we are able to evaluate this hypothesis. A positive and statistically significant coefficient on the interaction term using a one-sided test will support the hypothesis that parties pursue the same ideological strategies that were associated with vote gains in the previous election and that they discard strategies that were associated with vote losses. We add the interaction term along with the vote gain main effect term to the right-hand side of the pooled model (Model 1) and estimate the resulting model. The coefficient estimates from this model are reported in Table 3 as Model 11. Consistent with the results reported in Adams et al. (2004), these estimates do not support the hypothesis that parties adjust their policy positions in response to past election results. Most importantly, though, the parameter estimates continue to support the substantive conclusions reported in Adams-Haupt-Stoll 2007.

**No Lagged Dependent Variable.** Finally, we omit the lagged dependent variable, the previous party shift, from Models 1, 4, 5, and 6. We report these models in Table 11 as Models 32–35, respectively. With respect to the original Model 1, the only major change of note is that the economic effects version of the Leftist Exceptionalism Hypothesis narrowly fails to attain statistical support: the coefficient on the interaction term between the left party dummy variable and the change in foreign direct investment just misses attaining conventional levels of significance. On a more minor note, non-leftist parties are now predicted to shift rightwards in response to increases in trade, and leftist parties are now predicted to be less responsive to increases in trade than their competitors (although as before, the difference is not statistically significant). Our conclusions are unchanged with respect to the original Model 4. With respect to the original Models 5 and 6, social democratic parties’ responsiveness to changes in capital flows now narrowly attains conventional levels of statistical support, making social democratic parties look more responsive to the global economy than was originally the case. On a more minor note, non-leftist mainstream parties are now predicted to shift to the right in response to increases in trade. Hence, all in all, support for the economic effects version of the Leftist Exceptionalism Hypothesis is somewhat reduced by omitting the lagged dependent variable, at least when using change models; no such reduction in empirical support occurs when we instead use levels, however.

## 2.2 Alternative Variable Operationalizations

We next explore the use of another alternative measure of the party shift variable. Then we re-code the party family classification of the Dutch D66 and re-estimate our models. Finally, we employ an alternative operationalization of the three global economy variables.

**Gabel–Huber Vanilla Method Party Shift.** We first explore an alternative method for using party manifestos to estimate parties’ left–right positions: the Gabel–Huber “Vanilla” method (Gabel and Huber 2000).<sup>2</sup> Unfortunately, as with the use of the Laver–Garry based measure reported in the main paper, using this alternative measure of parties’ left–right positions greatly diminishes the size of our data set. As a result, the new data set has less than eighty observations

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<sup>2</sup>The Gabel-Huber “Vanilla” method involves statistically extracting a single dimension from the CMP data using principal factor analysis, which identifies the underlying dimension that best accounts for the observed covariation among the categories included in the CMP’s scheme for coding party manifestos. Data on the “Vanilla” method’s left–right placement of parties is available from John Huber’s website.

of party positional shifts from Britain, France, Denmark, Italy, and the Netherlands (recall that we omitted Luxembourg as part of a list-wise deletion missing data strategy to cope with missing data on the capital flows and FDI economic change variables). To explore whether our substantive conclusions are supported when we use the Gabel–Huber “Vanilla” party placements, we re-estimated the pooled model (Model 1) using this alternative measure of the dependent variable. The results are reported as Model 12 in Table 4. For comparative purposes, we also re-estimated the pooled model using the original, CMP-based measure of party positions and the same reduced data set in order to differentiate changes in estimates due to changes in the sample from changes in estimates due to changes in the measure. These results are reported as Model 13 in the same table.

The key point apparent from a comparison of the parameter estimates from Models 12 and 13 is their general similarity: based on these estimates, our substantive conclusions do not change depending on whether we employ the CMP measure or the Gabel–Huber “Vanilla” measure of the parties’ left–right positions. The parameter estimates based on both sets of measures support the hypothesis that centrist and right-wing parties respond to shifts in public opinion, i.e. the coefficient on the public opinion shift variable is positive and statistically significant in both Models 12 and 13. Furthermore, both sets of parameter estimates support the public opinion version of the Leftist Exceptionalism Hypothesis (H3a), that leftist parties are less responsive to public opinion shifts than are other types of parties; indeed, the estimate based on the “Vanilla” method of placing parties is even more favorable to this hypothesis than is the estimate based on the CMP party placements. Finally, neither the CMP-based parameter estimates nor the “Vanilla”-based parameter estimates on this reduced data set strongly support the Economic Effects Hypothesis (H2).<sup>3</sup> Similarly, neither support the Leftist Exceptionalism version of this hypothesis (H3b) since left-wing parties’ responses to the global economy never differ statistically from non-leftist parties’ responses. The only difference of note is that left-wing parties are estimated to be less responsive to changes in foreign direct investment than non-leftist parties when using the CMP-based measure, and more responsive when using the Gabel–Huber-based measure, even though the difference is statistically insignificant in both cases. The signs on all other coefficients are estimated to be the same. However, given that the CMP-based parameter estimates on the full data set ( $N = 128$ ) support both of these hypotheses and that the parameter estimates on the reduced data set are quite similar for Models 12 and 13, we infer that the lack of support for the economic effects version of the leftist exceptionalism hypothesis reflects changes in the sample rather than changes in our measure of parties’ left–right positions.

