Supporting Information for "Bullets for Ballots: Electoral Participation Provisions and Enduring Peace after Civil Conflict"

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Data, Alternative Analysis, and More Detailed Case Analysis

More Detail on the Data

Independent and Dependent Variables of Interest

I list both the dependent and independent variable of interest that I coded for all of the clustered peace agreements for the universe of cases (drawn initially from the UCDP Peace Agreement Dataset). The complete set of coding rules and the coding notes on each case are also available from the author upon request. An independent coder re-coded the data based on the coding rules, and the coding decisions differed only on the territorial cases (which are coded both ways as a robustness check). Several less clear coding decisions are noted in these data and the text, and the analysis is run with the opposite coding of these as a robustness check. Each country was also dropped in turn as an additional robustness check, so not an individual case is producing the results. The results held with these robustness checks.

All results, as well as the supporting files for additional quantitative analysis, are all available from the author upon request.

Table A1: Data on Electoral Participation Provisions and Peace Agreement Failure

Government, Rebel Group, Year of Agreement:	Electoral Participation Provisions:	Dyadic Peace (5 Years):
Afghanistan HII 1996	No	Holds***
Afghanistan HII 1993	Yes	Fails
Afghanistan HII 1993	Yes	Fails
Afghanistan HIII 1993	Yes	Holds***
Angola UNITA 1989	No	Fails
Angola UNITA 2002	Yes	Holds
Angola UNITA 1991	Yes	Fails

[1] Please note that figures and tables in this supporting information are also used in Aila M. Matanock. 2016. "External Engagement: Explaining the Spread of Electoral Participation Provisions in Civil Conflict Settlements." Working Paper. University of California, Berkeley, and Aila M. Matanock. 2017. *Electing Peace: From Civil Conflict to Political Participation*. Cambridge U.K.: Cambridge University Press. The supporting information for those publications, which overlap with this supporting information, also may be useful for readers. Coding notes by case, as well as code for various robustness checks, can also be provided by the author upon request.

Angola	UNITA	1994	Yes	Fails
Bangladesh (Chittagong Hill Tracts)	JSS/SB	1997	No	Holds
Bosnia and Herzegovina (Croat)	Croat	1994	No++	Holds
Bosnia and Herzegovina (Serb)	Serb	1995	Yes	Holds
Burundi	CNDD	2000	Yes	Holds
Burundi	FROLINA	2000	Yes	Holds
Burundi	CNDD-FDD	2003	Yes	Holds
Burundi	PALIPEHUTU	2000	Yes	Holds
Cambodia	KR	1991	Yes	Fails
Cambodia	KPNLF	1991	Yes	Holds
Cambodia	FUNCINPEC	1991	Yes	Holds
Chad	MDD	1999	No	Holds
Chad	FNT	1994	No	Holds
Chad	CSNPD	1994	No	Holds
Chad	CNR	1993	No	Fails
Chad	FNT	1992	No	Fails
Chad	MDD	1995	No	Fails
Chad	MDJT	2002	No	Fails
Chad	CDR or FNT	1997	Yes	Holds
Chad	FARF	1998	Yes	Holds
Chad	MDJT	2005	Yes	Holds
Chad	FAN	1978	No	Fails
Chad	FAN	1978	No	Fails*
Chad	FAN	1979	No	Fails
Chad	FAP	1979	No	Fails**
Colombia	FARC	1999	No	Fails
Colombia	FARC	2002	No	Fails
Colombia	EPL	1991	Yes	Holds***
Comoros (Anjouan)	MPA	2000	No	Holds
Comoros (Anjouan)	MPA	2001	Yes	Holds*
Comoros (Anjouan)	MPA	2003	Yes	Holds*
Congo	Ninjas	1999	No++	Fails**
Congo	Cocoyes	1999	No++	Holds
Congo	Ntsiloulous	1999	No++	Fails
Croatia (Serb)	Krajina	1995	No	Holds
Democratic Republic of Congo	MLC	1999	No+	Fails
Democratic Republic of Congo	RCD	1999	No+	Fails
Democratic Republic of Congo	MLC	2003	Yes	Holds
Democratic Republic of Congo	RCD	2003	Yes	Holds
Democratic Republic of Congo	RCD-ML	1999	No+	Fails
Democratic Republic of Congo	RCD-ML	2003	Yes	Holds
Djibouti	FRUD	1994	Yes	Holds
Djibouti	FRUD-AD	2001	Yes	Holds

