Supplemental appendix for "Human Rights NGO Shaming and the Exports of Abusive States"

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This appendix presents the results of several additional statistical models intended to demonstrate the robustness of our main results. We explain the motivation for each set of models, while also justifying the decision not to include the robustness checks in the main text. Then, we present and describe the results of the models. Many of these specifications were inspired by comments from our anonymous reviewers, whom we thank for their careful reading and detailed feedback.

First, we present Table A1, which replicates Table 1 in the main text (including dyad and year fixed effects) with the additional inclusion of variables for each state's (logged) 21-point Polity combined score, along with the interaction of these scores.[1] We excluded these variables from the dyad-fixed effects models in the main text given the fact that, for most dyads, there is very little—if any—variation over time in their values. We did include the Polity variables in

1 We added 11 before logging such that the minimum logged value is equal to 0. Results look essentially identical if we use non-logged Polity scores, but using logged indicators is in keeping with gravity model conventions, and allows for the interpretation of (conditional) coefficients as elasticities.

Table 2 of the main paper, wherein we specify dyad-random effects, allowing for time-invariant variables and accounting for between-dyad variation. Given that some dyads do see variation (and in a small number of cases, substantial variation) over time in one or both states' Polity scores, and because there is reason suspect democracy as a confounding factor in our analysis, we judged that dyad-fixed effects models including Polity scores were useful to present in this appendix. Results of Table A1 match those in Table 1 almost exactly, demonstrating the robustness of our results and further supporting our hypotheses.

[Table A1 about here]

Next, we present Table A2, which presents three sets of models demonstrating the robustness of our results. First, Models A7 and A8 duplicate Models 1 and 2 in the main text (our primary fixed effects models), with the addition of a lagged dependent variable (LDV). We didn't include the LDV in the main text because it could correlate with unit specific error, introducing bias into the model (e.g., Beck and Katz 2011). However, previous research demonstrates that this bias is most pronounced when there are few time periods (Beck and Katz 2011; see also Nickell 1981). Given that we examine 19 time periods, there could be reason to suspect that this bias is small. While we prefer to omit the LDV in the primary model, the result of Models A7 and A8 look nearly identical to those of Models 1 and 2.

The middle two columns of Table A2 present Models A9 and A10, in which we replicate Models 7 and 8 from the main text (with dyad-random effects), adding variables for the importer's and exporter's property rights/rule of law, as well as the interaction thereof, using data from Kaufmann et al. (2010). These variables are useful to assess whether our results suffer from

spurious correlation if human rights, shaming, and trade all follow from strong institutions facilitating rule of law and respect for private property. However, data for these added variables is limited, such that our analysis in Models A9 and A10 covers only the 1996-2009 periods (six fewer years than our primary models). Our decision to replicate Models 7 and 8 rather than 1 and 2 stems from the fact that these added variables are nearly time-invariant by dyad. All results in these models look essentially identical to those from Models 7 and 8, demonstrating the robustness of our results even in a reduced time period.

The final two columns of Table A2 presents Models A11 and A12, which replicate Models 1 and 2 for a revised dependent variable that sums together the CIRI physical integrity index and the CIRI (new) empowerment index. Summing these indices together overcomes some concern regarding the decision to focus solely on physical integrity rights in our analysis. However, because the creation of a greater additive index requires the strong assumption that physical integrity rights and empowerment rights and unidimensional, we prefer not to present these models as our primary models. However, we find that results of these models match those of Models 1 and 2, suggesting the possibility that our argument extends beyond the realm of physical integrity rights.

[Table A2 about here]

Table A3 presents four dyad-random effects models that assess the robustness of our results when including variables for relative factor endowments (exporter/importer). The first two columns present Models A13 and A14, which replicate Models 7 and 8 including a variable for relative land endowment, created using data on each state's proportion of arable land from

the World Development Indicators (World Bank 2012). The second two columns present Models A15 and A16, which further add variables for relative capital endowment and relative labor endowment. Relative capital endowment is calculated using data on GDP per capita, while labor endowment uses population data, both from Gleditsch (2014). Notably, in Models A15 and A16, we must exclude variables for importer GDP and both states' (logged) population due to perfect collinearity. Specifically our capital endowment variable is equal to ln(GDP PC exporter/GDP PC importer), which is mathematically equivalent to ln (GDP PC exporter) minus ln (GDP PC importer). In turn, each state's ln GDP PC, or ln (GDP / population), is mathematically equivalent to ln GDP minus ln population. Accordingly, three variables must be dropped from the models in order to include both relative capital endowment and relative labor endowment. Again, results of all four models in Table A3 match those from Models 7 and 8 nearly exactly, demonstrating the robustness of our results.