***Recoding D66 as ‘Liberal’.*** The CMP codes the Dutch D66 as a social democratic party, which seems to be a mistake. CMP party family codings are supposed to be based on a party’s international affiliations, and D66 affiliates with the Liberal, not the Socialist, International (this information is obtained from D66’s website and confirmed by the membership lists of the two international organizations). Accordingly, we re-code D66 as a non-leftist (and non-social democratic) party. We then re-estimate the key potentially affected models: Models 1, 5, and 6. These results are presented as Models 14–16 in Table 5 below. In Model 14, the economic effects version of the Leftist Exceptionalism Hypothesis (H3b) no longer receives statistical support when D66 is coded as a non-leftist party: the coefficient on the interaction term between the left party dummy variable and the foreign direct investment change variable loses statistical significance. However, leftist parties are still estimated to be less responsive to the global economy than non-leftist parties, even if

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<sup>3</sup>We note that these estimates provide weak support for the Economic Effects Hypothesis (H2), in that both coefficient estimates on the capital flows variable are statistically significant at the  $\alpha = 0.10$  level.

their responses do not differ statistically. We note that leftist parties are also now estimated to be less responsive to changes in trade, whereas with D66 coded as a leftist party in the original Model 1, leftist parties were estimated to be more responsive to changes in trade. In Model 15 (the social democratic model), the public opinion shift variable attains conventional levels of significance using a one-sided test while the change in capital flows variable no longer attains close-to-conventional levels of significance using a two-sided test. Moreover, the magnitude of social democratic parties' response to a change in trade is now estimated to be less than that of mainstream centrist and right-wing parties. Hence, while social democratic parties are estimated to be more responsive to public opinion (but still less responsive than mainstream center and right-wing parties) when D66 is coded as a liberal party, they are less responsive to the global economy. As a minor note, social democratic parties are now predicted to shift to the right in response to increases in trade. All other conclusions remain the same.

***Alternative Measures of the Global Economy.*** Instead of taking the election year value of foreign direct investment, capital flows, and total trade as our measures of these three dimensions of the global economy in Model 4, we employ the running average of each. This operationalization should better capture the country–election trends in the global economy to which parties are hypothesized to respond. The averages are taken over the three year span ranging from the year preceding the election to the year following it. We do not then construct change variables from these averages for use in Models 1, 5 and 6 due to the small sizes of the resulting changes (i.e., calculating the differences of running averages strikes us as over-smoothing the data). We report the results from estimating Model 4 using these alternative measures of the three global economy variables as Model 17 in Table 6 below. Centrist and right-wing parties now display a statistically significant responsiveness to all three dimensions of the global economy (instead of a responsiveness that is significant at close to conventional levels). While left-wing parties are always estimated to be less responsive than non-leftist parties, and to not display a statistically significant responsiveness to the global economy, the parties' responsiveness no longer differs statistically: the interaction term between the left party dummy variable and the average total trade narrowly falls short of attaining conventional levels of significance. Hence, the Leftist Exceptionalism version of the Economic Effects Hypothesis narrowly misses attaining conventional levels of statistical support. On a more minor note, an increase in average foreign direct investment is now predicted to shift left-wing parties rightwards, and an increase in average capital flows to shift them leftwards. All other conclusions are as reported in Adams-Haupt-Stoll 2007.

### 2.3 Case Influence and Diagnostics

Finally, we explore how the exclusion of particular cases affects our conclusions.

***Left–Right Competition.*** We begin by restricting the data set to parties competing along the classic left–right dimension: i.e., omitting parties that the CMP defined as members of the agrarian, ethnic/regional, national, ecology, and special interest party families, which in the case of our data set means eliminating national and special interest parties, since we have no cases of the other types. We then estimate the two affected models using this reduced data set: the pooled model (Model 1) and the mainstream center and right model (Model 6). These results are reported as Models 18 and 19, respectively, in Table 7. They support substantive conclusions identical to those we report in Adams-Haupt-Stoll 2007. The only minor difference of note is in Model 18: left-wing parties are now estimated to be less responsive to changes in trade than non-leftist parties but more responsive to changes in capital flows.

*Time Periods.* To test if any of the relationships that we observe change over time, we divide our sample into two time periods, 1976–89 and 1990–98, and estimate Model 1 separately on each time period. These results are reported as Models 20 and 21, respectively, in Table 7. We chose 1990 as our break point because the 1990s saw globalization accelerate (including European political and economic integration); the fall of communism; and the Third Way arrive on the social democratic scene. Note that our time series is unfortunately too short to pick up the full spectrum of changes that we are confident have occurred. Regardless, even for the roughly twenty year period under analysis here, we uncover intriguing time trends that are in accord with our expectations. To begin, in the earlier period, leftist and non-leftist parties differ statistically in their responsiveness to public opinion but not to the global economy; moreover, neither left nor right-wing parties display a statistically significant responsiveness to the global economy in this period. We also note the greater responsiveness of left-wing parties to changes in both capital flows and foreign direct investment in this period, even if these differences are not statistically significant; all other conclusions drawn on the basis of the pooled sample remain the same. In the later period, our findings are reversed: leftist and non-leftist parties no longer statistically differ in their responsiveness to public opinion, even though left-wing parties are still estimated to be substantively less responsive to it, but do differ statistically in their responsiveness to globalization. Further, increases in trade are now predicted to induce all parties to shift rightwards and increases in foreign direct investment to induce left-wing parties to shift leftwards. All other conclusions drawn on the basis of the pooled sample again remain the same.