El Salvador	FMLN	1992	Yes	Holds
Georgia (Abkhazia)	Abkhazia	1994	No	Holds
Guatemala	URNG	1991	No	Fails
Guatemala	URNG	1996	Yes	Holds
Guinea Bissau	junta	1998	Yes	Fails
Haiti	military	1993	No	Holds
India (Bodoland)	ABSU	1993	No	Holds
India (Tripura)	ATTF	1993	No	Fails
India: Tripura	TNV	1988	No	Holds
Indonesia (Aceh)	GAM	2002	No	Fails
Indonesia (Aceh)	GAM	2005	Yes+++	Holds
Israel (Palestine)	PLO/Fatah	1995	No	Fails
Israel (Palestine)	PLO/Fatah	1999	No	Fails
Israel (Palestine)	PNA	1999	No	Fails
Ivory Coast	MJP	2003	No	Fails
Ivory Coast	MJP	2003	No	Fails
Ivory Coast	MPCI	2003	No	Fails
Ivory Coast	MPCI	2003	No	Fails*
Ivory Coast	FN	2005	Yes	Holds
Ivory Coast	MPIGO	2003	No	Fails
Ivory Coast	MPIGO	2003	No	Fails
Ivory Coast	MJP	2004	Yes	Fails*, **
Ivory Coast	MPCI	2004	Yes	Fails*, **
Ivory Coast	MPIGO	2004	Yes	Fails*, **
Liberia	INPFL	1991	No	Holds
Liberia	NPFL	1991	No	Holds
Liberia	LURD	2003	Yes	Holds
Liberia	NPFL	1993	Yes	Holds*
Liberia	NPFL	1994	Yes	Holds*
Liberia	NPFL	1995	Yes	Holds*
Liberia	NPFL	1996	Yes	Holds*
Liberia	MODEL	2003	Yes	Holds
Macedonia	UCK	2001	Yes	Holds
Mali (Azawad)	MPA	1991	No	Holds*
Mali (Azawad)	MPA	1992	No+	Holds
Mauritania: Western Sahara	POLISARIO	1979	No	Holds
Mexico	EZLN	1996	No	Holds
Moldova (Dniestr)	PMR	1997	No	Holds
Mozambique	RENAMO	1992	Yes	Holds
Mozambique	RENAMO	1984	No	Fails
Niger	FLAA	1993	No	Holds
Niger (Air and Azawad)	CRA	1995	No+	Holds
Papua New Guinea (Bougainville)	BRA	1991	No	Fails

Papua New Guinea (Bougainville)	BRA	1994	No	Fails
Papua New Guinea (Bougainville)	BRA	2001	Yes+++	Holds
Philippines	military faction	1995	No	Holds
Philippines (Mindanao)	MILF	2001	No	Fails
Philippines (Mindanao)	MNLF	1996	Yes+++	Holds
Philippines: Mindanao	MNLF	1976	No	Fails
Philippines: Mindanao	MNLF	1987	No	Fails
Rwanda	FPR	1993	Yes	Fails
Senegal (Casamance)	MFDC	2004	No	Holds***
Sierra Leone	RUF	1996	No	Fails
Sierra Leone	RUF	1999	Yes	Fails
Sierra Leone	RUF	2000	Yes	Holds
Somalia	SPM or USC	1993	No	Holds
Somalia	USC/SNA	1997	No	Fails**
Somalia	USC/SNA	1994	No	Fails
South Africa	ANC	1993	Yes	Holds
South Africa: Namibia	SWAPO	1978	No	Fails
Sudan (Southern Sudan)	SPLM/A	2005	Yes	Holds
Sudan	NDA	2005	Yes	Holds
Sudan	SPLM/A	1988	No	Fails
Tajikistan	UTO	1997	Yes	Fails
Uganda	UNRF II	2002	No	Holds
Uganda	UPDA	1988	No	Holds
Uganda	NRA	1985	No	Fails
UK (Northern Ireland)	PIRA	1998	Yes	Holds
Yugoslavia (Kosovo)	Kosovo	1999	No	Holds
Yugoslavia (Slovenia)	Slovenia	1991	No	Holds
Zimbabwe (Rhodesia)	PF	1979	No+	Holds
Zimbabwe (Rhodesia)	ANC	1975	No	Holds

*Also coded as dropping since these are renegotiations of previous agreements without a return to conflict in between.
**Also coded as holding under alternative specification not using UCDP-coded alliances.
***Also coded as failing under alternative specification more than 5 years later (although likely splinters) or through an unrelated coup.
+Also coded as yes under a more inclusive coding of expectations of electoral participation that anticipates that all groups will be allowed to participate.
++Also coded as yes under a more inclusive coding of expectations of electoral participation for all parties that participated before the conflict.
+++Also coded as no under a less inclusive coding of no expectations of electoral participation for territorial rebel groups in regional transitional bodies.

Moderating Variables

Beyond the description of the moderating variables in the text, and the justification made there for using them, this section provides more information on the distribution and features of the democracy promotion variables, as well as alternative coding of them. Both variables are well-distributed across the ranges that they cover, from 0-100 percent for observation and 0-20 percent for aid. These regional electoral observation and regional democracy and governance assistance percentages correlate highly, as expected and described. Each variable increases over time across regions, but regional democracy and governance aid deviates less from a direct time trend than does regional electoral observation (and it is only available after the end of the Cold War), so the latter provides greater explanatory leverage.

I also considered alternative specifications of these measures. First, legislative elections are the most comparable measures across cases,[2] so I use these in the main analysis.[3] I include all elections in an alternative specification—the variables are similar in these data (correlated at 0.95)—and smooth over multiple years (two-year lags, two-year lags alongside the current year). The effects are positive and substantively similar. The lagged variable is preferable because it captures when the combatants are likely assessing international actors' ability and willingness to neutrally engage through elections.

I also follow Hyde 2011 in adopting five regions, but also code alternative specifications (UCDP-defined regions, regional intergovernmental organization-defined zones, sub-regions, etc.), which produce similar results but are slightly weaker with certain regional groupings.

[2] Like studies of international election observation, I drop "mature" democracies from regional calculations in each of these specifications; see Susan D. Hyde. 2011. *The Pseudo-Democrat's Dilemma: Why Election Observation Became an International Norm*. Ithaca, N.Y.: Cornell University Press; Judith G. Kelley. 2012. *Monitoring Democracy: When International Election Observation Works, and Why It Often Fails*. Princeton, N.J.: Princeton University Press.

