

INTERNET APPENDIX
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"Bones of Contention: Comparing Territorial, Maritime, and River Issues"
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This document contains the results of a number of supplementary analyses that are not included in the text of the article, but that offer useful insight into the processes at work (largely in response to comments by the manuscript's reviewers).

Multinomial Logit Analysis of Tradeoffs among Settlement Types

Some readers may have a different conceptualization of how substitutability of settlement techniques might work, with the idea that certain independent variables might be associated with the selection of one technique rather than another. While we believe that many of our hypothesized variables are likely to increase the likelihood that either of several different issue management techniques might be selected, and our analyses support this, we also decided to consider the possibility of tradeoffs between different techniques. To do this, we examined the data using a multinomial logit model, which allows us to explicitly examine when one foreign policy option is being chosen compared to the other, as an alternative to the separate logit models that we ran in the paper for each type of management technique.

One issue that arises with this approach is that there are 142 observations (years during an ongoing claim) where we observe both peaceful and militarized settlement attempts over the claim in the same year, summarized in the following table:

		Peaceful settlement attempts		Total
		No	Yes	
Militarized settlement attempts	No	8,562	1,174	9,736
	Yes	163	142	305
Total		8,725	1,316	10,041

In order for multinomial logit to work properly, we were forced to place the 142 observations that include both militarized and peaceful settlement attempts into one of the two categories (militarized or peaceful). To ensure the robustness of our results, we ran the analyses two different ways -- coding these observations as peaceful attempts in one set of analyses (Appendix Tables A1 and A2), and as militarized attempts in another set (Appendix Tables B1 and B2). We also included the results of the Small-Hsiao IIA test in the bottom rows of each table, in order to evaluate the independence of irrelevant alternatives (IIA) assumption.

Though some minor variation exists between the results presented in the manuscript and the multinomial results presented in the appendix, we see very little difference between the two approaches. The only difference is that a handful of coefficients drop from significance in the multinomial models. The signs of the coefficients never change. Overall, these results support our conceptualization of substitution. Policy makers do not necessarily choose either peaceful or militarized means to settle an issue claim exclusive of the type of settlement, but often employ multiple foreign policy tools to pursue their issue related goals.

Details of Past Militarized Dispute Conflict

It is also possible that we have overlooked important characteristics of past armed conflict over the issue. In the analyses that we reported in the paper, we use a measure of recent armed conflict that includes the number of militarized interstate disputes over the previous decade, weighted by the time that has elapsed since each one. At the suggestion of reviewers, though, we also considered several other characteristics of the most recent militarized dispute over the issue (drawing from work on recurrent conflict and rivalry): the outcome and severity level.

To examine the possibility that dispute outcomes (rather than simply the occurrence of recent conflict) have an important impact on subsequent conflict management decisions, we examined how experiencing a militarized dispute ending in a stalemate in the most recent MID over the issue affected future settlement decisions. The alternative outcome types, decisive victories or compromises, have been shown to have significantly different effects on recurrent conflict or rivalry processes. These results of including stalemated outcomes in the model are presented in Appendix Tables C1 and C2. These results indicate that focusing on the outcome of previous militarized actions does not alter our original results. That is, while stalemates do have a significant effect (increasing the likelihood of both militarized conflict and peaceful settlement techniques), the effects of the other variables in the model (including previous militarized actions) remain the same.

We also considered the impact of dispute severity, focusing on the number of recent fatal militarized disputes rather than all militarized disputes over the issue (using the same weighting scheme reported in the paper for the analysis of all disputes). These results are presented in Appendix Tables D1 and D2. These tables indicate that our original results, which include any level of MID, remain consistent when focusing only on fatal MIDs. That is, previous fatal militarized disputes have the same effect as all militarized disputes, increasing the likelihood of both militarized and peaceful settlement attempts. Furthermore, the effects of the other variables in the model remain the same.