*Case Influence Analysis.* Next, examination of the univariate distributions of the independent variables reveal that the distributions of the change in capital flows and foreign direct investment variables are skewed to the right (i.e., towards large increases), each with several high outliers; the distribution of the change in total trade variable is reasonably symmetric with one high and one low outlier; and the distribution of the public opinion shift variable is slightly skewed to the left with one low outlier. A case influence analysis with respect to the key models (Models 1, 4, 5 and 6) uncovers three influential cases, one of which is influential in both Models 1 and 4. Note that we have no reason to believe that these cases should not be allowed to contribute to the analyses, but we report the results obtained from their omission for the sake of completeness.

*Model 1.* No cases are influential with respect to individual regression coefficients (the DFBE-TAS measure of influence). Similarly, no cases are influential with respect to the overall regression (i.e., to all regression coefficients, the Cook’s Distance measure of influence). One case (which happens to have moderate leverage) is influential with respect to the fitted values (the DFFITS measure of influence), however: the Dutch Christian Democrats for 1982–1986. The estimates obtained when this case is deleted are reported as Model 22 in Table 8. The estimated coefficient on the change in total trade main effect term is increased from  $-0.0017$  to  $0.014$  (an increase in absolute value). The estimated coefficient on the interaction term between the change in total trade and left party dummy variables is decreased from  $-0.0067$  to  $-0.018$  (an increase in absolute value). Hence, it is non-leftist parties, not leftist parties, who are now predicted to be more responsive to changes in total trade, and non-leftist parties are now predicted to shift to the right in response to increases in trade instead of to the left. No meaningful changes in the other estimated coefficients are observed when this case is dropped. Hence, our substantive conclusions are identical to those reported in Adams-Haupt-Stoll 2007.

*Model 4.* One case is identified as influential with respect to the fitted values (the DFFITS measure of influence): the British Labour party for 1992–1997. No other cases are influential using

any of the three standard measures of influence. The estimates obtained when this case is deleted are reported as Model 23 in Table 8. The coefficient estimates and estimated standard errors are nearly identical to those obtained in the original Model 4, so the substantive conclusions reported in Adams-Haupt-Stoll 2007 are unchanged by dropping this case.

*Model 5.* One case is identified as influential with respect to the foreign direct investment and capital flows change variables (the DFBETAS measure of influence), as well as with respect to the fitted values (the DFFITS measure of influence): the Spanish Socialists for 1989–1993. No other cases are influential using any of the three standard measures of influence. The estimates obtained when this case is deleted are reported as Model 24 in Table 8. Both the foreign direct investment and capital flows change variables now attain conventional levels of significance for social democratic parties. In fact, taking both the statistical significance and the magnitude of variables into account, social democratic parties are estimated to be more responsive to the global economy than mainstream centrist and right-wing parties when this case is omitted, providing support for neo-liberal convergence arguments that paint left-wing (and especially social democratic) parties as being under the greatest pressure from globalization, in spite of their flexibility-inhibiting characteristics. However, we note that the estimated leftward shifts of social democratic parties in response to increases in both trade and capital flows are inconsistent with convergence arguments. All other conclusions are as reported in Adams-Haupt-Stoll 2007.

*Model 6.* Finally, the same case that was identified as influential in Model 1 with respect to the fitted values, the Dutch Christian Democrats for 1982–1986, is also influential with respect to the fitted values in Model 6. No other cases are influential using any of the three standard measures of influence. The estimates obtained when this case is deleted are reported as Model 25 in Table 8. Increases in trade are now predicted to influence mainstream centrist and right-wing parties to shift to the right instead of to the left and the coefficient on the capital flows change variable is now statistically significant at conventional levels, indicating greater responsiveness on the part of mainstream, non-leftist parties to the global economy. Our remaining conclusions are unaltered by the omission of this case.

***Multiple Imputation.*** We next employ multiple imputation as an alternative to the list-wise deletion missing data strategy. We note that our missing data is most likely missing completely at random, and since inferences based on list-wise deletion are unbiased in this case, list-wise deletion is a reasonable strategy even though multiple imputation is more efficient (see King, Honaker, Joseph and Scheve 2001). We use AMELIA II (Honaker and King N. d.; Honaker, King, and Blackwell N. d.) to perform the multiple imputations. The results from estimating the four key original models (Models 1, 4, 5, and 6) using multiply imputed instead of list-wise deleted data is shown as Models 26, 27, 28, and 29 in Table 9.<sup>4</sup> The multiple imputation missing data strategy yields results that are similar to those obtained using the list-wise deletion strategy, with the exception of the pooled level model (Model 4).