[3] Although several cases had legislative elections that were technically unmonitored in the relevant years, even though other elections in the same states are monitored in the same years (typically presidential elections taking place in another month). Since most of these cases worked against my hypotheses—would have meant monitoring in unexpected, and often unsuccessful, cases—I counted these as monitored. The results hold in either case.

Table A2: Summary Statistics on Main Variables and Controls

	Mean	Stan. Dev.	Observations
Failure of Peace in the Government-Rebel Group Dyad (within 5 years)(=1)	0.43	0.50	110
Independent Variables of Interest			
Electoral Participation Provisions(=1)[a,b]	0.38	0.49	110
Implemented Electoral Participation(=1)[a,b]	0.25	0.44	110
Cold War(=1)	0.13	0.33	110
Regional Election Observation (Percent, Lagged)(=0-1)	0.60	0.31	110
Regional Dem. Assist. (Percent of Development Aid, Lagged 2yr.)(=0.01-0.19)[c]	0.08	0.06	96
Other Provisions[d]			
DDR Provisions(=1)	0.51	0.50	110
SSR Provisions(=1)	0.49	0.50	110
Government Power-Sharing Provisions(=1)	0.17	0.38	110
Civil Service Power-Sharing Provisions(=1)	0.12	0.32	110
Control Variables			
Major Conflict Indicator(=1)	0.75	0.44	110
Conflict Duration (Dyadic)(=0-38)	7.35	7.77	110
Real GDP per 1,000 (Lagged)(=0.20-27.02)	2.51	4.40	110
Balance between Group and Government(=0-2)[e]	1.02	0.64	108
Government's Military Personnel (1000s, Logged, Lagged)(=0-7.14)	3.55	1.38	107
Rebel Group's Fighters(Logged, During Conflict)(=5.30-11.04)	8.76	1.45	83
Past Agreement(s)(=0-3)	0.34	0.62	110
Number of Active Factions Not Signing(=0-9)	1.47	2.14	110
Number Signing(=1-3)	1.43	0.78	110
More Negotiations Stipulated in Agreement(=1)	0.15	0.36	110
Territorial Conflict(=1)	0.31	0.46	110
Identity Conflict(=1)	0.83	0.38	109
Marxist Conflict(=1)	0.17	0.38	110
Rebel Groups with Total Goals(=1)	0.74	0.44	109
Post-9/11(=1)	0.20	0.40	110
U.N. Peacekeeping Mission(Present Prior to Agreement)(=1)	0.19	0.39	110
Past U.N. Peacekeeping Mission(=1)	0.25	0.44	110
Enforcement U.N. Peacekeeping Mission(=1)	0.15	0.35	110
Regional Democracy Level (Lagged)(=0.07-0.88)	0.32	0.22	110
Aid as a Share of GDP (Lagged)(=0-0.26)	0.05	0.05	108
Trade as a Share of GDP (Lagged)(=1.62-197.93)	53.77	33.26	110
Democracy (Lagged)(=-9-10)	0.41	5.00	110
Population (Lagged)(=0.53-870.11)	43.72	139.14	110
Oil Production Indicator (Lagged)(=1)	0.45	0.50	110
Corruption (Lagged)(=0-5)	2.33	1.07	69
Bureaucratic Quality (Lagged)(=0-4)	1.81	1.28	69
Law and Order (Lagged)(=0-6)	2.23	1.19	69

Note: 110 dyadic peace agreements (without peaceful renegotiations and with nine emerging from settlements with multiple signatories) between 81 dyads in 49 civil conflicts in 43 states.
Alternative variables, listed in footnote prior to this table, are described in the supporting information.
a: Units are peace agreements; dependent variable is conflict recurrence.
b: The distinction is between those peace agreements that include provisions to hold elections and allow both sides to participate as political parties versus those that do not, not implementation (also shown though).
c: This variable is not coded prior to 1990. For 1989, the closest value (1989-1990) is used; earlier cases drop.
d: All the other power-sharing provisions coded in the UCDP Peace Agreement Dataset are also considered.
e: Coded at group-level from parity (0) to "much" stronger (2). Three groups are not perfect matches by name.

Table A3: Correlation between Electoral Participation Provisions and Other Substantive Provisions in Peace Agreements

Military Provisions	**Correlation**
Ceasefire	0.18
Withdrawal of Foreign Forces	0.24
Security Sector Reform	0.39
Disarmament, Demobilization, and Reintegration	0.36
Political Provisions	
National Talks	-0.20
Civil Service Integration	0.06
Government Integration	0.19
Power-Sharing	0.29
Interim Government	0.26
Political Party Formation	0.26
Electoral Reform	0.49
Territorial Provisions	
Regional Development	-0.17
Local Power-sharing	-0.11
Independence	-0.11
Autonomy	-0.08
Local Government	0.01
Federalism	-0.02
Cultural Freedoms	0.10
Referendum	0.25
Justice Provisions	
Amnesty	0.07
Release of Prisoners	0.16
National Reconciliation	0.45

Note: Process variables on the amount of the incompatibility solved and the outstanding issues also negatively correlate with electoral participation provisions, as expected. When the former is included with electoral participation provisions, the statistical significance of each provision's associate with peace drops just below the standard level, but further tests show that including these variables statistically significantly improves the model's fit.