[Table A3 about here]

Table A4 presents models A17-A20, models that replicate Models 1 and 2 while attempting to reduce missing observations following from missing values for the dependent and explanatory variables. All four models impute 0s to missing values of the dependent variable. Although some scholars have used multiple imputation to fill values other than 0 to trade data (e.g., Gleditsch 2002), these data are not available for the full time span of our study. Furthermore, other research suggests that imputing values to missing trade data could be problematic (e.g., Barbieri and Keshk 2011). Imputing 0s to assess robustness (while retaining models with missing values in the main text) allows us to assess whether our results are sensitive

to the observations that are included. Models A17 and A18 include the imputed 0s while also removing other explanatory variables that have any missing values in order to assess whether our main result—that more shaming is associated with lower export value—holds when including all dyad-years between 1990 and 2009. Importantly, we remove the variables for human rights practices from these models because there are some states that have no values for the measure, whereas we have shaming data for all states and wish not to lose any in the analysis. Models A19 and A20 do include the normal control variables from Models 1 and 2, thus losing some observations from missing values therein. In all four models presented in Table A4, we find support for our main expectations. First, in Models A17 and A18, the coefficient for ln Shaming is negative and significant; thus, shaming (which, on average, should correlate with abuse) does appear associated with lower exports. In models A19 and A20, which include the 3-way interaction from our main models, all results are similar to those in Models 1 and 2.

[Table A4 about here]

In Table A5, we present models subset not only by importer abuse level but also by exporter abuse level (Models A21 and A22, where importer abuse is low [<3] or high [>5], and in both cases where exporter abuse is high [>5], given lack on interest in respectful exporters) and by shaming level (Model A23-A26, holding shaming at either below or above the mean), in order to assess, respectively, whether abuse and shaming are associated with export volume in models that do not include any interaction.

Results are consistent in all of these models. In models A21 and A22, we find that shaming is associated with lower export volume only in subsamples where importer abuse is

low; these results exclude observations where the exporter engages in little abuse given that shaming is unlikely to occur under this condition. Results of Models A23-A26 also show that (1) exporter abuse is associated with lower exports only in the case where the importer's abuse is low; and (2) the impact of exporter abuse is greater when shaming is held at a higher level.

[Table A5 about here]

Table A6 presents models include additional explanatory variables to capture dyadic preferential trade agreement (PTA) membership and dyadic defense pacts. We take PTA data from the World Trade Organization, coding all years equal to one after a trade agreement enters into force; and we use defense pact data from Gibler (2009), with dyad years maintaining an alliance coded as equal to 1. These variables capture political phenomena that presumably could affect both trade and human rights practices. We specify both dyad-fixed effects and dyad-random effects models replicating Models 1 and 2 (FE), as well as 7 and 8 (RE), including the PTA variables in both. However we include the defense pact variable only in random effects models due to near time-invariance by dyad over the time period of the study. Once more, all of our primary results are robust in these measures.

[Table A6 about here]

Table A7 presents models aggregated to the country-year level of analysis. That is, the dependent variable in these models is the total exports of a given state. In these models, we cannot specify the characteristics of importers nor the relationship between importer and

exporter. However, we can examine whether exporter human rights abuse, in conjunction with HRO shaming of the exporter, influences its total export volume. Model A31 uses exporter-fixed effects and includes only exporter variables. Model A32 uses exporter-random effects and includes variables for the exporter as well as for neighboring states (within 400 miles).

Results are mixed in the monadic models of country exports. It appears that physical integrity abuse, and HRO shaming thereof, have no statistically significant impact on exports in the fixed effects model. However, we do find that exporter abuse becomes associated with lower total exports as shaming increases in the random effects model, although significance levels are modest. Ultimately, we think that dyadic models are superior to these monadic models because trade is a dyadic phenomenon. However, these additional models do provide some intriguing first evidence that that overall influence of human rights abuse and shaming on the exports of abusive states might be ambiguous. Perhaps shaming of abuse leads primarily to a reshaping of trade patterns rather than simply reduction in overall exports (keeping in mind that we control for sanctions—another channel through abuse could affect trade). Future research would benefit from examining in detail the state-level determinants of overall trade volume.

[Table A7 about here]

The first and second columns of Table A8 replicate models 1 and 2 excluding all observations in which importing states are democracies (with Polity score greater than 6) and/or among the most developed states (with GDP PC greater than $25,702 in 2005 US dollars, adjusted for inflation). These models demonstrate that our results are not an artifact of an effect

limited to the most developed democracies (which can be considered distinct from most other states). Results of these models look quite similar to hose in Models 1 and 2.

The third and fourth columns of Table A8 presents models using general method of moments (GMM), attempting to prevent endogeneity by using lags of multiple explanatory variables as instruments for our primary explanatory variables. Although, in our primary models, we lead our dependent variable to prevent bias due to reversed causation, it is possible for this bias to persist if trade in year t+1 is highly correlated with trade in year t, and if this trade affects human rights practices and shaming (rather than vice-versa). Results of these models support our expectations. However, diagnostics suggest that these models could be over-identified.