With respect to Model 1 (Model 26), the only differences worth noting from the conclusions reported in Adams-Haupt-Stoll 2007 are minor: non-leftist parties are now predicted to shift to the right instead of to the left in response to increases in trade, and left-wing parties are now predicted to be less responsive to changes in trade than non-leftist parties. Hence, stronger support

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<sup>4</sup>The estimates appearing in Table 9 were produced as follows (King, Honaker, Joseph and Scheve 2001, 53): five multiply imputed data sets were constructed; the model was estimated using each of these data sets; each point estimate was calculated by averaging across the five separate estimates; and each estimated standard error was calculated by taking the average of the five separate estimates plus the variance in the point estimates across the five data sets multiplied by a factor that corrects for bias.

is provided for the economic effects version of the Leftist Exceptionalism hypothesis. For Model 4 (Model 27), while left-wing parties are still always estimated to be less responsive to changes in the global economy than non-leftist parties, the differences in the responses are no longer statistically significant at conventional levels. Hence, statistical support is no longer provided for the economic effects version of the Leftist Exceptionalism hypothesis. All other conclusions reported in Adams-Haupt-Stoll 2007 are unaltered by the use of multiple imputation as a missing data strategy. For Models 5 and 6 (Models 28 and 29, respectively), all conclusions reported in Adams-Haupt-Stoll 2007 remain supported. While social democratic parties now display a close to statistically significant response to both changes in public opinion and foreign direct investment, as well as a statistically significant response to changes in capital flows, the magnitude of their response is always substantially less than that of mainstream centrist and right-wing parties, with the exception of changes in capital flows, where their response is of a greater magnitude. Hence, social democratic parties appear more responsive to both public opinion and the global economy when employing multiple imputation than list-wise deletion, but generally still less responsive than mainstream centrist and right-wing parties. On a minor note, mainstream centrist and right-wing parties are now predicted to shift rightwards in response to increases in trade instead of leftwards.

**All Parties.** Next, instead of confining our analysis to *politically significant* parties, we estimate Model 1 using *all* parties included in the CMP that meet our remaining selection criteria. The results from this model, which we label Model 30, are shown in Table 10. While left-wing parties are still estimated to be less responsive than non-leftist parties to two out of the three global economic factors (specifically, however, to changes in trade instead of to changes in capital flows), and to not display a statistically significant responsiveness to the global economy, the parties' responsiveness no longer differs statistically: the interaction term between the left party dummy variable and the change in foreign direct investment falls short of attaining conventional levels of significance. Hence, the Leftist Exceptionalism version of the Economic Effects Hypothesis fails to attain conventional levels of statistical support. All other conclusions are as reported in Adams-Haupt-Stoll 2007.

**Governing Parties.** Next, we estimate Model 1 using a sub-set of our original cases: specifically, only the parties that participated in government during the period we study. The results from this model, which we label Model 31, are shown in Table 10. Surprisingly enough, nearly identical conclusions are drawn to those we draw when estimating Model 1 on all parties (Model 30). While left-wing parties are still estimated to be less responsive than non-leftist parties to two out of the three global economic factors (specifically, however, to changes in trade instead of to changes in capital flows), and to not display a statistically significant responsiveness to the global economy, the parties' responsiveness no longer differs statistically: the interaction term between the left party dummy variable and the change in foreign direct investment falls short of attaining conventional levels of significance. Hence, the Leftist Exceptionalism version of the Economic Effects Hypothesis fails to attain conventional levels of statistical support. All other conclusions are as reported in Adams-Haupt-Stoll 2007.

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	$\beta_0$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$	$\beta_5$	$\beta_6$	$\beta_7$	$\beta_8$	$\beta_9$	$\beta_{10}$
$\beta_0$	0.0099										
$\beta_1$	-0.0085	0.015									
$\beta_2$	0.0083	-0.012	0.039								
$\beta_3$	-0.010	0.018	-0.040	0.079							
$\beta_4$	-0.0028	-0.0018	0.0060	-0.0053	0.0085						
$\beta_5$	-0.00018	-0.000014	0.00085	-0.00053	0.00052	0.00020					
$\beta_6$	0.00012	0.00014	-0.00045	-0.00020	-0.00035	-0.00014	0.00020				
$\beta_7$	-0.0017	0.00044	0.00095	-0.0013	0.0019	0.000094	-0.00013	0.0012			
$\beta_8$	0.00058	-0.0010	-0.0018	0.0014	-0.0014	-0.00015	-0.000059	-0.00033	0.0019		
$\beta_9$	0.00025	0.00015	-0.00033	0.00043	-0.00054	-0.000011	0.000038	-0.00034	0.000022	0.00013	
$\beta_{10}$	0.00012	-0.00031	0.00061	-0.00070	0.00045	0.000037	-0.0000098	0.000058	-0.00040	-0.0000015	0.00016

Table 1: Estimated variance-covariance matrix of coefficients for Model 1, each covariance rounded to two significant digits.

