

Supplemental Materials

Replication data can be obtained at <http://brandonpark.net/research>. Supplemental materials for this article are available with the manuscript on the *Political Research Quarterly* (PRQ) website.

Dynamic Specification

To arrive at the best dynamic specification for the relationship between government vote and sanctions, I apply the ‘general to specific’ modeling strategy suggested by Hendry (1995) and DeBoef and Keele (2008). With the baseline model, I include an arbitrarily large number of lags of all variables to consider higher order dynamic specifications. For instance, I include four years of lag for *sanction* variable (i.e., $t-1$, $t-2$, $t-3$, and $t-4$ of *sanction*) and two years of lag for all other variables. I then iteratively test restrictions on the general model. For each time a variable is removed in the general model, I check for serial correlation.

This strategy helps identify the model that best approximates the data generating process by choosing the model that is sufficient in that the model does not omit necessary lags such that there is un-modeled serial correlation in the residuals, and parsimonious, in that the model does not include any unnecessary lags. This test leads me to include one year lagged values of variables such as *vote share*, *sanction*, *democracy*, *GDP growth rate*, *trade*, *opposition fractionalization*, and *protest*, and contemporaneous values for *GDP per capita*, *ethnic fractionalization*, *international conflict*, *civil war*.

For robustness, I also follow the restrictions of the Autoregressive Distributed lag (ADL) General Dynamic Model, proposed by DeBoef and Keele (2008). Table A.3 shows the list of restrictions of the ADL General Dynamic Model. First, I begin with a general model, then apply each restriction, which is tested in the context of the ADL using t -tests or F -tests. To decide if the static model is consistent with the data generating process, I estimate the ADL and conduct a t -test on $\alpha_1 = \beta_1 = 0$. If I fail to reject the null, then I can proceed to draw inference from the static model, assured that the restriction is valid. If I reject the null, then I test alternate restrictions or proceed with an analysis of the general model (DeBoef and Keele 2008). The result of the restriction tests indicates that Dead Start is the best practice. More specifically, the t -tests reject the null of PA and Static models, but fail to reject the null of Dead Start, which suggests that the Dead Start specification is appropriate.

Table A.3: Restrictions of the ADL General Dynamic Model

| Type | ADL Model | Restriction |
|--------------------|---|--------------------------|
| General | $Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \beta_1 X_{t-1} + \varepsilon_t$ | None |
| Partial Adjustment | $Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \varepsilon_t$ | $\beta_1 = 0$ |
| Static | $Y_t = \alpha_0 + \beta_0 X_t + \varepsilon_t$ | $\alpha_1 = \beta_1 = 0$ |
| Dead Start | $Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_1 X_{t-1} + \varepsilon_t$ | $\beta_0 = 0$ |

Note: DeBoef and Keele (2008: 187)

Table A.4: The Effect of Sanctions on Government Vote conditioned on the Cost of Sanction

| | Model 11 |
|------------------------------------|----------------------|
| Previous Vote Share | 0.184** (0.071) |
| Sanction | 23.51 (18.29) |
| Democracy | 0.232 (0.840) |
| Cost of Sanction | 0.163 (2.142) |
| Sanction \times Democracy | -1.447 (1.809) |
| Sanction \times Cost of Sanction | -10.84*** (3.847) |
| Multiple Sender | -0.063 (0.600) |
| USA Sender | 2.802 (2.430) |
| GDP Growth Rate (%) | 0.049 (0.230) |
| GDP (per capita/log) | 10.48*** (2.712) |
| Trade (% of GDP) | 0.101*** (0.026) |
| Ethnic fract. | 10.30** (4.357) |
| Opposition fract. | 12.60*** (4.422) |
| Interstate Armed Conflict | 0.823 (1.744) |
| Civil War | 1.051 (1.338) |
| Protest | -0.005 (0.272) |
| Constant | -81.27*** (25.04) |
| Countries | 19 |
| Elections | 61 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

