

Online Appendix – Supporting Information (SI)

**How International Reputation Matters: Revisiting Alliance
Violations in Context**

Table A1: Differences in *Unreliability* Scores Generated for All States.

Note: States with 1 violation shown in left column. Notice that while Malta and Mali both committed a single violation in the middle of the 20th century, our logic suggests that Malta will suffer a greater reputational cost with respect to gaining a future alliance on better terms. *Unreliability* scores generated for states with 2, 3, 4, and 5 violations are listed at right.

1 Alliance Violation			2 Alliance Violations		
<i>Country</i>	<i>Unreliability Score</i>	<i>Year of Violation</i>	<i>Country</i>	<i>Unreliability Score</i>	<i>Year of Violation</i>
Malta	81	1987	Germany	69	1938
U. Kingdom	68	1975	France	44	1938
Germany	54	1933	Italy	40	1939
Greece	29	1935	Russia	27	1939
France	29	1935	Iraq	25	1959
Belgium	28	1936	Jordan	22	1958
Italy	28	1936	Egypt	19	1956
Niger	25	1981	3 Alliance Violations		
Chad	24	1982	Germany	78	1940
Senegal	21	1989	France	56	1939
Uganda	19	1979	Italy	49	1941
Turkey	17	1935	Iraq	39	1977
Algeria	17	1984	Russia	36	1940
Sudan	16	1985	Egypt	34	1961
Russia	15	1938	4 Alliance Violations		
Syria	15	1980	France	113	1966
Morocco	14	1986	Germany	86	1941
Somalia	14	1977	Italy	66	1943
Jordan	13	1957	Egypt	48	1967
Iran	13	1979	Russia	45	1941
Tunisia	13	1974	5 Alliance Violations		
Madagascar	11	1973	Russia	59	1945
USA	11	1980	Egypt	63	1976
Libya	10	1970			
Saudi Arabia	9	1962			
Hungary	9	1949			
Albania	9	1949			
Poland	9	1949			
Czechoslovakia	9	1949			
Iraq	9	1958			
Bulgaria	9	1949			
Romania	9	1949			
Yugoslavia	9	1940			
Afghanistan	8	1950			
Thailand	8	1940			
Egypt	7	1951			
Nigeria	6	1962			
Mali	6	1960			

Table A2: Logistic Regressions Results for Hypothesis 1. Dependent variable is probability of alliance gain for state*i* in year *t*

VARIABLES	(1) $I_{i,t}$		(2) $I_{i,t}$		(3) $I_{i,t}$		(4) $I_{i,t}$		(5) $I_{i,t}$		(6) $I_{i,t}$	
	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain
Unreliability			-0.01*** (0.003)		-0.01*** (0.002)		-0.01*** (0.003)					-0.01*** (0.003)
Violation History	-0.10* (0.055)			-0.06 (0.041)					-0.04 (0.055)			
Major Power	1.67*** (0.298)		1.82*** (0.309)	1.29*** (0.218)	1.40*** (0.231)			1.26*** (0.248)			1.41*** (0.257)	
Democracv Score	-0.62*** (0.206)		-0.58*** (0.206)	-0.43** (0.171)	-0.42** (0.171)			-0.46** (0.180)			-0.44** (0.178)	
No. of Alliances Lagged	0.20*** (0.043)		0.19*** (0.038)	0.12*** (0.037)	0.12*** (0.034)			0.13*** (0.038)			0.12*** (0.036)	
No. of Alliances ² Lagged	-0.01*** (0.002)		-0.01*** (0.001)	-0.00*** (0.001)	-0.00*** (0.001)			-0.00*** (0.001)			-0.00** (0.001)	
Time Since AllianceGain				-0.28*** (0.052)				-0.26*** (0.048)			-0.26*** (0.048)	
Time Since AllianceGain ²				0.01*** (0.004)				0.01*** (0.004)			0.01*** (0.004)	
Time Since AllianceGain ³				-0.00** (0.000)				-0.00** (0.000)			-0.00** (0.000)	
Decav								-0.13* (0.067)			-0.08 (0.066)	
Decav ²								0.01** (0.006)			0.01* (0.006)	
Decav ³								-0.00*** (0.000)			-0.00** (0.000)	
Mideast	-0.34 (0.259)		-0.33 (0.256)	-0.27 (0.207)	-0.27 (0.206)			-0.27 (0.222)			-0.27 (0.217)	
Africa	-1.33*** (0.411)		-1.35*** (0.405)	-1.30*** (0.367)	-1.31*** (0.365)			-1.32*** (0.373)			-1.32*** (0.370)	
Asia	-1.32*** (0.338)		-1.40*** (0.357)	-0.97*** (0.232)	-1.02*** (0.242)			-0.98*** (0.239)			-1.03*** (0.247)	
Americas	-2.20*** (0.633)		-2.29*** (0.582)	-1.75*** (0.529)	-1.83*** (0.493)			-1.76*** (0.558)			-1.84*** (0.510)	
Constant	-2.79*** (0.258)		-2.76*** (0.233)	-1.66*** (0.271)	-1.65*** (0.263)			-1.68*** (0.280)			-1.67*** (0.264)	
Number of Observations	4,794		4,794	4,794	4,794			4,794			4,794	