[Table A8 about here]

Next, we present summary statistics for all explanatory variable presented in our primary models.

[Table A9 about here]

Finally, we present an interaction plot showing the marginal effect of exporter shaming by HROs over the range of exporter abuse, with three panes examining the further conditioning role of importer abuse. The figure shows that, generally, the marginal effect of shaming becomes increasingly negative as exporter abuse increases. Given the size of confidence intervals, this marginal effect does not appear to be conditional on importer shaming. Ultimately, we think that examining this aspect of the 3-way interaction is of marginal utility because shaming is unlikely

to occur when exporter abuse is low (unless perhaps shaming in this case occurs over the issue of empowerment rights violations).

[Figure A1 about here]

Table A1. Replication of Table 1 including Polity scores

	A1	A2	A3	A4	A5	A6
	3-way interaction		Subsample: respectful importers		Subsample: abusive importers	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exporter abuse	-0.011	-0.013*	-0.016*	-0.016**	-0.001	-0.001
	(0.006)	(0.006)	(0.006)	(0.006)	(0.010)	(0.010)
ln Shaming	0.107***	0.111***	0.070*	0.075**	-0.014	-0.015
	(0.032)	(0.031)	(0.029)	(0.028)	(0.054)	(0.053)
Exporter abuse X Shaming	-0.026***	-0.027***	-0.021**	-0.022***	-0.005	-0.007
	(0.007)	(0.007)	(0.006)	(0.006)	(0.011)	(0.011)
Importer abuse	-0.018**	-0.018**				
	(0.006)	(0.006)				
Exporter abuse X Importer abuse	0.002	0.002				
	(0.001)	(0.001)				
Shaming X Importer abuse	-0.018*	-0.019*				
	(0.009)	(0.009)				
Exp. ab. X Imp. ab. X Shaming	0.000	0.000				
	(0.002)	(0.002)				
ln Other events	0.006	0.007	-0.010	-0.010	0.056*	0.058*
	(0.009)	(0.009)	(0.013)	(0.013)	(0.023)	(0.023)
ln Importer GDP	0.272***	0.276***	-0.372***	-0.366***	0.629***	0.632***
	(0.038)	(0.038)	(0.068)	(0.068)	(0.065)	(0.064)
ln Exporter GDP	0.201***	0.207***	0.413***	0.416***	-0.150	-0.130
	(0.038)	(0.038)	(0.053)	(0.053)	(0.087)	(0.087)
ln Importer population	-0.072	-0.066	0.812***	0.817***	-1.262***	-1.296***
	(0.105)	(0.104)	(0.160)	(0.160)	(0.290)	(0.288)
ln Exporter population	-0.817***	-0.801***	-1.495***	-1.453***	-0.045	-0.059
	(0.108)	(0.107)	(0.150)	(0.148)	(0.256)	(0.255)
ln Importer Polity	0.191**	0.191**	0.383***	0.378**	-0.143	-0.138
	(0.066)	(0.066)	(0.115)	(0.115)	(0.124)	(0.124)
ln Exporter Polity	0.154*	0.152*	0.254*	0.247*	-0.024	-0.020
	(0.066)	(0.066)	(0.121)	(0.121)	(0.109)	(0.109)
Imp. Polity X Exp. Polity	-0.100***	-0.100***	-0.143***	-0.142***	0.014	0.011
	(0.024)	(0.024)	(0.042)	(0.042)	(0.045)	(0.045)
Dyadic sanction of exporter		-0.284*		-0.259**		-0.237
		(0.111)		(0.092)		(0.358)
Third-party sanction of exporter	-0.026	-0.029	-0.030	-0.036	-0.070	-0.076
	(0.020)	(0.020)	(0.029)	(0.028)	(0.046)	(0.046)
Constant	8.231***	8.008***	11.759***	11.375***	12.805***	13.076***
	(1.393)	(1.389)	(1.981)	(1.976)	(3.754)	(3.740)
Observations	351,603	355,316	150,279	152,580	67,220	67,799
R-squared	0.070	0.071	0.055	0.055	0.079	0.080
Number of dyads	22,223	22,312	15,333	15,400	9,362	9,389

All models include dyad and year fixed effects. Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Table A2. Models including a lagged DV, rule of law variables, and a DV combining physint with empinx.