	Cntry Dum., Model 1 (Mod. 7) <sup>a</sup>	Cntry Dum., Model 4 (Mod. 8)	Cntry Dum., Model 5 (Mod. 9)	Cntry Dum., Model 6 (Mod. 10)
Intercept	0.093 (0.18)	0.15 (1.6)	0.36 (0.53)	0.089 (0.15)
left	0.26** (0.12)	1.8* (0.93)		
public opinion shift <sub>(t)</sub>	1.0*** (0.22)	0.54** (0.26)	0.45 (0.31)	1.1*** (0.26)
public opinion shift <sub>(t)</sub> × left	-0.83*** (0.27)	-0.57*** (0.21)		
party shift <sub>(t-1)</sub>	-0.54*** (0.086)	0.55*** (0.055)	-0.67*** (0.18)	-0.41*** (0.093)
change in trade <sub>(t)</sub>	0.00060 (0.014)	-0.0054 (0.011)	-0.0016 (0.011)	-0.0018 (0.014)
change in trade <sub>(t)</sub> × left	-0.0035 (0.013)	0.011** (0.0048)		
change in fdi <sub>(t)</sub>	0.11*** (0.037)	0.12* (0.061)	0.052 (0.079)	0.12*** (0.038)
change in fdi <sub>(t)</sub> × left	-0.094** (0.040)	-0.14** (0.064)		
change in capflows <sub>(t)</sub>	-0.024* (0.012)	-0.022* (0.032)	-0.035 (0.025)	-0.025** (0.012)
change in capflows <sub>(t)</sub> × left	0.0019 (0.011)	0.025* (0.012)		
<i>n</i>	128	166	37	68
<i>C</i> - 1 (df)	30	38	30	30
Root MSE	0.61	0.61	0.58	0.42
<i>R</i> <sup>2</sup>	0.39	0.67	0.47	0.61

Table 2: Estimated coefficients and robust standard errors (country–election cycle clustered) for four alternative model specifications: country fixed effects versions of Models 1, 4, 5 and 6 (Models 7–10). Country fixed effects only shown for Model 7, where Britain serves as the baseline.

<sup>a</sup>With Britain serving as the baseline country, the estimated coefficients and robust standard errors (in parentheses) on the six country dummy variables are: Denmark, -0.28 (0.22); France, -0.12 (0.22); Greece, -0.17 (0.29); Italy, 0.031 (0.28); Netherlands, 0.015 (0.20); and Spain, -0.011 (0.38).

	Past Election (Mod. 11)
Intercept	-0.0095 (0.098)
left	0.27** (0.12)
public opinion shift <sub>(t)</sub>	1.0*** (0.20)
public opinion shift <sub>(t)</sub> × left	-0.78*** (0.24)
party shift <sub>(t-1)</sub>	-0.50*** (0.088)
change in trade <sub>(t)</sub>	-0.0026 (0.015)
change in trade <sub>(t)</sub> × left	-0.0021 (0.013)
change in fdi <sub>(t)</sub>	0.13*** (0.038)
change in fdi <sub>(t)</sub> × left	-0.11** (0.043)
change in capflows <sub>(t)</sub>	-0.027** (0.013)
change in capflows <sub>(t)</sub> × left	0.0040 (0.013)
vote gain <sub>(t-1)</sub>	0.11 (0.073)
vote gain <sub>(t-1)</sub> × party shift <sub>(t-1)</sub>	-0.049 (0.081)
<i>n</i>	128
<i>C</i> - 1 (df)	30
Root MSE	0.60
<i>R</i> <sup>2</sup>	0.38

Table 3: Estimated coefficients and robust standard errors (country–election cycle clustered) for an alternative model specification (Model 11) that controls for past election results.

	Gabel-Huber Estimates (Mod. 12)	CMP Estimates, Gabel-Huber Cases (Mod. 13)
Intercept	0.028 (0.086)	-0.00084 (0.14)
left	0.18 (0.17)	0.26 (0.16)
public opinion shift <sub>(t)</sub>	1.0*** (0.32)	1.4*** (0.43)
public opinion shift <sub>(t)</sub> × left	-1.3*** (0.42)	-0.93* (0.48)
party shift <sub>(t-1)</sub>	-0.34*** (0.086)	-0.43*** (0.12)
change in trade <sub>(t)</sub>	-0.016 (0.0099)	-0.0094 (0.013)
change in trade <sub>(t)</sub> × left	-0.0023 (0.011)	-0.0024 (0.013)
change in fdi <sub>(t)</sub>	0.060 (0.044)	0.11 (0.069)
change in fdi <sub>(t)</sub> × left	0.070 (0.11)	-0.031 (0.069)
change in capflows <sub>(t)</sub>	-0.033* (0.019)	-0.050* (0.024)
change in capflows <sub>(t)</sub> × left	-0.017 (0.035)	-0.0075 (0.024)
<i>n</i>	77	77
<i>C</i> - 1 (df)	17	17
Root MSE	0.60	0.58
<i>R</i> <sup>2</sup>	0.31	0.40

Table 4: Estimated coefficients and robust standard errors (country–election cycle clustered) for one model (Model 12) that employs the Gabel–Huber-based measure of party positioning and one model (Model 13) that employs the original CMP-based measure but comparable cases.