Robust Standard errors clustered by state in parentheses *** p<0.01, ** p<0.05* p<0.10

Table A3: Results for Hypothesis 1 *controlling for Leader Unreliability and Security Threat*. DV is probability of alliance gain.

VARIABLES	(1) Logit alliance_gain	(2) Logit alliance_gain	(3) Logit alliance_gain	(4) Logit alliance_gain
Unreliability	-0.01** (0.003)	-0.00** (0.002)	-0.00 (0.003)	-0.01** (0.004)
Leader Unreliability				
External Security Threat	0.19 (0.204)	0.23 (0.193)	0.26 (0.209)	0.23 (0.193)
Major Power	1.58*** (0.275)	1.37*** (0.238)	1.39*** (0.258)	1.34*** (0.221)
Democracy Score	-0.34 (0.224)	-0.34* (0.204)	-0.33 (0.212)	-0.38* (0.210)
No. of Alliances Lagged	0.00 (0.046)	-0.02 (0.041)	-0.02 (0.042)	-0.01 (0.040)
No. of Alliances ² Lagged	0.00 (0.002)	0.00 (0.001)	0.00 (0.001)	-0.00 (0.001)
Time Since AllianceGain		-0.23*** (0.050)	-0.22*** (0.048)	-0.24*** (0.051)
Time Since AllianceGain ²		0.01*** (0.004)	0.01*** (0.004)	0.01*** (0.004)
Time Since AllianceGain ³		-0.00** (0.000)	-0.00** (0.000)	-0.00** (0.000)
Decay		-0.14* (0.075)	-0.14* (0.075)	
Decay ²		0.02** (0.006)	0.02** (0.006)	
Decay ³		-0.00** (0.000)	-0.00** (0.000)	
Mideast	-0.24 (0.240)	-0.15 (0.208)	-0.08 (0.250)	-0.16 (0.206)
Africa	-1.35*** (0.409)	-1.25*** (0.376)	-1.24*** (0.384)	-1.25*** (0.375)
Asia	-1.48*** (0.295)	-1.32*** (0.273)	-1.31*** (0.277)	-1.30*** (0.268)
Americas	-0.63*** (0.205)	-0.48*** (0.168)	-0.40** (0.180)	-0.37** (0.161)
Constant	-1.83*** (0.275)	-1.22*** (0.249)	-1.26*** (0.261)	-1.20*** (0.248)
Number of Observations	2,217	2,217	2,217	2,217

Table A4: Logistic Regressions Results for Hypothesis 1, Restricted to European States

