

Web Appendix to “Alliance Formation and Conflict Initiation: The Missing Link”

The manuscript reviewers at the *Journal of Peace Research* suggested that I provide additional evidence to support the claim proposed in this project—that the endogenous relationship between alliances and conflict could affect our inferences drawn from previous research. Here I replicate the analysis provided by Russett and Oneal in *Triangulating Peace* (2001). Table 1 (below) reports the results of that replication. The results reported here are not exactly comparable to the results within the manuscript due to the substantial differences in sample size. Column A exactly replicates their results reported in table A5.1 (2001, 316) using the model they estimated (i.e. a population-averaged panel data model with groups identified on dyadid and time accounted for by year). They specified a logit link in the model. Column B estimates the same model as a single logit model. Results are consistent across the specifications. Column C estimates their model specified as a probit model and again the results are consistent. Column D estimated their model as a probit model replacing their measure of alliance ties with my variable that indicates alliance formation. While allies has a consistent negative effect in the previous specifications of their model, the influence of alliance formation cannot be determined to be different from zero in the single probit specification. Column E uses Russett and Oneal’s specification of the dispute phase (excluding allies) and estimated a seemingly unrelated bivariate probit model with the alliance formation equation specified consistent with the models I report in this manuscript. The results of the bivariate probit model in the dispute equation are consistent with the previously estimated parameters. Column F reports parameter estimated for a bivariate probit model that accounts for the direct effect of alliance formation on the likelihood of a dispute occurring. Models E and F are not directly comparable because the log of distance is omitted in the dispute phase of model F due to concerns about multicollinearity as noncontiguity and contiguity are correlated over .8 as are the distance measures. Nonetheless, the effect of alliance formation on dispute initiation is positive and different from zero. Moreover, the magnitudes of several coefficients change in size though there are no changes in direction.

The replication example of Russett and Oneal reaffirms two claims that I make in this paper. First, a failure to account for the endogenous and simultaneous relationship between alliance formation decisions and dispute initiation can lead to erroneous inferences about the relationship between alliance formation and dispute initiation as the influence of alliance formation in the single probit model cannot be determined to be different from zero. Second, accounting for the direct effect of alliance formation on dispute initiation changes the magnitudes of at least three other factors that influence dispute initiation suggesting the substantive effects of those variables will be different when the direct link between alliance formation and dispute initiation is captured. The empirical evidence presented based upon the findings of Russett and Oneal do support my claim that these processes ought to be examined together and that the effects of some factors differ in magnitude when the processes are linked and simultaneously examined is consequential lends support to a re-specified model of alliance behavior.

Table 1: Replication of Russett and Oneal (2001, p. 316) Table A5.1 and Bivariate Probit Applications

	A	B	C	D	E	F
	Replication	Logit	Probit 1	Probit 2	Bivariate Probit 1	Bivariate Probit 2
<i>Dispute Equation</i>						
Power Ratio	-0.318* (0.042)	-0.328* (.020)	-0.146* (.009)	-0.134* (.009)	-0.151* (.009)	-0.158* (.009)
Lower Democracy	0.0608* (.009)	-0.064* (.005)	-0.029* (.002)	-0.025* (.002)	-.027* (.002)	-0.027* (.002)
Lower Dependence	-52.924* (13.405)	-67.667* (10.73)	-27.595* (5.091)	-18.952* (4.147)	-27.387* (5.193)	-19.973* (4.302)
IO membership	-0.0135* (.0423)	-0.011* (.002)	-0.005* (.0008)	-0.006* (.0008)	-0.007* (.0008)	-0.007* (.0008)
Noncontiguity	-0.989* (.168)	-1.047* (.074)	-0.465* (.036)	-0.436* (.037)	-0.435* (.036)	-0.581* (.034)
Log of Distance	-0.3762* (.0656)	-0.375* (.026)	-0.184* (.013)	-0.150* (.015)	-0.182* (.014)	NA NA
Only Minor Powers	-0.647* (.178)	-0.618* (.078)	-0.270* (.036)	-0.313* (.042)	-0.341* (.042)	-0.153* (.037)
Allies	-0.539* (.159)	-0.595* (.068)	-0.254* (.034)	---	---	---
Alliance Formation				.060 (.042)	---	0.3616* (.148)
Constant	-0.128 (.536)	-0.1812* (.211)	-0.261* (.106)	-0.663* (.117)	-0.299* (.110)	-1.584* (.058)
<i>Alliance Formation Equation</i>						
Relative Capabilities	NA	NA	NA	NA	-1.509* (.102)	-1.492* (.102)
Log of Distance					-0.5126* (.024)	-0.513* (.024)
Contiguity					-3.753* (.184)	3.753* (.184)
Joint Democracy					-0.211* (.040)	-0.212* (.040)
Joint Autocracy					-0.085* (.037)	-0.0890* (.037)
Sum of Shared Rivals					0.780* (.055)	0.787* (.055)
Constant					3.351* (.197)	3.342* (.197)
N	39,988	39,996	39,996	38,745	38,824	38,824
Wald chi-square(df)	228.11*(8)	1570*(8)	1403*(8)	1072*(8)	2778.72*(13)	2636.24(13)
Log Likelihood	NA	-6661.9	-6678.8	-5700.1	-11169.51	-11254.90