Additional Tables Discussing Rebel Group Strength

The following tables show the results of additional correlates of electoral participation provisions. The second table shows rebel groups' performance in the first post-conflict elections. Variables are described in the codebook. More information is available in Matanock 2016, 2017.[4]

Table A4: Electoral Participation Provisions Not Limited to Easier Cases for Peace

Potential Correlates of Electoral Participation Provisions:	Mean with Electoral Participation Provisions	Mean without Electoral Participation Provisions	p-value on test that these are the same
Conflict Recurrence Predictors (Expected Direction Predicting Increase)*			
Conflict Intensity Measured as Battle Deaths, Logged, Lagged (+)	10.63	9.50	0.01
State Strength Measured by Real GDP per capita, 1,000s, Lagged (-)	2.16	2.73	0.51
State Strength Measured by Mountainous Terrain, Percent, Logged (+)	2.36	1.92	0.08
Rebel Reversion Measured by Contraband Financing (+)	0.45	0.33	0.20

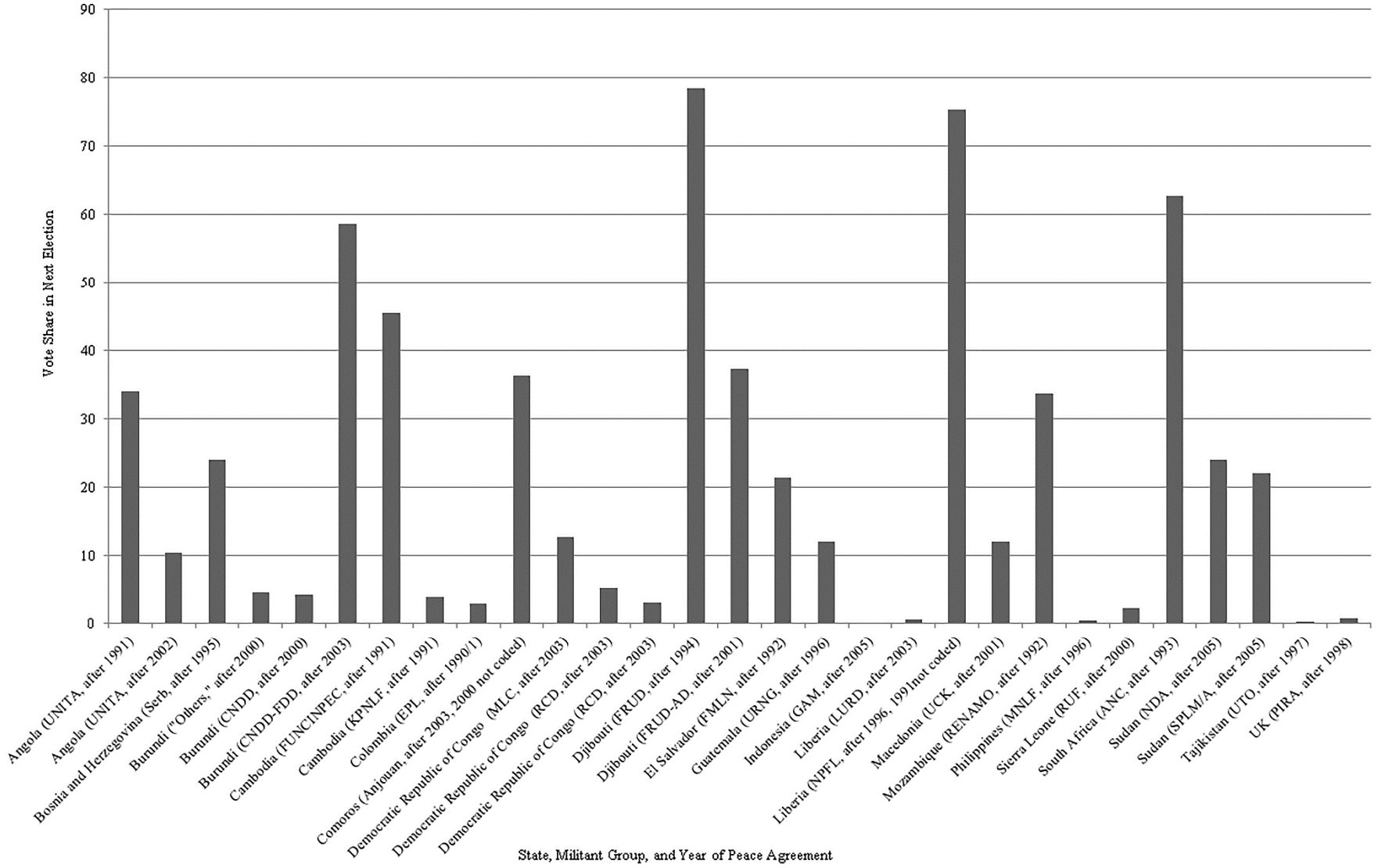
*Contraband financing is the consistent predictor of failure beyond termination type, prior to international intervention, according to Fortna 2008; the other variables are standard measures of conflict difficulty and state strength. These results are not affected by the exclusion of single cases or set of relevant cases, such as the Balkans. Including these, and the controls listed below, such as conflict size, duration, failed past agreements, etc., generally result in even stronger correlations between electoral participation provisions and peace (see tables with controls).

Table A4.1: Are Electoral Participation Provisions Signed Only by Stronger Groups?