VARIABLES	(1) I _{opit}		(2) I _{opit}		(3) I _{opit}		(4) I _{opit}		(5) I _{opit}		(6) I _{opit}	
	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain
Unreliability			-0.01*** (0.002)		-0.01*** (0.001)							-0.01*** (0.003)
Violation History	-0.14*** (0.031)				-0.05* (0.028)				-0.06 (0.057)			
Major Power	1.90*** (0.311)		2.06*** (0.292)		1.29*** (0.244)		1.40*** (0.240)		1.36*** (0.298)		1.51*** (0.294)	
Democracv Score	-1.14*** (0.273)		-1.09*** (0.277)		-0.74*** (0.232)		-0.73*** (0.229)		-0.79*** (0.256)		-0.77*** (0.250)	
No. of Alliances Lagged	0.16*** (0.046)		0.15*** (0.042)		0.07* (0.041)		0.07* (0.040)		0.06 (0.038)		0.05 (0.036)	
No. of Alliances ² Lagged	-0.01*** (0.002)		-0.00** (0.002)		-0.00* (0.002)		-0.00 (0.002)		-0.00* (0.001)		-0.00 (0.001)	
Time Since AllianceGain					-0.34*** (0.069)		-0.33*** (0.069)		-0.31*** (0.058)		-0.30*** (0.059)	
Time Since AllianceGain ²					0.02*** (0.006)		0.02*** (0.006)		0.01*** (0.005)		0.01*** (0.005)	
Time Since AllianceGain ³					-0.00* (0.000)		-0.00* (0.000)		-0.00** (0.000)		-0.00** (0.000)	
Decav									-0.13 (0.083)		-0.08 (0.078)	
Decav ²									0.02** (0.007)		0.01* (0.007)	
Decav ³									-0.00** (0.000)		-0.00** (0.000)	
Constant	-2.42*** (0.216)		-2.42*** (0.202)		-1.14*** (0.261)		-1.16*** (0.266)		-1.16*** (0.257)		-1.19*** (0.256)	
Number of Observations	1,408		1,408		1,408		1,408		1,408		1,408	

Table A5: Logistic Regressions Results for Hypothesis 1, using a 10 year Moving Average to Measure the Regional Violation Rate

VARIABLES	(1) I _{opit}		(2) I _{opit}		(3) I _{opit}		(4) I _{opit}		(5) I _{opit}		(6) I _{opit}	
	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain
Reputation 10vr avg deflator			-0.002***		-0.001***		-0.001***		-0.044		-0.001***	
		(0.0004)			(0.0003)		(0.0003)		(0.0550)		(0.0003)	
Violation History	-0.102*		1.790***		1.292***		1.395***		1.263***		1.387***	
	(0.0548)		(0.2872)		(0.2183)		(0.2149)		(0.2479)		(0.2384)	
Maior Power	1.673***		-0.507**		-0.434**		-0.372**		-0.458**		-0.389**	
	(0.2977)		(0.2039)		(0.1713)		(0.1683)		(0.1802)		(0.1720)	
Democracv Score	-0.616***		0.202***		0.124***		0.127***		0.132***		0.129***	
	(0.2060)		(0.0400)		(0.0365)		(0.0353)		(0.0383)		(0.0369)	
Number of Alliances Lagged	0.199***		-0.006***		-0.004***		-0.004***		-0.004***		-0.004***	
	(0.0430)		(0.0016)		(0.0014)		(0.0015)		(0.0015)		(0.0014)	
Number of Alliances^2 Lagged	-0.006***		-0.279***		-0.272***		-0.272***		-0.264***		-0.258***	
	(0.0015)		(0.0522)		(0.0526)		(0.0526)		(0.0479)		(0.0485)	
Time Since Alliance Gain	1.673***		0.013***		0.013***		0.013***		0.012***		0.012***	
	(0.2977)		(0.0044)		(0.0044)		(0.0044)		(0.0039)		(0.0039)	
Time Since Alliance Gain^2	-0.616***		-0.000**		-0.000**		-0.000**		-0.000**		-0.000**	
	(0.2060)		(0.0001)		(0.0001)		(0.0001)		(0.0001)		(0.0001)	
Time Since Alliance Gain^3	0.199***		-0.129*		-0.129*		-0.129*		-0.129*		-0.129*	
	(0.0430)		(0.0665)		(0.0665)		(0.0665)		(0.0665)		(0.0665)	
Decav	1.673***		0.014**		0.014**		0.014**		0.014**		0.014**	
	(0.2977)		(0.0060)		(0.0060)		(0.0060)		(0.0060)		(0.0060)	
Decav^2	-0.336		-0.000***		-0.000***		-0.000***		-0.000***		-0.000**	
	(0.2587)		(0.0001)		(0.0001)		(0.0001)		(0.0001)		(0.0001)	
Decav^3	-1.329***		-0.274		-0.274		-0.274		-0.274		-0.255	
	(0.4110)		(0.2224)		(0.2224)		(0.2224)		(0.2224)		(0.2227)	
Mideast	-1.319***		-1.283***		-1.283***		-1.283***		-1.319***		-1.292***	
	(0.3376)		(0.3658)		(0.3658)		(0.3658)		(0.3734)		(0.3707)	
Africa	-2.204***		-1.002***		-1.002***		-1.002***		-0.980***		-1.001***	
	(0.6332)		(0.2415)		(0.2415)		(0.2415)		(0.2389)		(0.2449)	
Asia	-2.790***		-1.751***		-1.751***		-1.751***		-1.765***		-1.806***	
	(0.2580)		(0.4995)		(0.4995)		(0.4995)		(0.5582)		(0.5184)	
Americas	-2.790***		-1.658***		-1.658***		-1.658***		-1.679***		-1.727***	
	(0.2580)		(0.2714)		(0.2714)		(0.2714)		(0.2801)		(0.2731)	
Constant	4,794		4,794		4,794		4,794		4,794		4,794	
Number of Observations	4,794		4,794		4,794		4,794		4,794		4,794	