	A7	A8	A9	A10	A11	A12
	Including lagged DV		Including variables for Rule of Law		Combing physical integrity and empowerment abuse	
	Dyad fixed effects		Dyad random effects		Dyad fixed effects	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exports (LDV)	0.420***	0.422***				
	(0.003)	(0.003)				
Exporter abuse	-0.009*	-0.010*	-0.020**	-0.021**	-0.017***	-0.018***
	(0.004)	(0.004)	(0.007)	(0.007)	(0.003)	(0.003)
ln Shaming	0.080**	0.083***	0.071	0.070	0.088**	0.089**
	(0.026)	(0.025)	(0.041)	(0.039)	(0.032)	(0.031)
Exporter abuse X Shaming	-0.016**	-0.017**	-0.020*	-0.020*	-0.007*	-0.007*
	(0.006)	(0.006)	(0.009)	(0.009)	(0.003)	(0.003)
Importer abuse	-0.014***	-0.014***	-0.015*	-0.014*	-0.023***	-0.022***
	(0.004)	(0.004)	(0.007)	(0.007)	(0.003)	(0.003)
Exporter abuse X Importer abuse	0.001	0.001	0.002	0.002	0.001*	0.001*
	(0.001)	(0.001)	(0.002)	(0.002)	(0.000)	(0.000)
Shaming X Importer abuse	-0.017*	-0.017*	-0.003	-0.004	-0.009*	-0.009**
	(0.007)	(0.007)	(0.011)	(0.011)	(0.004)	(0.004)
Exp. ab. X Imp. ab. X Shaming	0.001	0.001	0.000	0.000	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.000)	(0.000)
ln Other events	-0.009	-0.008	0.018	0.018	-0.002	-0.000
	(0.006)	(0.006)	(0.009)	(0.009)	(0.008)	(0.008)
ln Importer GDP	0.182***	0.184***	0.914***	0.917***	0.297***	0.300***
	(0.023)	(0.023)	(0.020)	(0.020)	(0.037)	(0.037)
ln Exporter GDP	0.138***	0.140***	1.052***	1.052***	0.214***	0.218***
	(0.023)	(0.023)	(0.022)	(0.022)	(0.037)	(0.037)
ln Importer population	0.218***	0.221***	0.164***	0.163***	-0.072	-0.067
	(0.062)	(0.061)	(0.023)	(0.023)	(0.101)	(0.101)
ln Exporter population	-0.422***	-0.412***	0.201***	0.203***	-0.897***	-0.882***
	(0.063)	(0.063)	(0.024)	(0.024)	(0.104)	(0.103)
Dyadic sanction of exporter		-0.201**		-0.048		-0.311**
		(0.067)		(0.102)		(0.109)
Third-party sanction of exporter	-0.025*	-0.028*	0.194***	0.189***	-0.021	-0.025
	(0.013)	(0.012)	(0.022)	(0.022)	(0.019)	(0.019)
ln Importer Polity			0.274***	0.272***		
			(0.076)	(0.076)		
ln Exporter Polity			0.184*	0.183*		
			(0.076)	(0.075)		
Imp. Polity X Exp. Polity			-0.050	-0.048		
			(0.028)	(0.028)		
ln Distance			-1.463***	-1.457***		
			(0.024)	(0.024)		
Contiguity			1.127***	1.076***		
			(0.149)	(0.148)		
Common language			1.185***	1.177***		
			(0.055)	(0.055)		
Importer rule of law			0.484***	0.484***		
			(0.025)	(0.025)		
Exporter rule of law			0.693***	0.692***		
			(0.026)	(0.026)		
Imp. rule of law X Exp. rule of law			0.041**	0.041**		
			(0.016)	(0.015)		
Constant	1.536	1.394	-7.052***	-7.125***	8.571***	8.386***
	(0.795)	(0.791)	(0.320)	(0.318)	(1.311)	(1.308)
Observations	396,667	400,437	193,783	195,905	399,296	403,060
R-squared	0.243	0.245	0.647	0.654	0.069	0.070
Number of dyads	27,531	27,619	21,116	21,274	27,531	27,619

All models include dyad random effects and year fixed effects. Robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

Table A3. Models including relative factor endowments.