Impact of Recent Successful Settlement Attempts

Finally, we considered the impact of recent *successful* settlement attempts in the analysis, rather than focusing exclusively on failed settlement attempts; these are measured using the same basic weighting scheme. The results, which are presented in Appendix Tables E1 and E2, indicate that successful attempts increase the probability of subsequent peaceful settlement attempts, while having no effect on militarized conflict (where one might reasonably expect to see a significant negative effect). Furthermore, none of the other variables' effects change.

Appendix Table A1. Replication of Table 2 - Multinomial Logit (Observations for both militarized and peaceful settlement attempts coded as peaceful)

	Model I		Model II	
	Militarized	Peaceful	Militarized	Peaceful
Maritime Claim	-0.27* (1.55)	-0.53*** (6.77)	-0.05 (0.26)	-0.31*** (3.87)
River Claim	-0.05 (0.14)	0.46*** (4.59)	0.04 (0.11)	0.38*** (3.51)
Within-Issue Salience	0.27*** (7.28)	0.14*** (9.99)	0.20*** (5.48)	0.08*** (5.67)
Militarized Disputes			0.96*** (10.27)	0.28*** (3.72)
Failed Peaceful Attempts			0.19*** (2.52)	0.48*** (14.64)
Joint Democracy	-0.18 (0.93)	0.42*** (5.86)	-0.22 (1.06)	0.286*** (3.79)
Capability Imbalance	-1.26*** (2.71)	-1.45*** (7.17)	-0.70* (1.39)	-0.951*** (4.42)
Constant	-4.67*** (8.79)	-1.58*** (7.44)	-5.09*** (9.12)	-2.01*** (8.93)
Observations	9940	9940	9940	9940
Tests for IIA assumption				
Chi2	4.34	4.40	3.26	10.60
(P>Chi2)	(.63)	(.62)	(.92)	(.23)

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Tests for IIA employ the Small-Hsiao tests of Independence of Irrelevant Alternatives using the `mlogtest` command in Stata 8.0. The values in each column indicate whether or not the equations are independent when the same column's dependent variable is omitted from the analysis (the null is independence of irrelevant alternatives).

Appendix Table A2. Replication of Table 4 - Multinomial Logit (Observations for both militarized and peaceful settlement attempts coded as peaceful)

	Model I Territorial Claims		Model II River Claims		Model III Maritime Claims	
	<u>Militarized</u>	<u>Peaceful</u>	<u>Militarized</u>	<u>Peaceful</u>	<u>Militarized</u>	<u>Peaceful</u>
Within-Issue Salience	0.21*** (4.47)	0.11*** (6.07)	0.22** (1.94)	0.01 (0.30)	0.19*** (2.90)	0.04* (1.30)
Militarized Disputes	0.87*** (7.54)	0.46*** (5.91)	0.80*** (2.71)	-0.12 (0.35)	1.07*** (5.72)	0.42*** (2.91)
Failed Peaceful Attempts	0.24*** (2.60)	0.46*** (11.12)	-2.62** (2.10)	0.29*** (4.26)	0.31** (2.23)	0.63*** (7.96)
Joint Democracy	-0.58* (1.42)	0.40*** (3.95)	-33.45*** (86.86)	0.82*** (3.95)	-0.02 (0.94)	-0.06 (0.47)
Capability Imbalance	-1.08** (1.78)	-1.12*** (3.99)	-4.21*** (2.66)	-0.43 (0.50)	0.56 (0.55)	-0.47 (1.18)
Constant	-4.78*** (6.99)	-2.09*** (7.05)	-1.84 (1.09)	-1.54** (2.26)	-6.26*** (5.59)	-2.31*** (5.18)
Observations	6022	6022	762	762	3156	3156
Tests for IIA assumption						
Chi2	5.32	2.86	7.09	1.10	4.20	8.59
(P>Chi2)	(.51)	(.83)	(.32)	(.99)	(.65)	(.20)

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Tests for IIA employ the Small-Hsiao tests of Independence of Irrelevant Alternatives using the mlogtest command in Stata 8.0. The values in each column indicate whether or not the equations are independent when the same column's dependent variable is omitted from the analysis (the null is independence of irrelevant alternatives).