Table A6: Logistic Regressions Results for Hypothesis 1, Restricted to European States and using a 10 year Moving Average

VARIABLES	(1) I _{opit}		(2) I _{opit}		(3) I _{opit}		(4) I _{opit}		(5) I _{opit}		(6) I _{opit}	
	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain	alliance	gain
Reputation 10vr avg deflator			-0.002***		-0.001***		-0.001***		-0.001***		-0.001***	
			(0.0004)		(0.0002)		(0.0002)		(0.0002)		(0.0002)	
Violation History												
	-0.140***											
	(0.0309)											
Major Power	1.901***		1.981***		1.387***		1.387***		1.364***		1.470***	
	(0.3115)		(0.2474)		(0.2105)		(0.2105)		(0.2984)		(0.2626)	
Democracv Score	-1.144***		-0.998***		-0.680***		-0.680***		-0.793***		-0.705***	
	(0.2727)		(0.2661)		(0.2207)		(0.2207)		(0.2559)		(0.2357)	
Number of Alliances Lagged	0.163***		0.163***		0.071*		0.071*		0.059		0.056	
	(0.0461)		(0.0460)		(0.0407)		(0.0407)		(0.0384)		(0.0391)	
Number of Alliances^2 Lagged	-0.005***		-0.006***		-0.003		-0.003		-0.002*		-0.002	
	(0.0017)		(0.0022)		(0.0016)		(0.0016)		(0.0015)		(0.0017)	
Time Since Alliance Gain												
Time Since Alliance Gain^2												
Time Since Alliance Gain^3												
Decav												
Decav^2												
Decav^3												
Constant	-2.423***		-2.487***		-1.143***		-1.190***		-1.164***		-1.228***	
	(0.2161)		(0.2119)		(0.2608)		(0.2732)		(0.2568)		(0.2656)	
Number of Observations	1,408		1,408		1,408		1,408		1,408		1,408	

Table A7: Logistic Regressions Results for Hypothesis 1, using All State-Years from 1919 to 1989