	D66 Recode, Model 1 (Mod. 14)	D66 Recode, Model 5 (Mod. 15)	D66 Recode, Model 6 (Mod. 16)
Intercept	0.013 (0.098)	0.28** (0.12)	-0.24 (0.087)
left	0.22* (0.12)		
public opinion shift <sub>(t)</sub>	0.96*** (0.20)	0.53* (0.27)	1.0*** (0.19)
public opinion shift <sub>(t)</sub> × left	-0.72** (0.30)		
party shift <sub>(t-1)</sub>	-0.49*** (0.092)	-0.60*** (0.19)	-0.35*** (0.10)
change in trade <sub>(t)</sub>	-0.0068 (0.014)	0.0054 (0.018)	-0.0068 (0.014)
change in trade <sub>(t)</sub> × left	0.0097 (0.015)		
change in fdi <sub>(t)</sub>	0.11*** (0.037)	0.093 (0.064)	0.12*** (0.038)
change in fdi <sub>(t)</sub> × left	-0.075 (0.049)		
change in capflows <sub>(t)</sub>	-0.028** (0.012)	-0.035 (0.022)	-0.027** (0.012)
change in capflows <sub>(t)</sub> × left	0.0092 (0.012)		
<i>n</i>	128	31	74
<i>C</i> - 1 (df)	30	30	30
Root MSE	0.61	0.59	0.59
<i>R</i> <sup>2</sup>	0.34	0.42	0.36

Table 5: Estimated coefficients and robust standard errors (country–election cycle clustered) for three models (Models 14–16) that utilize the re-coded Dutch D66 case.

	Economic Averages (Mod. 17)
Intercept	1.0 (0.96)
left	1.7* (0.94)
public opinion shift <sub>(t)</sub>	0.41*** (0.18)
public opinion shift <sub>(t)</sub> × left	−0.54** (0.20)
party shift <sub>(t−1)</sub>	0.56*** (0.058)
change in trade <sub>(t)</sub>	−0.0079** (0.0037)
change in trade <sub>(t)</sub> × left	0.0090* (0.0045)
change in fdi <sub>(t)</sub>	0.13** (0.064)
change in fdi <sub>(t)</sub> × left	−0.12 (0.081)
change in capflows <sub>(t)</sub>	−0.029** (0.014)
change in capflows <sub>(t)</sub> × left	0.023 (0.017)
<i>n</i>	160
<i>C</i> − 1 (df)	37
Root MSE	0.62
<i>R</i> <sup>2</sup>	0.64

Table 6: Estimated coefficients and robust standard errors (country–election cycle clustered) for a version of Model 4 that employs alternative measures of the global economy variables (Model 17).

	L-R Parties, Model 1 (Mod. 18)	L-R Parties, Model 6 (Mod. 19)	1976–89, Model 1 (Mod. 20)	1990–98, Model 1 (Mod. 21)
Intercept	−0.051 (0.085)	−0.048 (0.085)	0.037 (0.14)	−0.035 (0.17)
left	0.30*** (0.11)		0.15 (0.17)	0.25 (0.22)
public opinion shift <sub>(t)</sub>	1.1*** (0.17)	1.1*** (0.18)	1.4*** (0.32)	0.80* (0.37)
public opinion shift <sub>(t)</sub> × left	−0.88*** (0.24)		−1.1*** (0.32)	−0.41 (0.79)
party shift <sub>(t−1)</sub>	−0.53*** (0.095)	−0.44*** (0.097)	−0.31*** (0.10)	−0.67*** (0.11)
change in trade <sub>(t)</sub>	−0.0074 (0.011)	−0.0060 (0.011)	−0.0013 (0.016)	0.044 (0.033)
change in trade <sub>(t)</sub> × left	0.0030 (0.010)		−0.014 (0.017)	0.028 (0.065)
change in fdi <sub>(t)</sub>	0.11*** (0.031)	0.12*** (0.032)	0.082 (0.077)	0.074*** (0.024)
change in fdi <sub>(t)</sub> × left	−0.086** (0.036)		0.0023 (0.087)	−0.085** (0.039)
change in capflows <sub>(t)</sub>	−0.017* (0.010)	−0.018* (0.010)	−0.050* (0.024)	−0.0061 (0.0059)
change in capflows <sub>(t)</sub> × left	−0.0048 (0.011)		−0.0032 (0.027)	0.0024 (0.012)
<i>n</i>	117	63	76	52
<i>C</i> − 1 (df)	30	30	18	12
Root MSE	0.57	0.58	0.58	0.63
<i>R</i> <sup>2</sup>	0.39	0.41	0.32	0.53

Table 7: Estimated coefficients and robust standard errors (country–election cycle clustered) for four models (Models 18–21) that are estimated using different sets of cases.