Appendix Table B1. Replication of Table 2 - Multinomial Logit (Observations for both militarized and peaceful settlement attempts coded as militarized)

	Model I		Model II	
	Militarized	Peaceful	Militarized	Peaceful
Maritime Claim	-0.32*** (2.38)	-0.55*** (6.61)	-0.002 (0.01)	-0.34*** (4.08)
River Claim	-0.12 (0.47)	0.52*** (5.06)	-0.05 (0.21)	0.43*** (3.85)
Within-Issue Saliency	0.23*** (8.76)	0.13*** (9.02)	0.15*** (5.28)	0.08*** (5.48)
Militarized Disputes			0.98*** (11.93)	0.30*** (4.21)
Failed Peaceful Attempts			0.35*** (6.98)	0.48*** (14.42)
Joint Democracy	-0.13 (0.89)	0.48*** (6.34)	-0.25* (1.54)	0.33*** (4.22)
Capability Imbalance	-2.24*** (6.00)	-1.21*** (5.66)	-1.62*** (3.99)	-0.76*** (3.39)
Constant	-3.00*** (7.61)	-1.86*** (8.26)	-3.47*** (8.30)	-2.25*** (9.54)
Observations	9940	9940	9940	9940
Tests for IIA assumption				
Chi2	8.69	4.51	8.12	14.22
(P>Chi2)	(.20)	(.61)	(.43)	(.08)

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Tests for IIA employ the Small-Hsiao tests of Independence of Irrelevant Alternatives using the `mlogtest` command in Stata 8.0. The values in each column indicate whether or not the equations are independent when the same column's dependent variable is omitted from the analysis (the null is independence of irrelevant alternatives).

Appendix Table B2. Replication of Table 4 - Multinomial Logit (Observations for both militarized and peaceful settlement attempts coded as militarized)

	Model I Territorial Claims		Model II River Claims		Model III Maritime Claims	
	<u>Militarized</u>	<u>Peaceful</u>	<u>Militarized</u>	<u>Peaceful</u>	<u>Militarized</u>	<u>Peaceful</u>
Within-Issue Salience	0.16*** (4.40)	0.11*** (6.00)	0.11* (1.41)	0.01 (0.26)	0.13*** (2.76)	0.04 (1.13)
Militarized Disputes	0.94*** (9.19)	0.32*** (3.84)	0.74*** (2.85)	-0.17 (0.45)	1.07*** (6.49)	0.27** (1.70)
Failed Peaceful Attempts	0.38*** (5.83)	0.46*** (10.82)	0.12 (0.58)	0.29*** (4.17)	0.42*** (4.08)	0.65*** (7.99)
Joint Democracy	-0.35* (1.34)	0.44*** (4.26)	-1.26 (1.21)	0.87*** (4.14)	-0.17 (0.74)	-0.03 (0.21)
Capability Imbalance	-1.86*** (3.61)	-0.95*** (3.29)	-5.29*** (3.26)	-0.14 (0.16)	-0.71 (0.98)	-0.22 (0.53)
Constant	-3.36*** (6.17)	-2.31*** (7.53)	-0.26 (0.18)	-1.82*** (2.62)	-4.19*** (5.69)	-2.61*** (5.38)
Observations	6022	6022	762	762	3156	3156
Tests for IIA assumption						
Chi2	6.68	5.09	7.18	54.02	5.30	8.80
(P>Chi2)	(.36)	(.54)	(.31)	(.01)	(.51)	(.19)

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Tests for IIA employ the Small-Hsiao tests of Independence of Irrelevant Alternatives using the mlogtest command in Stata 8.0. The values in each column indicate whether or not the equations are independent when the same column's dependent variable is omitted from the analysis (the null is independence of irrelevant alternatives).