	A13	A14	A15	A16
	Including relative land endowment		Including relative land, labor, and capital endowment	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exporter abuse	-0.040***	-0.042***	-0.041***	-0.043***
	(0.006)	(0.006)	(0.006)	(0.006)
ln Shaming	0.102**	0.107**	0.101**	0.106**
	(0.033)	(0.032)	(0.033)	(0.032)
Exporter abuse X Shaming	-0.029***	-0.030***	-0.029***	-0.030***
	(0.008)	(0.007)	(0.008)	(0.007)
Importer abuse	-0.039***	-0.039***	-0.039***	-0.039***
	(0.006)	(0.006)	(0.006)	(0.006)
Exporter abuse X Importer abuse	0.000	0.001	0.000	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Shaming X Importer abuse	-0.008	-0.009	-0.008	-0.009
	(0.009)	(0.009)	(0.009)	(0.009)
Exp. ab. X Imp. ab. X Shaming	-0.001	-0.001	-0.001	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
ln Other events	0.100***	0.099***	0.099***	0.099***
	(0.009)	(0.009)	(0.009)	(0.009)
ln Importer GDP	1.015***	1.020***		
	(0.016)	(0.016)		
ln Exporter GDP	1.199***	1.203***	2.190***	2.198***
	(0.018)	(0.018)	(0.016)	(0.016)
ln Importer population	0.020	0.017		
	(0.020)	(0.020)		
ln Exporter population	-0.067***	-0.065**		
	(0.020)	(0.020)		
ln Importer Polity	0.139*	0.140*	0.138*	0.139*
	(0.060)	(0.060)	(0.060)	(0.060)
ln Exporter Polity	0.131*	0.131*	0.130*	0.130*
	(0.060)	(0.060)	(0.060)	(0.060)
Imp. Polity X Exp. Polity	-0.031	-0.031	-0.031	-0.031
	(0.023)	(0.022)	(0.023)	(0.022)
ln Distance	-1.471***	-1.467***	-1.477***	-1.473***
	(0.024)	(0.024)	(0.024)	(0.024)
Contiguity	0.900***	0.887***	0.874***	0.861***
	(0.144)	(0.144)	(0.144)	(0.143)
Common language	1.280***	1.279***	1.277***	1.276***
	(0.055)	(0.055)	(0.055)	(0.055)
Dyadic sanction of exporter		-0.109		-0.110
		(0.107)		(0.107)
Third-party sanction of exporter	0.099***	0.094***	0.098***	0.093***
	(0.020)	(0.020)	(0.020)	(0.020)
ln Arable land ratio	-0.020	-0.019	-0.020	-0.019
	(0.012)	(0.011)	(0.012)	(0.012)
ln Population ratio			1.046***	1.048***
			(0.012)	(0.012)
ln GDPPC ratio			1.003***	1.007***
			(0.014)	(0.013)
Constant	-6.128***	-6.243***	-6.235***	-6.350***
	(0.295)	(0.294)	(0.297)	(0.296)
Observations	335,938	339,437	335,938	339,437
R-squared	0.607	0.614	0.606	0.613
Number of dyads	21,249	21,334	21,249	21,334

All models include dyad random effects and year fixed effects. Robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

Table A4. Replication models accounting for missing observations.

	A17	A18	A19	A20
	Removal of control variables with missing observations		Imputed zeros for Exports	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exporter abuse			-0.008	-0.009
			(0.005)	(0.005)
ln Shaming	-0.042***	-0.045***	0.119***	0.122***
	(0.011)	(0.011)	(0.029)	(0.029)
Exporter abuse X Shaming			-0.025***	-0.026***
			(0.006)	(0.006)
Importer abuse			-0.008	-0.008
			(0.005)	(0.005)
Exporter abuse X Importer abuse			0.003*	0.003*
			(0.001)	(0.001)
Shaming X Importer abuse			-0.025**	-0.026**
			(0.008)	(0.008)
Exp. ab. X Imp. ab. X Shaming			0.001	0.001
			(0.002)	(0.002)
ln Other events	0.006	0.006	0.000	0.001
	(0.006)	(0.006)	(0.007)	(0.007)
ln Importer GDP			0.245***	0.248***
			(0.031)	(0.031)
ln Exporter GDP			0.187***	0.191***
			(0.032)	(0.032)
ln Importer population			-0.096	-0.092
			(0.092)	(0.091)
ln Exporter population			-1.017***	-1.005***
			(0.093)	(0.093)
Third-party sanction of exporter	0.027	0.023	-0.004	-0.008
	(0.015)	(0.015)	(0.017)	(0.017)
Dyadic sanction of exporter		-0.311**		-0.348**
		(0.119)		(0.108)
Constant	3.537***	3.589***	9.360***	9.220***
	(0.038)	(0.039)	(1.146)	(1.143)
Observations	637,383	641,541	476,448	480,255
R-squared	0.045	0.045	0.062	0.063
Number of dyads	35,972	36,065	34,263	34,352

All models include dyad and year fixed effects. Robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

Table A5. Replication models with more disaggregated data by exporter abuse, importer abuse, and shaming