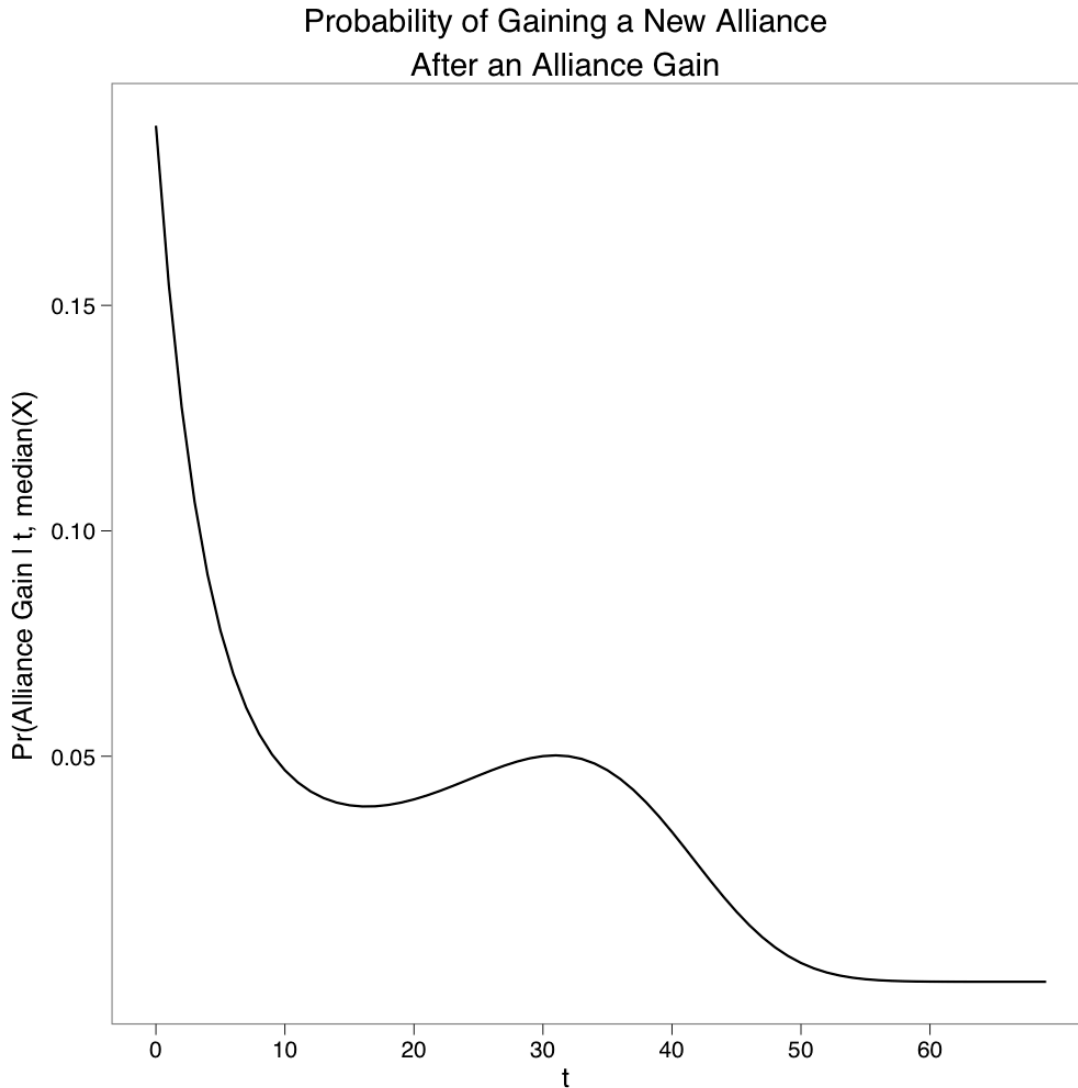
VARIABLES	(1) Γ_{opit} alliance_gain	(2) Γ_{opit} alliance_gain	(3) Γ_{opit} alliance_gain	(4) Γ_{opit} alliance_gain	(5) Γ_{opit} alliance_gain	(6) Γ_{opit} alliance_gain
Unreliability		-0.01*** (0.003)		-0.01*** (0.002)		-0.01** (0.003)
Violation History	-0.11* (0.055)		-0.07 (0.045)		-0.04 (0.060)	
Major Power	1.65*** (0.281)	1.78*** (0.290)	1.40*** (0.231)	1.50*** (0.246)	1.33*** (0.259)	1.46*** (0.273)
Democracv Score	-0.53*** (0.178)	-0.50*** (0.184)	-0.49*** (0.172)	-0.47*** (0.175)	-0.51*** (0.177)	-0.49*** (0.177)
No. of Alliances Lagged	0.15*** (0.034)	0.14*** (0.031)	0.18*** (0.032)	0.18*** (0.029)	0.19*** (0.034)	0.18*** (0.033)
No. of Alliances ² Lagged	-0.00*** (0.001)	-0.00** (0.001)	-0.01*** (0.001)	-0.01*** (0.001)	-0.01*** (0.001)	-0.01*** (0.001)
Time Since AllianceGain			-0.19*** (0.039)	-0.19*** (0.038)	-0.18*** (0.035)	-0.18*** (0.035)