	Mean with Electoral Participation Provisions	Mean without Electoral Participation Provisions	p-value on test that these are the same
Measures of Rebel Group Strength			
Rebel troops (best estimate during prior period of the conflict, logged)	9.18	8.49	0.03
Government troops (logged)	3.71	3.46	0.36

[4] Citation information is available in the first note in this document.

Figure A1: Rebel Group Vote Share in the Election after Settlement with Participation



Additional Tables Testing the Main Effects

The following tables show the additional tables mentioned in the article that test the main effects.

Table A5: Conflict Recurrence after Peace Agreements (Cross-Tabulation)

	Participation Provisions	None
Recurrence	21% (9)	56% (38)
None	79% (33)	44% (30)

Fisher's Exact=0.00

In the following models (which provide the basis for Figure 2 in the paper), I am interested in the interaction terms. In Model 3, I include electoral participation provisions, regional election observation, and their interaction; and in Models 4, I include these variables, as well as region and time-period indicators and their interaction. I do the same for democracy and governance assistance as a percentage of development aid (Models 5 and 6, Table 5).

Table A6: Conflict Recurrence after Peace Agreements (Interactions)

Independent Variables:	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Participation Provisions	1.24	1.95*	0.76	0.58
	(0.92)	(1.17)	(0.73)	(0.86)
Regional Election Observation (Percent, Lagged)	-0.30	0.43		
	(0.84)	(1.00)		
Part. Provisions*Reg. Election Observation (Interaction of Interest)	**-4.03*** **	**-5.20*** **		
	(1.50)	**(1.83)**		
Regional Democracy and Governance Assistance/ Development Aid (Lagged Two Year Average)			9.71	8.59
			(6.97)	(10.27)
Part. Provisions*Reg. Dem. and Gov. Assistance (Interaction of Interest)			**-32.30*** **	**-31.12*** **
			(10.19)	**(10.59)**
Region, Decade, Interaction		IN		IN
Number of Observations	110	97	96	84
Pseudo R-Squared	0.13	0.16	0.17	0.21
Log pseudolikelihood	-65.13	-55.77	-53.24	-45.23

Note: Method is logistic regression analysis. DV is conflict recurrence by government-rebel group dyad within 5 years (binary). Numbers in parentheses are robust standard errors, clustered by state (maximum=43). Number of observations varies because region, time-period indicators, or their interaction, perfectly predicts success/failure. * $p<0.10$, ** $p<0.05$, *** $p<0.01$

Additional Tables Showing the Results of the Controls

The following tables show the results considering the standards control variables that I discuss in the paper's text. Additional control variables are described in the codebook.

Table A7: Effect of Participation Provisions on Conflict Recurrence (With Controls)

	Model A1	Model A2	Model A3	Model A4	Model A5	Model A6	Model A7
Participation Provisions	-1.54***	-1.34**	-1.99***	-1.62***	-2.04***	-1.50***	-3.77**
	(0.56)	(0.54)	(0.56)	(0.59)	(0.58)	(0.55)	(1.56)
DDR Provisions		-0.89**					-1.93***
		(0.45)					(0.74)
SSR Provisions		-0.00					-2.05
		(0.48)					(1.27)
Government Power-Sharing Provisions		0.50					
		(0.58)					
Civil Service Power-Sharing Provisions		0.13					
		(0.49)					
Major War			0.94				2.17*
			(0.71)				(1.21)
Duration of the Dyad's Conflict			0.03				0.08
			(0.03)				(0.06)
Real GDP per capita (1,000's, Lagged)			0.02				1.07***
			(0.06)				(0.40)
Balance between Group and Government			-0.45				
			(0.41)				
Past Agreement(s)				0.15			
				(0.31)			
Number of Active Factions Not Signing				0.10			
				(0.08)			
Number of Factions Signing				0.49**			0.33
				(0.22)			(0.35)
More Negotiations Stipulated in Agreement				0.92			0.60
				(0.57)			(0.94)
Territorial Conflict					0.13		-2.27
					(0.80)		(1.47)
Identity Conflict					-0.38		
					(0.64)		
Marxist Conflict					-0.62		
					(0.54)		
Rebel Groups with Total Goals					1.56*		0.11
					(0.86)		(1.20)
Cold War						-0.70	
						(1.17)	
Post-9/11						0.15	
						(0.69)	
U.N. Peacekeeping Mission (Present)						0.31	2.65
						(0.64)	(2.10)
Regional Election Observation (%, Lagged)						-1.19	
						(1.15)	
Regional Democracy Level (Lagged)						-2.26*	-0.45
						(1.37)	(5.53)
Level of Democracy (Lagged)							
Population (1000's, Lagged)							-0.001
							(0.002)
Region, Decade, Interaction							IN
Number of Observations	110	110	108	110	108	110	96
Log Pseudo Likelihood	-68.48	-66.10	-63.25	-64.63	-61.66	-64.10	-40.73
Pseudo R-Squared	0.09	0.12	0.15	0.14	0.16	0.15	0.38

Note: Method is logistic regression analysis. DV is conflict recurrence by government-rebel group dyad within 5 years (binary). Numbers in parentheses are robust standard errors, clustered by state (maximum=43). Number of observations varies, aside from control missingness, because region/time-period/interaction perfectly predicts success/failure (five regions and three time-periods). *** p<0.01, ** p<0.05, * p<0.1

Table A7.1: Effect of Participation Provisions on Conflict Recurrence (More Controls)