	A21	A22	A23	A24	A25	A26
	Respectful importer Abusive exporter	Abusive importer Abusive exporter	Respectful importer		Abusive importer	
			Low shaming	High shaming	Low shaming	High shaming
ln Shaming	-0.070*	-0.036				
	(0.029)	(0.052)				
Exporter abuse			-0.012*	-0.031*	-0.003	0.047
			(0.006)	(0.015)	(0.010)	(0.031)
ln Other events	-0.049	0.023	-0.018	0.021	0.036	0.044
	(0.034)	(0.064)	(0.011)	(0.047)	(0.021)	(0.088)
ln Importer GDP	-0.484***	0.557***	-0.268***	-0.555***	0.637***	0.615***
	(0.143)	(0.148)	(0.065)	(0.167)	(0.068)	(0.169)
ln Exporter GDP	0.357***	0.225	0.425***	0.247*	-0.090	0.151
	(0.087)	(0.145)	(0.051)	(0.116)	(0.093)	(0.203)
ln Importer population	0.840*	-1.053	0.806***	0.565	-1.021***	-0.499
	(0.403)	(0.684)	(0.154)	(0.367)	(0.306)	(0.826)
ln Exporter population	-1.646***	-0.783	-1.532***	-0.843*	-0.295	0.710
	(0.460)	(0.778)	(0.144)	(0.379)	(0.260)	(0.767)
Dyadic sanction of exporter	-0.368	-0.856	-0.279**	-0.299*	-0.207	-0.232
	(0.229)	(0.850)	(0.099)	(0.135)	(0.207)	(0.719)
Third-party sanction of exporter	-0.059	-0.220*	-0.027	-0.090	-0.049	-0.254
	(0.060)	(0.106)	(0.026)	(0.081)	(0.047)	(0.167)
Constant	16.754**	14.457	10.727***	13.895**	11.286**	-5.108
	(5.914)	(10.147)	(1.800)	(5.320)	(3.778)	(10.961)
Observations	33,258	12,988	163,729	21,108	64,153	8,485
R-squared	0.044	0.094	0.050	0.073	0.079	0.127
Number of dyads	6,458	3,226	19,628	8,112	9,972	3,773

All models include dyad and year fixed effects. Robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

Table A6. Replication models including variables for dyadic PTA and defense pact

	A27	A28	A29	A30
	Dyad fixed effects		Dyad random effects	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exporter abuse	-0.008	-0.010	-0.038***	-0.040***
	(0.006)	(0.005)	(0.006)	(0.006)
ln Shaming	0.117***	0.121***	0.110***	0.113***
	(0.030)	(0.029)	(0.033)	(0.032)
Exporter abuse X Shaming	-0.026***	-0.027***	-0.031***	-0.032***
	(0.007)	(0.007)	(0.007)	(0.007)
Importer abuse	-0.017**	-0.018**	-0.035***	-0.035***
	(0.005)	(0.005)	(0.006)	(0.006)
Exporter abuse X Importer abuse	0.002	0.002	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Shaming X Importer abuse	-0.022**	-0.023**	-0.013	-0.013
	(0.009)	(0.008)	(0.009)	(0.009)
Exp. ab. X Imp. ab. X Shaming	0.001	0.000	-0.000	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)
ln Other events	-0.000	0.001	0.114***	0.114***
	(0.008)	(0.008)	(0.009)	(0.009)
ln Importer GDP	0.302***	0.306***	1.019***	1.023***
	(0.037)	(0.037)	(0.016)	(0.016)
ln Exporter GDP	0.225***	0.229***	1.190***	1.193***
	(0.036)	(0.036)	(0.018)	(0.018)
ln Importer population	-0.038	-0.033	0.002	-0.001
	(0.101)	(0.101)	(0.020)	(0.020)
ln Exporter population	-0.879***	-0.863***	-0.073***	-0.071***
	(0.103)	(0.103)	(0.020)	(0.020)
ln Importer Polity			0.207***	0.208***
			(0.060)	(0.060)
ln Exporter Polity			0.199***	0.199***
			(0.059)	(0.059)
Imp. Polity X Exp. Polity			-0.055*	-0.056*
			(0.022)	(0.022)
ln Distance			-1.391***	-1.386***
			(0.025)	(0.025)
Contiguity			0.808***	0.796***
			(0.143)	(0.142)
Common language			1.144***	1.139***
			(0.056)	(0.056)
Dyadic sanction of exporter		-0.322**		-0.101
		(0.109)		(0.104)
Third-party sanction of exporter	-0.021	-0.026	0.100***	0.095***
	(0.019)	(0.019)	(0.020)	(0.019)
Dyadic PTA	0.065	0.062	0.101*	0.098*
	(0.044)	(0.043)	(0.042)	(0.041)
Dyadic defense pact			0.593***	0.607***
			(0.067)	(0.066)
Constant	7.703***	7.500***	-6.731***	-6.840***
	(1.311)	(1.308)	(0.299)	(0.297)
Observations	400,398	404,168	343,614	347,214
R-squared	0.068	0.069	0.608	0.616
Number of dyads	27,535	27,623	21,527	21,610

All models include year fixed effects. Robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

Table A7. Monadic models.