Appendix Table C1. Replication of Table 2: Add Staleated Outcome in Previous MID

	Militarized Conflict		Peaceful Techniques	
	Model I	Model II	Model III	Model IV
Staleated Outcome	1.39*** (11.71)	0.69*** (4.49)	0.67*** (9.60)	0.21*** (2.39)
Maritime Claim	-0.13 (0.96)	0.03 (0.23)	-0.50*** (6.37)	-0.31*** (3.80)
River Claim	-0.02 (0.06)	-0.09 (0.34)	0.53*** (5.26)	0.41*** (3.78)
Within-Issue Salience	0.17*** (6.29)	0.12*** (4.44)	0.11*** (8.08)	0.07*** (5.15)
Militarized Disputes		0.74*** (9.02)		0.25*** (3.73)
Failed Peaceful Attempts		0.14*** (3.01)		0.47*** (14.39)
Joint Democracy	-0.27** (1.79)	-0.35** (2.13)	0.43*** (5.93)	0.28*** (3.75)
Capability Imbalance	-1.65*** (4.25)	-1.33*** (3.20)	-1.17*** (5.65)	-0.89*** (4.11)
Constant	-3.66*** (8.92)	-3.72*** (8.72)	-1.83*** (8.44)	-2.04*** (9.04)
Observations	9940	9940	9940	9940

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Appendix Table C2. Replication of Table 4: Add Stalemated Outcome in Previous MID

	Militarized Settlement Attempts			Peaceful Settlement Attempts		
	Model I Territorial Claims	Model II River Claims	Model III Maritime Claims	Model IV Territorial Claims	Model V River Claims	Model VI Maritime Claims
Stalemated Conflict	0.73*** (3.75)	1.80** (1.90)	0.34 (1.24)	0.31*** (2.84)	-0.96* (1.32)	0.13 (0.81)
Within-Issue Saliience	0.13*** (3.63)	0.11 (1.23)	0.11*** (2.36)	0.10*** (5.57)	0.01 (0.32)	0.03 (0.99)
Militarized Disputes	0.68*** (7.09)	-0.15 (0.32)	0.97*** (5.52)	0.26*** (3.33)	0.38 (0.70)	0.26** (1.78)
Failed Peaceful Attempts	0.17*** (2.61)	0.04 (0.20)	0.12* (1.55)	0.43*** (10.51)	0.29*** (4.35)	0.61*** (7.99)
Joint Democracy	-0.49** (1.83)	-1.33 (1.25)	-0.20 (0.89)	0.42*** (4.09)	0.84*** (4.02)	-0.06 (0.52)
Capability Imbalance	-1.50*** (2.78)	-3.39* (1.57)	-0.61 (0.84)	-1.02*** (3.61)	-0.66 (0.76)	-0.46 (1.17)
Constant	-3.64*** (6.42)	-2.02 (1.00)	-4.203*** (5.70)	-2.15*** (7.22)	-1.36** (1.96)	-2.26*** (5.10)
Observations	6022	762	3156	6022	762	3156

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).

Appendix Table D1. Replication of Table 2: Add Recent Fatal MIDs

	Militarized Model II	Peaceful Model IV
Maritime Claim	-0.001 (0.01)	-0.29*** (3.58)
River Claim	-0.29 (1.12)	0.36*** (3.31)
Within-Issue Saliency	0.16*** (6.11)	0.08*** (5.65)
Fatal MIDs	0.94*** (5.13)	0.47*** (3.08)
Failed Peaceful Attempts	0.30*** (8.19)	0.51*** (16.17)
Joint Democracy	-0.38*** (2.39)	0.27*** (3.54)
Capability Imbalance	-1.85*** (4.83)	-1.02*** (4.81)
Constant	-3.26*** (8.11)	-1.92*** (8.62)
Observations	9940	9940

Absolute values of robust Z statistics in parentheses: * $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed tests).