Time Since AllianceGain ²			0.01*** (0.003)	0.01*** (0.003)	0.01*** (0.003)	0.01*** (0.003)
Time Since AllianceGain ³			-0.00** (0.000)	-0.00* (0.000)	-0.00** (0.000)	-0.00** (0.000)
Decav					-0.15** (0.073)	-0.10 (0.077)
Decav ²					0.02** (0.007)	0.01* (0.007)
Decav ³					-0.00*** (0.000)	-0.00** (0.000)
Mideast	-0.27 (0.239)	-0.26 (0.237)	-0.15 (0.211)	-0.15 (0.210)	-0.18 (0.231)	-0.17 (0.224)
Africa	-0.96*** (0.247)	-0.97*** (0.241)	-0.94*** (0.245)	-0.94*** (0.241)	-0.97*** (0.252)	-0.97*** (0.247)
Asia	-1.24*** (0.248)	-1.29*** (0.258)	-1.08*** (0.239)	-1.12*** (0.241)	-1.10*** (0.244)	-1.13*** (0.245)
Americas	-2.43*** (0.619)	-2.49*** (0.575)	-2.16*** (0.583)	-2.22*** (0.546)	-2.19*** (0.612)	-2.24*** (0.566)
Constant	-2.63*** (0.203)	-2.62*** (0.190)	-2.16*** (0.222)	-2.16*** (0.214)	-2.15*** (0.231)	-2.15*** (0.220)
Number of Observations	7,064	7,064	7,064	7,064	7,064	7,064