	A31 State fixed effects	A32 State random effects
Exporter abuse	-0.012	-0.015
	(0.010)	(0.011)
ln Shaming	0.065	0.084
	(0.055)	(0.058)
Exporter abuse X Shaming	-0.019	-0.022*
	(0.013)	(0.013)
ln Other events	-0.005	-0.000
	(0.019)	(0.017)
ln Exporter GDP	0.563***	0.930***
	(0.097)	(0.076)
ln Neighbor total GDP	0.897***	0.548***
	(0.317)	(0.205)
ln Exporter population	-0.203	-0.139
	(0.301)	(0.094)
ln Neighbor total population	-2.125***	-0.747***
	(0.501)	(0.187)
Count of neighbors with same language		-0.002
		(0.004)
Count of PTA partners		0.003*
		(0.002)
Count of sanctioning states		0.012
		(0.013)
Count of common borders		0.019
		(0.030)
ln Exporter Polity		-0.043
		(0.301)
Neighbor average polity		-0.826**
		(0.407)
Exp. Polity X Neighbor av. Polity		0.012
		(0.144)
Constant	-61.576***	-56.549***
	(14.184)	(12.392)
Observations	2,920	2,700
R-squared	0.466	0.846
Number of exporters	177	153

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A8. Subset models and GMM

	A33	A34	A35	A36
	Excluding developed or democratic importers		GMM	
	Dyadic sanctions excluded	Dyadic sanctions modeled	Dyadic sanctions excluded	Dyadic sanctions modeled
Exports (LDV)			0.141***	0.146***
			(0.004)	(0.003)
Exporter abuse	-0.026**	-0.027**	-0.163***	-0.166***
	(0.009)	(0.009)	(0.017)	(0.016)
ln Shaming	0.055	0.051	0.652**	0.538*
	(0.058)	(0.058)	(0.244)	(0.213)
Exporter abuse X Shaming	-0.037**	-0.036*	-0.122*	-0.104*
	(0.014)	(0.014)	(0.052)	(0.046)
Importer abuse	-0.023**	-0.022**	-0.121***	-0.126***
	(0.007)	(0.007)	(0.017)	(0.016)
Exporter abuse X Importer abuse	0.004*	0.004*	0.030***	0.031***
	(0.002)	(0.002)	(0.005)	(0.005)
Shaming X Importer abuse	-0.009	-0.008	-0.268***	-0.237***
	(0.013)	(0.013)	(0.075)	(0.065)
Exp. ab. X Imp. ab. X Shaming	0.003	0.003	0.048**	0.043**
	(0.003)	(0.003)	(0.016)	(0.014)
ln Other events	0.028*	0.028*	0.144***	0.139***
	(0.013)	(0.013)	(0.012)	(0.012)
ln Importer GDP	0.388***	0.391***	0.988***	0.987***
	(0.046)	(0.046)	(0.017)	(0.017)
ln Exporter GDP	-0.019	-0.013	1.287***	1.277***
	(0.057)	(0.057)	(0.018)	(0.018)
ln Importer population	-0.470**	-0.483**	-0.005	-0.015
	(0.165)	(0.165)	(0.018)	(0.018)
ln Exporter population	-0.561***	-0.558***	-0.247***	-0.245***
	(0.161)	(0.161)	(0.018)	(0.017)
ln Importer Polity			0.397***	0.394***
			(0.049)	(0.049)
ln Exporter Polity			0.420***	0.422***
			(0.049)	(0.049)
Imp. Polity X Exp. Polity			-0.041*	-0.041*
			(0.019)	(0.019)
Common language			1.115***	1.092***
			(0.045)	(0.044)
ln Distance			-1.283***	-1.273***
			(0.020)	(0.020)
Contiguity			0.970***	0.903***
			(0.117)	(0.114)
Dyadic sanction of exporter		0.189		0.159***
		(0.282)		(0.040)
Third-party sanction of exporter	-0.031	-0.031	0.232***	0.230***
	(0.029)	(0.029)	(0.016)	(0.016)
Constant	9.857***	9.868***	-7.725***	-7.616***
	(2.105)	(2.101)	(0.239)	(0.234)
Observations	189,568	190,124	340,213	343,813
R-squared	0.065	0.065		
Number of dyads	15,651	15,673	21,526	21,609