Appendix Table D2. Replication of Table 4 - Add Recent Fatal MIDs

	Militarized Settlement Attempts			Peaceful Settlement Attempts		
	Model I Territorial Claims	Model II River Claims	Model III Maritime Claims	Model IV Territorial Claims	Model V River Claims	Model VI Maritime Claims
Within-Issue Salience	0.16*** (4.65)	0.12* (1.50)	0.18*** (3.71)	0.11*** (5.94)	0.01 (0.16)	0.04* (1.40)
Fatal MIDs	0.73*** (3.59)	0.78** (1.90)	1.92*** (2.96)	0.45*** (2.55)	0.27 (0.53)	0.64 (1.03)
Failed Peaceful Attempts	0.37*** (7.33)	0.09 (0.46)	0.25*** (3.83)	0.49*** (12.28)	0.30*** (4.43)	0.67*** (9.08)
Joint Democracy	-0.75*** (2.81)	-1.51* (1.46)	-0.07 (0.28)	0.36*** (3.51)	0.86*** (4.15)	-0.04 (0.35)
Capability Imbalance	-2.20*** (4.66)	-5.12*** (3.36)	-0.88 (1.18)	-1.24*** (4.50)	-0.14 (0.16)	-0.52* (1.29)
Constant	-2.95*** (5.81)	-0.431 (0.31)	-4.28*** (5.80)	-1.93*** (6.63)	-1.80*** (2.58)	-2.26*** (5.09)
Observations	6022	762	3156	6022	762	3156

Absolute values of robust Z statistics in parentheses: * $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed tests).

Appendix Table E1. Replication of Table 2 - Add Recent Successful Peaceful Attempts

	Militarized Model II	Peaceful Model IV
Maritime Claim	0.01 (0.05)	-0.32*** (3.98)
River Claim	-0.12 (0.48)	0.39*** (3.61)
Within-Issue Saliency	0.13*** (4.91)	0.08*** (5.34)
Militarized Disputes	0.91*** (11.87)	0.25*** (3.93)
Failed Peaceful Attempts	0.14*** (2.89)	0.39*** (11.23)
Successful Peaceful Attempts	0.08 (1.09)	0.38*** (7.59)
Joint Democracy	-0.34** (2.03)	0.21*** (2.72)
Capability Imbalance	-1.49*** (3.65)	-0.79*** (3.61)
Constant	-3.54*** (8.41)	-2.15*** (9.51)
Observations	9940	9940

Absolute values of robust Z statistics in parentheses: * $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed tests).

Appendix Table E2. Replication of Table 4 - Add Recent Successful Peaceful Attempts

	Militarized Settlement Attempts			Peaceful Settlement Attempts		
	Model I Territorial Claims	Model II River Claims	Model III Maritime Claims	Model IV Territorial Claims	Model V River Claims	Model VI Maritime Claims
Within-Issue Saliency	0.14*** (4.04)	0.12* (1.41)	0.12*** (2.50)	0.11*** (5.78)	0.01 (0.23)	0.02 (0.83)
Militarized Disputes	0.81*** (8.73)	0.69*** (2.46)	1.08*** (7.12)	0.28*** (3.72)	-0.16 (0.46)	0.20* (1.30)
Failed Peaceful Attempts	0.19*** (2.94)	-0.02 (0.08)	0.12 (1.27)	0.393*** (9.21)	0.26*** (3.50)	0.45*** (5.22)
Successful Peaceful Attempts	0.14* (1.61)	0.39 (1.13)	0.002 (0.02)	0.35*** (5.36)	0.20 (1.17)	0.46*** (5.13)
Joint Democracy	-0.56** (1.94)	-1.59* (1.47)	-0.19 (0.81)	0.32*** (3.09)	0.78*** (3.58)	-0.12 (0.92)
Capability Imbalance	-1.75*** (3.37)	-5.15*** (3.23)	-0.66 (0.89)	-1.03*** (3.66)	-0.38 (0.44)	0.03 (0.08)
Constant	-3.40*** (6.22)	-0.56 (0.39)	-4.15*** (5.55)	-2.17*** (7.29)	-1.61** (2.36)	-2.68*** (5.94)
Observations	6022	762	3156	6022	762	3156

Absolute values of robust Z statistics in parentheses: * p < .10; ** p < .05; *** p < .01 (one-tailed tests).