	Infl. Case, Model 1 (Mod. 22)	Infl. Case, Model 4 (Mod. 23)	Infl. Case, Model 5 (Mod. 24)	Infl. Case, Model 6 (Mod. 25)
Intercept	-0.026 (0.099)	1.0 (0.87)	0.23** (0.11)	-0.068 (0.085)
left	0.28** (0.12)	1.8* (0.88)		(0.12)
public opinion shift <sub>(t)</sub>	1.1*** (0.19)	0.38** (0.17)	0.41 (0.27)	1.1*** (0.19)
public opinion shift <sub>(t)</sub> × left	-0.85*** (0.26)	-0.56*** (0.18)		
party shift <sub>(t-1)</sub>	-0.49** (0.086)	0.58** (0.051)	-0.51*** (0.16)	-0.38*** (0.095)
change in trade <sub>(t)</sub>	0.014 (0.017)	-0.0073* (0.0038)	-0.010 (0.012)	0.014 (0.016)
change in trade <sub>(t)</sub> × left	-0.018 (0.016)	0.010** (0.0044)		
change in fdi <sub>(t)</sub>	0.12*** (0.033)	0.11* (0.058)	0.15*** (0.049)	0.12*** (0.033)
change in fdi <sub>(t)</sub> × left	-0.093** (0.040)	-0.14** (0.066)		
change in capflows <sub>(t)</sub>	-0.024** (0.011)	-0.024* (0.012)	-0.066*** (0.015)	-0.023** (0.011)
change in capflows <sub>(t)</sub> × left	0.0020 (0.012)	0.028** (0.013)		
<i>n</i>	127	165	37	67
<i>C</i> - 1	30	28	29	30
Root MSE	0.60	0.62	0.52	0.59
<i>R</i> <sup>2</sup>	0.37	0.66	0.48	0.42

Table 8: Estimated coefficients and robust standard errors (country–election cycle clustered) for four models (Models 22–25) that are estimated using different cases: specifically, with influential cases dropped.

	M.I. Model 1 (Mod. 26)	M.I. Model 4 (Mod. 27)	M.I. Model 5 (Mod. 28)	M.I. Model 6 (Mod. 29)
Intercept	0.024 (0.091)	1.1 (0.90)	0.27*** (0.11)	-0.010 (0.080)
left	0.19** (0.11)	1.8** (0.91)		
public opinion shift <sub>(t)</sub>	1.1*** (0.19)	0.32** (0.16)	0.41* (0.26)	1.2*** (0.19)
public opinion shift <sub>(t)</sub> × left	-0.99*** (0.28)	-0.47*** (0.18)		
party shift <sub>(t-1)</sub>	-0.45*** (0.080)	0.57*** (0.050)	-0.54*** (0.16)	-0.36*** (0.085)
change in trade <sub>(t)</sub>	0.0094 (0.011)	-0.0018* (0.0014)	-0.0060 (0.010)	0.0078 (0.010)
change in trade <sub>(t)</sub> × left	-0.0099 (0.010)	0.0012 (0.0018)		
change in fdi <sub>(t)</sub>	0.12*** (0.035)	0.059 (0.047)	0.079* (0.058)	0.14*** (0.034)
change in fdi <sub>(t)</sub> × left	-0.090** (0.044)	-0.068 (0.059)		
change in capflows <sub>(t)</sub>	-0.026*** (0.011)	-0.014* (0.010)	-0.037** (0.019)	-0.025*** (0.011)
change in capflows <sub>(t)</sub> × left	0.0019 (0.014)	0.015 (0.012)		
<i>n</i>	151	188	42	82
<i>C</i> - 1 (df)	43	35	35	35

Table 9: Estimated coefficients and robust standard errors (country–election cycle clustered) for four models (Models 26–29) estimated using multiply-imputed instead of list-wise deleted data.

	All Parties Model 1 (Mod. 30)	Governing Parties Model 1 (Mod. 31)
Intercept	0.057 (0.10)	-0.072 (0.097)
left	0.12 (0.11)	0.31** (0.12)
public opinion shift <sub>(t)</sub>	0.92*** (0.24)	1.1*** (0.21)
public opinion shift <sub>(t)</sub> × left	-0.84** (0.33)	-0.67** (0.26)
party shift <sub>(t-1)</sub>	-0.49*** (0.074)	-0.44*** (0.091)
change in trade <sub>(t)</sub>	-0.0029 (0.014)	-0.0080 (0.011)
change in trade <sub>(t)</sub> × left	0.00033 (0.013)	0.0037 (0.011)
change in fdi <sub>(t)</sub>	0.11*** (0.027)	0.14*** (0.040)
change in fdi <sub>(t)</sub> × left	-0.048 (0.041)	-0.046 (0.067)
change in capflows <sub>(t)</sub>	-0.038*** (0.0082)	-0.032** (0.013)
change in capflows <sub>(t)</sub> × left	-0.0012 (0.013)	-0.011 (0.023)
<i>n</i>	171	95
<i>C</i> - 1 (df)	31	30
Root MSE	0.58	0.57
<i>R</i> <sup>2</sup>	0.34	0.41

Table 10: Estimated coefficients and robust standard errors (country–election cycle clustered) for two versions of Model 1 estimated using different sets of cases (Models 30–31).