	(More Conflict & Capacity)	*(More Conflict & Capacity)*	*(More Conflict & Capacity)*	*(More Conflict & Capacity)*	*(More Int'l Ties)*	*(More Int'l Ties)*	*(More Int'l Ties)*
Participation Provisions	-2.04***	-2.11***	-1.92***	-1.64***	-1.57***	-1.58***	-1.37**
	(0.61)	(0.60)	(0.55)	(0.57)	(0.57)	(0.57)	(0.56)
Duration of the Dyad's Conflict	0.019		0.04				
	(0.03)		(0.04)				
Total Battle Deaths	0.28**	0.35***	0.16				
(Logged, Best Estimate)	(0.13)	(0.12)	(0.15)				
Real GDP per capita	0.04	0.09	0.04				
(1,000's, Lagged)	(0.05)	(0.05)	(0.06)				
Population	-0.00*						
	(0.00)						
Duration of the Conflict		-0.02					
		(0.02)					
Balance between Group and		-0.43					
Government Capacity		(0.44)					
Government Military Personnel			-0.25				
			(0.23)				
Militant Group Fighters			0.33				
			(0.23)				
Past Agreement				0.18			
				(0.32)			
Factions Fighting				0.14			
				(0.09)			
Aid as a Share of GDP					-1.21		
					(5.00)		
Trade as Share of GDP					0.01		
					(0.01)		
Member of GATT or WTO					-0.11		
					(0.51)		
Past U.N. Mission						0.21	
						(0.50)	
Enforcement U.N. Mission							-1.51**
							(0.72)
Constant	-2.55*	-2.57**	-3.46	-0.18	0.09	0.20	0.34
	(1.45)	(1.30)	(2.35)	(0.39)	(0.55)	(0.30)	(0.30)
Observations	110	108	81	109	108	110	110
Log pseudolikelihood	-64.11	-61.77	-48.05	-66.17	-66.64	-68.39	-66.30
Pseudo R-squared	0.15	0.17	0.14	0.11	0.10	0.09	0.12

See Table A7 (above) notes.

Table A7.2: Effect of Participation Provisions on Conflict Recurrence (More Controls)

	(More Int'l Ties)	*(More Regime Type)*	*(More Regime Type)*	*(More Regime Type)*	*(More Governance Quality)*	*(More Governance Quality)*
Participation Provisions	-2.13***	-1.57***	-1.79***	-1.86***	-1.52***	-2.14***
	(0.76)	(0.56)	(0.58)	(0.57)	(0.57)	(0.72)
Real GDP per capita		0.03	0.069	0.03	0.00	
(1,000's, Lagged)		(0.06)	(0.05)	(0.05)	(0.06)	
Troops per 1000	-0.05					
	(0.05)					
Regime Variable		0.23				
(Most to Least Inclusive, Lagged)		(0.30)				
Indicator of Democracy		0.54				
(Lagged)		(0.85)				
Indicator of Past Democracy			-1.43***			
(Any time from 1945 to date)			(0.51)			
Indicator of Change in Regime Type				-1.39**		
(Compared to 5 Years Ago)				(0.57)		
Oil Production Indicator					0.48	
(Lagged)					(0.47)	
Corruption						0.28
(Lagged)						(0.33)
Bureaucratic Quality						0.10
(Lagged)						(0.32)
Law and Order						-0.33
(Lagged)						(0.30)
Constant	0.60	-0.62	0.92**	0.27	-0.00	0.45
	(0.51)	(1.18)	(0.38)	(0.32)	(0.36)	(0.76)
Observations	51	110	110	110	110	69
Log pseudolikelihood	-28.42	-68.11	-63.36	-65.81	-67.76	-40.34
Pseudo R-squared	0.18	0.09	0.16	0.12	0.10	0.15

See Table A7 (above) notes.