Table A8: Results for Hypothesis 1 *controlling number of alliances in the region*. DV is probability of alliance gain.

VARIABLES	(1) Logit alliance gain
Unreliability	-0.01** (0.003)
# of Alliances in Region	-0.01* (0.004)
Maior Power	1.25*** (0.288)
Democracv Score	-0.39** (0.174)
No. of Alliances Lagged	0.15*** (0.038)
No. of Alliances ² Lagged	-0.00** (0.001)
Time Since AllianceGain	-0.24*** (0.045)
Time Since AllianceGain ²	0.01*** (0.004)
Time Since AllianceGain ³	-0.00** (0.000)
Decav	-0.09 (0.067)
Decav ²	0.01** (0.006)
Decav ³	-0.00** (0.000)
Mideast	-0.54** (0.267)
Africa	-1.52*** (0.419)
Asia	-1.36*** (0.302)
Americas	-2.07*** (0.555)
Constant	-1.28*** (0.377)
Number of Observations	4,794

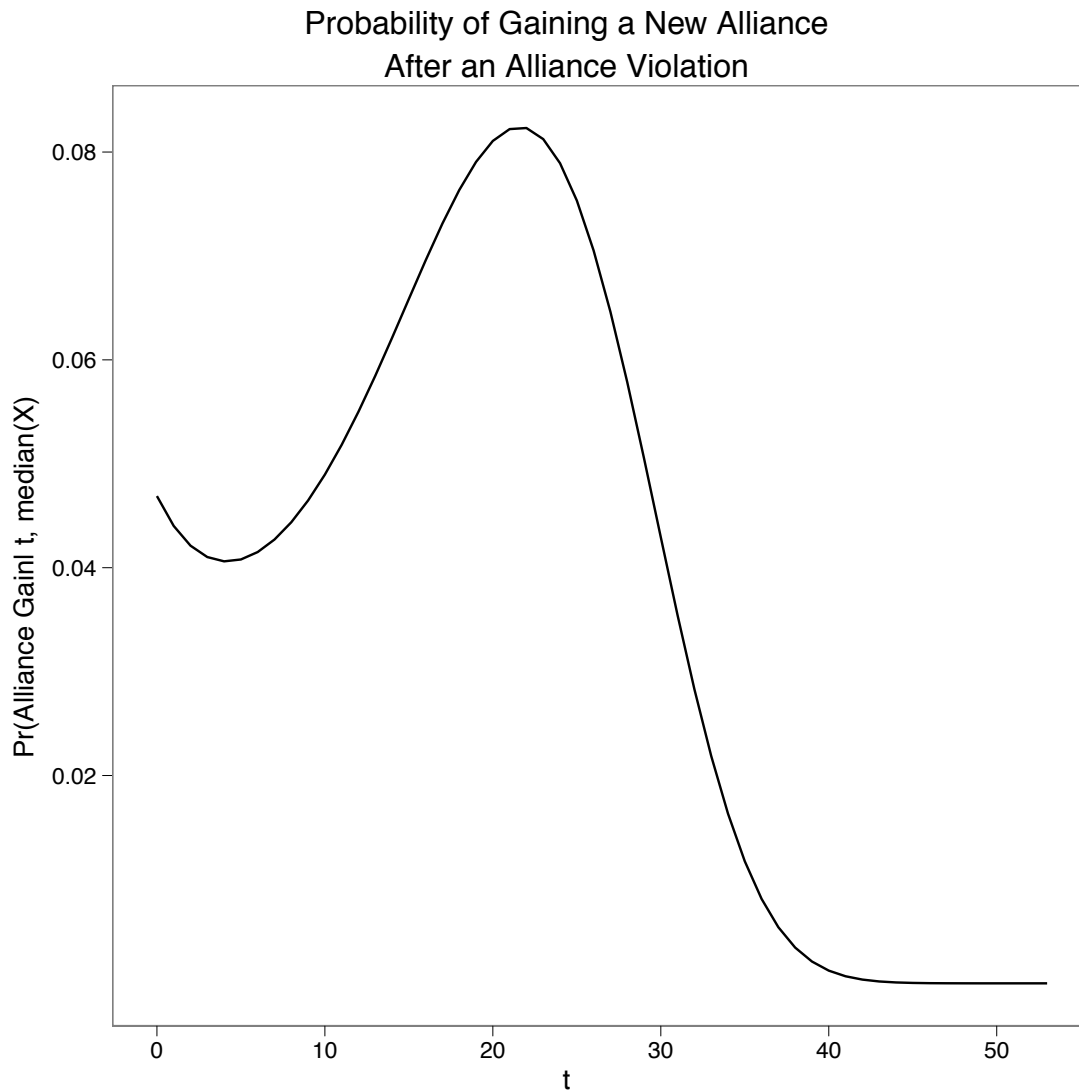
Robust Standard errors clustered by state in parentheses *** p<0.01, ** p<0.05* p<0.10

Figure A1: Time Polynomial Describing the Predicted Probability of Gaining a New Alliance after a Recent Alliance Gain



Note: Plotted is the time polynomial describing how the predicted probability of gaining a new alliance changes after a recent alliance gain (with all other variables set at their median value). Immediately following an alliance gain, countries are much less likely to gain a new alliance.

Figure A2: Hazard Function Following a Single Alliance Violation.



Note: Does reputation decay over time? Plotted above is the hazard function following a single alliance violation. Notice the likelihood of gaining a new alliance immediately decreases after a violation, but then gradually increases for the next 15 years as the violation appears to be discounted and the reputational consequences fade. After 20 years, the probability of an alliance gain decreases again, possibly because long periods without an alliance gain correlates with many states leaving the alliance market completely.