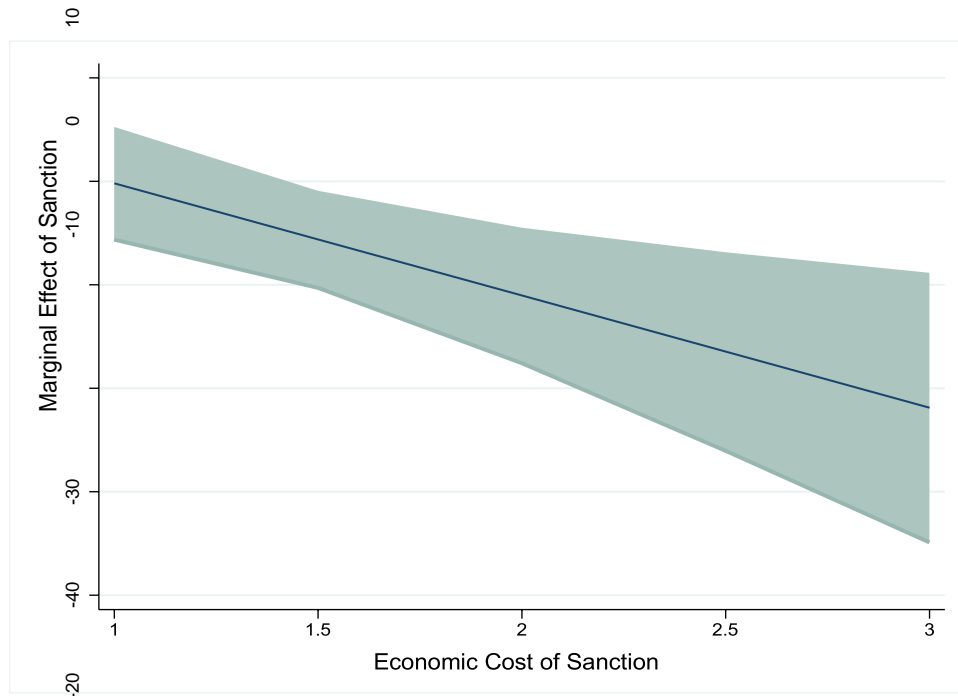
Table A.5: Summary Statistics

| Variable | Mean | Std. Dev. | Min. | Max. | N |
|------------------------------------|-------------|------------------|-------------|-------------|----------|
| Government Vote Share ^a | 53.872 | 16.791 | 9.47 | 100.0 | 716 |
| Sanction ^b | .163 | .369 | 0 | 1 | 716 |
| Government Vote Share | 50.992 | 12.927 | 12.55 | 97.73 | 427 |
| Change in Vote Share | -3.085 | 16.026 | -73.89 | 55.83 | 427 |
| Sanction | .187 | .390 | 0 | 1 | 427 |
| Multiple Senders | .427 | .869 | 0 | 5 | 427 |
| USA Sender | .159 | .366 | 0 | 1 | 427 |
| Democracy | 8.306 | 2.127 | 0 | 10 | 427 |
| GDP Growth Rate (%) | 3.006 | 4.296 | -24.7 | 29.7 | 427 |
| GDP per capital (log) | 9.171 | 1.107 | 5.519 | 11.020 | 427 |
| Trade (% of GDP) | 74.896 | 48.231 | 12.677 | 360.857 | 427 |
| Ethnic fract. | .347 | .242 | .001 | .908 | 427 |
| Opposition fract. | .450 | .271 | 0 | 1 | 427 |
| Interstate Armed Conflict | .082 | .465 | 0 | 3 | 427 |
| Civil War | .265 | .730 | 0 | 3 | 427 |
| Protest | 1.246 | 3.242 | 0 | 37 | 427 |
| Asia | .093 | .292 | 0 | 1 | 427 |
| Latin America | .166 | .373 | 0 | 1 | 427 |
| Post Communist | .119 | .325 | 0 | 1 | 427 |
| MiddleEast/ Northern Africa | .065 | .248 | 0 | 1 | 427 |
| West | .380 | .486 | 0 | 1 | 427 |
| Sub-Sahara Africa | .121 | .316 | 0 | 1 | 427 |

N is different from the number of observation used in Table 2 due to lagged variables.

a and *b* are based on the bivariate test in Figure 1.

Figure A.1: Marginal Effect of Sanction on Government Vote Share (%)



Note: Economic costs of sanctions are coded as 1(minor), 2(major), and 3(severe) (Morgan et al. 2013). The full model of this marginal effect graph is available in Table A.5 in online supplementary materials.