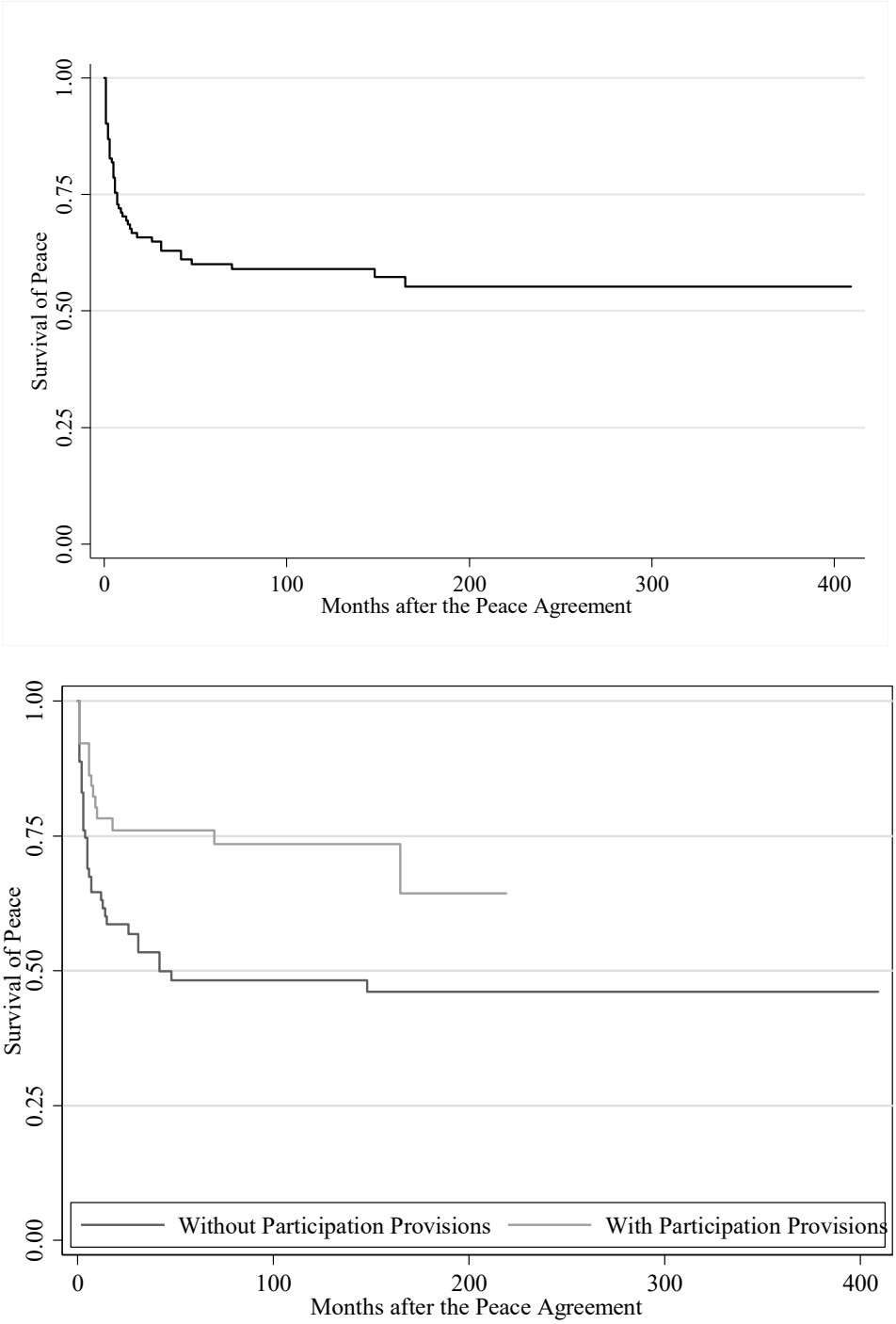
Using Duration Models in Place of Logistic Regression Analysis

Many studies modeling post-conflict peace use duration models in place of logistic regression analysis. There is additional variation to explore using these analyses—*how long* peace lasts, in addition to whether it fails in a set amount of time—and much of this work is interested in how post-conflict processes such as economic growth or foreign aid provided after the fighting affect peace. The logistic regression analysis in some ways makes more sense for the question that this article posits about settlement design and peace, but, nonetheless, I also show duration models in this appendix for general interest and for comparison with those studies.

Non-parametric estimations: the Kaplan-Meier estimator

I first estimate the basic non-parametric survival function (measuring duration through 2010); I then estimate this with the electoral participation provisions variable. These are the simplest estimations of the duration effects (and the second one is also shown in the text of the article).

Figure A2: Survival Estimates



Note: The upper graph shows the unconditional probability that a peace agreement survives beyond time *t*. The lower graph shows the same analysis by electoral participation provisions (also shown in the article).

Semi-parametric models: Cox model

Most of the studies that use duration models to examine post-conflict peace rely on a type of semi-parametric model, the Cox model. This section presents the results of the estimated models using the Efron methods (and other methods, such as the Exact Discrete Partial Likelihood, produce very similar results). Since more than one peace agreement fails per month, all estimated Cox models assume "tied observations" (see figure below). All estimations report coefficients and, thus, are not exponentiated, so, like the logit models, these effects can be read as negative or positive based on the signs in the table (negative effects are expected on electoral participation provisions).