	No Lag Model 1 (Mod. 32)	No Lag Model 4 (Mod. 33)	No Lag Model 5 (Mod. 34)	No Lag Model 6 (Mod. 35)
Intercept	-0.020 (0.11)	3.21*** (0.77)	0.19* (0.11)	-0.036 (0.096)
left	0.21 (0.15)	2.5*** (0.89)		
public opinion shift <sub>(t)</sub>	1.2*** (0.29)	0.69*** (0.16)	0.44 (0.31)	1.2*** (0.27)
public opinion shift <sub>(t)</sub> × left	-0.99** (0.32)	-0.91*** (0.19)		
party shift <sub>(t-1)</sub>				
change in trade <sub>(t)</sub>	0.0057 (0.014)	-0.011*** (0.0040)	-0.0054 (0.011)	0.0050 (0.013)
change in trade <sub>(t)</sub> × left	-0.0081 (0.013)	0.012** (0.0054)		
change in fdi <sub>(t)</sub>	0.14*** (0.043)	0.11* (0.056)	0.11 (0.076)	0.14*** (0.043)
change in fdi <sub>(t)</sub> × left	-0.12* (0.061)	-0.088 (0.064)		
change in capflows <sub>(t)</sub>	-0.027** (0.013)	-0.027** (0.012)	-0.050** (0.024)	-0.026* (0.013)
change in capflows <sub>(t)</sub> × left	0.0055 (0.019)	0.022* (0.011)		
<i>n</i>	128	167	37	68
<i>C</i> - 1 (df)	30	38	30	30
Root MSE	0.68	0.74	0.63	0.64
<i>R</i> <sup>2</sup>	0.19	0.50	0.20	0.30

Table 11: Estimated coefficients and robust standard errors (country–election cycle clustered) for versions of Models 1, 4, 5 and 6 that drop the lagged dependent variable (Models 32–35).

### Conditional Effects of Four Variables

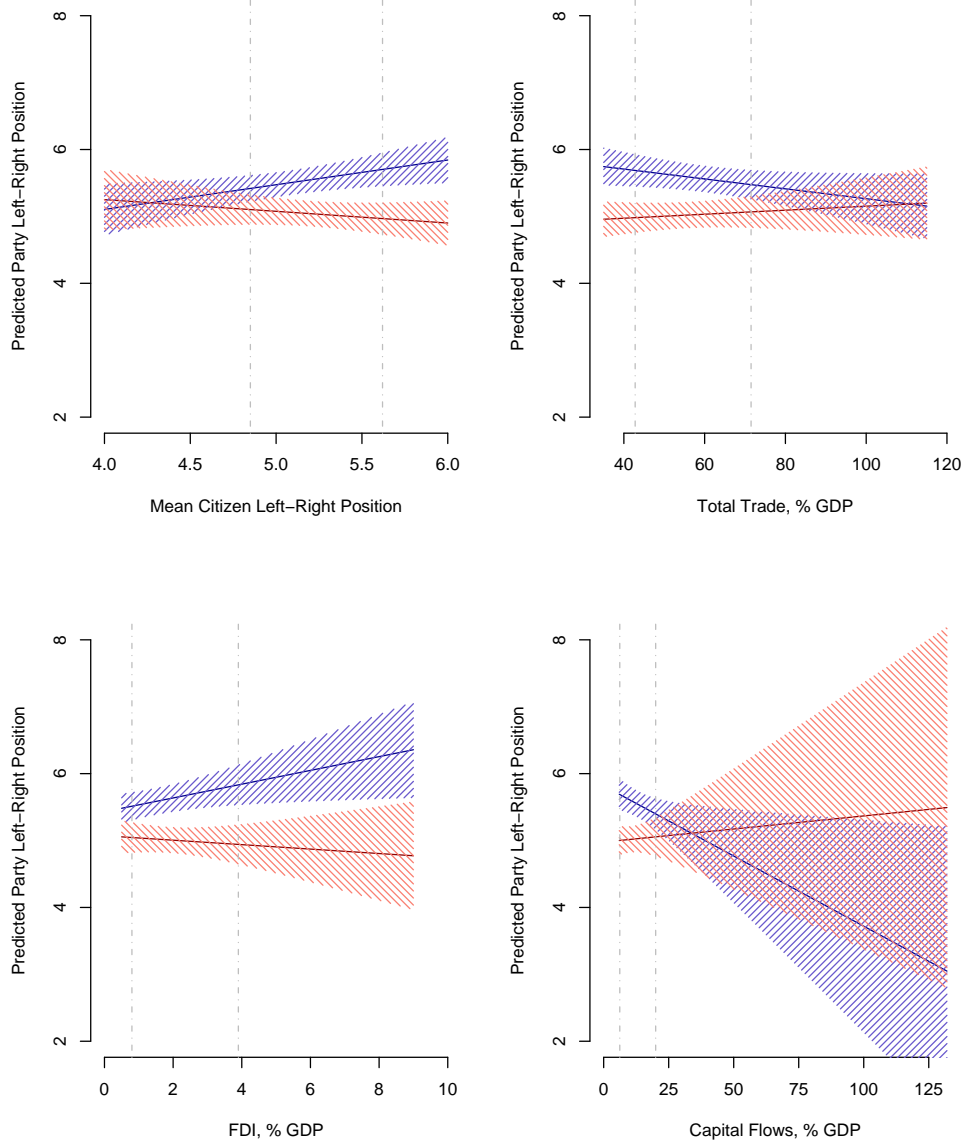


Figure 1: The estimated conditional effects of the public opinion and global economy variables upon parties' predicted ideological positions along the left-right dimension from Model 4, all other variables held at their medians. Left-wing parties are plotted in red and non-left wing parties in blue, with hatching indicating 95% confidence intervals. Vertical lines denote the inter-quartile ranges.