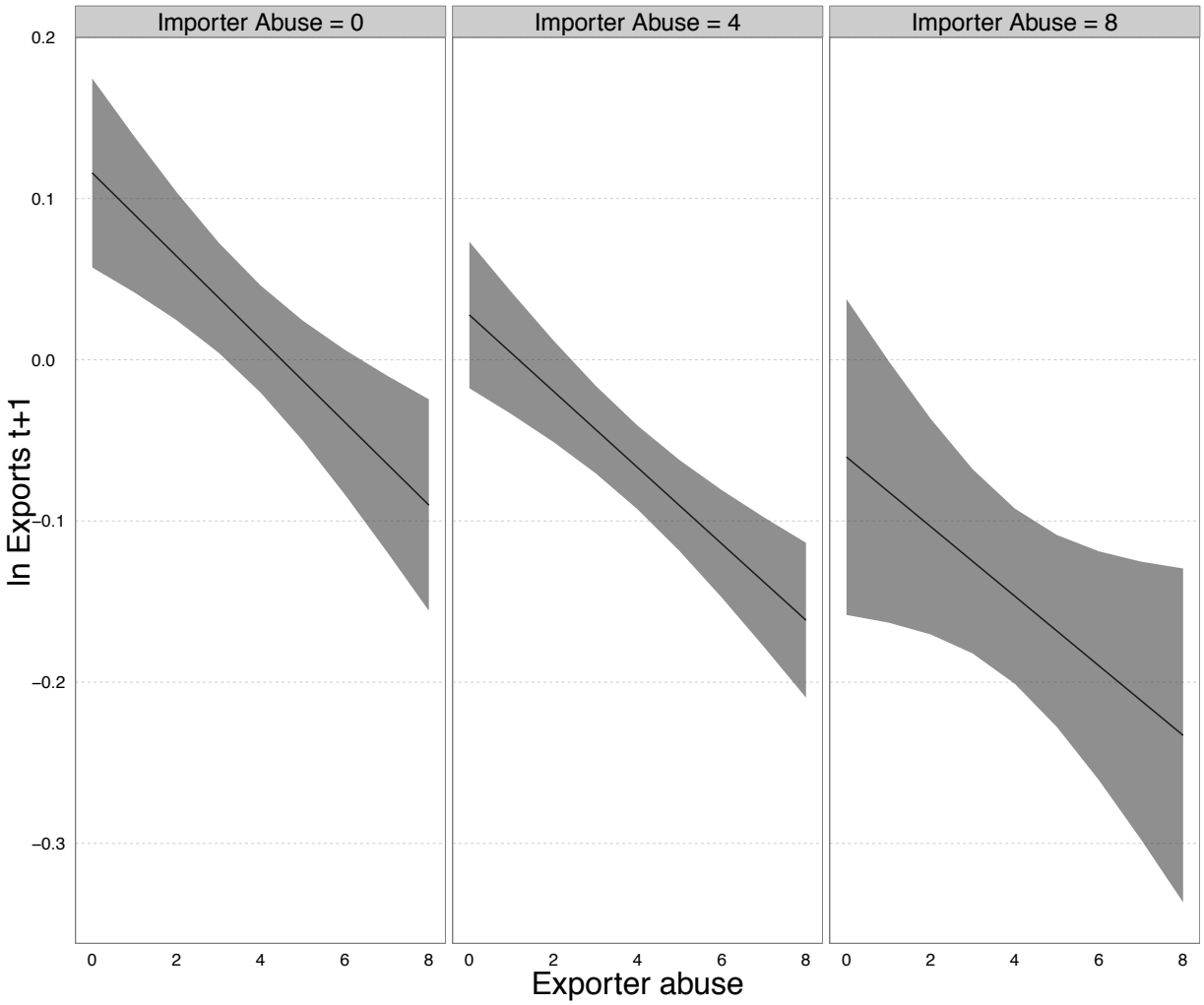
All models include year fixed effects. Models 13 and 14 contain dyad fixed effects. Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05

Table A9. Summary statistics

Variable	Obs.	Mean	St. Dev	Min	Max
Exports t+1	347,214	6.202808	4.819651	0	19.61551
Exporter abuse	347,214	3.235183	2.285148	0	8
ln Shaming	347,214	0.1089702	0.3188202	0	2.564949
Exporter abuse X ln Shaming	347,214	0.4861816	1.571316	0	12.8755
Importer abuse	347,214	3.236073	2.286474	0	8
Exporter abuse X Importer abuse	347,214	10.44517	11.67931	0	64
ln Shaming X Importer abuse	347,214	0.3527007	1.292108	0	20.51959
Exp abuse X Imp abuse X ln Shaming	347,214	1.572688	6.342133	0	103.004
ln Other events	347,214	6.543193	1.869643	0	12.37353
ln Importer GDP	347,214	10.8872	1.91632	5.679216	16.39188
ln Exporter GDP	347,214	10.88955	1.923914	5.679216	16.39188
ln Importer population	347,214	9.269058	1.502016	5.943377	14.0819
ln Exporter population	347,214	9.262421	1.511522	5.943377	14.0819
ln Importer Polity	347,214	2.472176	0.7329153	0	3.044523
ln Exporter Polity	347,214	2.46738	0.7430622	0	3.044523
Exporter Polity X Importer Polity	347,214	6.093757	2.627851	0	9.269117
ln Distance	347,214	8.669815	0.7902878	4.087945	9.901043
Common border	347,214	0.0240255	0.1531286	0	1
Common language	347,214	0.1319791	0.3384686	0	1
Dyadic sanction	347,214	0.0103682	0.1012955	0	1
Third-party sanction	347,214	0.5300881	0.4990946	0	1

Figure A1. Marginal effect of HRO shaming over the range of exporter abuse (x-axis), at three levels of importer abuse (panes).



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