Figure A3: Distribution of Duration of Peace across Agreements

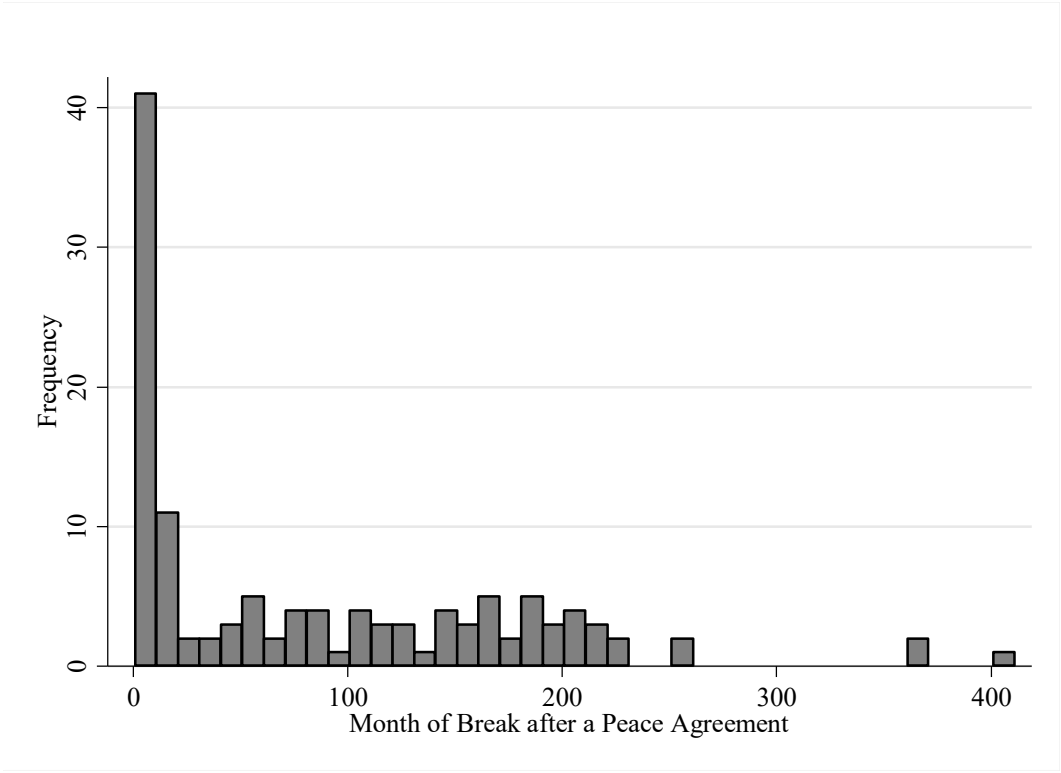


Table A8: Effect on Conflict Recurrence (Cox Model)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Participation Provisions	-0.79**	-0.61*	-1.04**	-0.81**	-1.04***	-0.66*	-1.39***
	(0.40)	(0.36)	(0.41)	(0.40)	(0.39)	(0.38)	(0.51)
DDR Provisions		-0.53					-1.20**
		(0.38)					(0.54)
SSR Provisions		0.03					-0.27
		(0.40)					(0.47)
Government Power-Sharing Provisions		-0.24					
		(0.48)					
Civil Service Power-Sharing Provisions		0.10					
		(0.36)					
Major War			0.78				1.09*
			(0.52)				(0.56)
Duration of the Dyad's Conflict			0.03				0.02
			(0.02)				(0.02)
Real GDP per capita (1,000's, Lagged)			0.01				0.48***
			(0.03)				(0.14)
Balance between Group and Government			-0.35				
			(0.28)				
Past Agreement(s)				0.07			
				(0.15)			
Number of Active Factions Not Signing				0.01			
				(0.08)			
Number of Factions Signing				0.35**			0.44**
				(0.14)			(0.22)
More Negotiations Stipulated in Agreement				0.97**			1.41***
				(0.38)			(0.49)
Territorial Conflict					0.24		-0.34
					(0.46)		(0.41)
Identity Conflict					-0.30		
					(0.37)		
Marxist Conflict					0.11		
					(0.42)		
Rebel Groups with Total Goals					1.08*		0.55
					(0.56)		(0.49)
Cold War						-0.44	
						(0.57)	
Post-9/11						0.06	
						(0.49)	
U.N. Peacekeeping Mission (Present)						0.27	1.19**
						(0.46)	(0.52)
Regional Election Observation (%, Lagged)						-1.04*	
						(0.58)	
Regional Democracy Level (Lagged)						-0.95	0.58
						(1.19)	(2.96)
Level of Democracy (Lagged)							
Population (1000's, Lagged)							0.00
							(0.00)
Region, Decade, Interaction							IN
Number of Observations	122	122	120	122	120	122	121
Log Pseudo Likelihood	-221.3	-219.4	-214.2	-215.8	-211.4	-218.5	-188.5

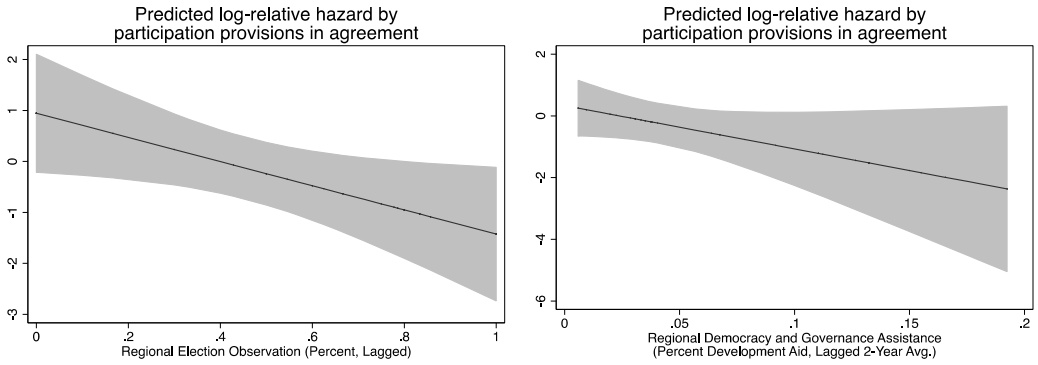
Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A8.1: Conditional Effect on Conflict Recurrence (Cox Model)

	Model 8	Model 9	Model 10	Model 11
Participation Provisions	0.95	1.03	0.33	0.07
	(0.59)	(0.73)	(0.50)	(0.52)
Regional Election Observation (Percent, Lagged)	-0.47	-0.28		
	(0.45)	(0.77)		
Part. Provisions*Reg. Election Observation	-2.37**	-2.63**		
(Interaction of Interest)	(1.10)	(1.24)		
Regional Democracy and Governance Assistance/			4.46	8.44
Development Aid (Lagged Two Year Average)			(3.89)	(5.56)
Part. Provisions*Reg. Dem. and Gov. Assistance			-14.04	-12.33
(Interaction of Interest)			(8.85)	(7.99)
Region, Decade, Interaction		IN		IN
Observations	122	122	107	107
Log pseudolikelihood	-217.8	-210.6	-173.8	-166.1

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

Figure A4: Predicted Conflict Recurrence (Cox Model)

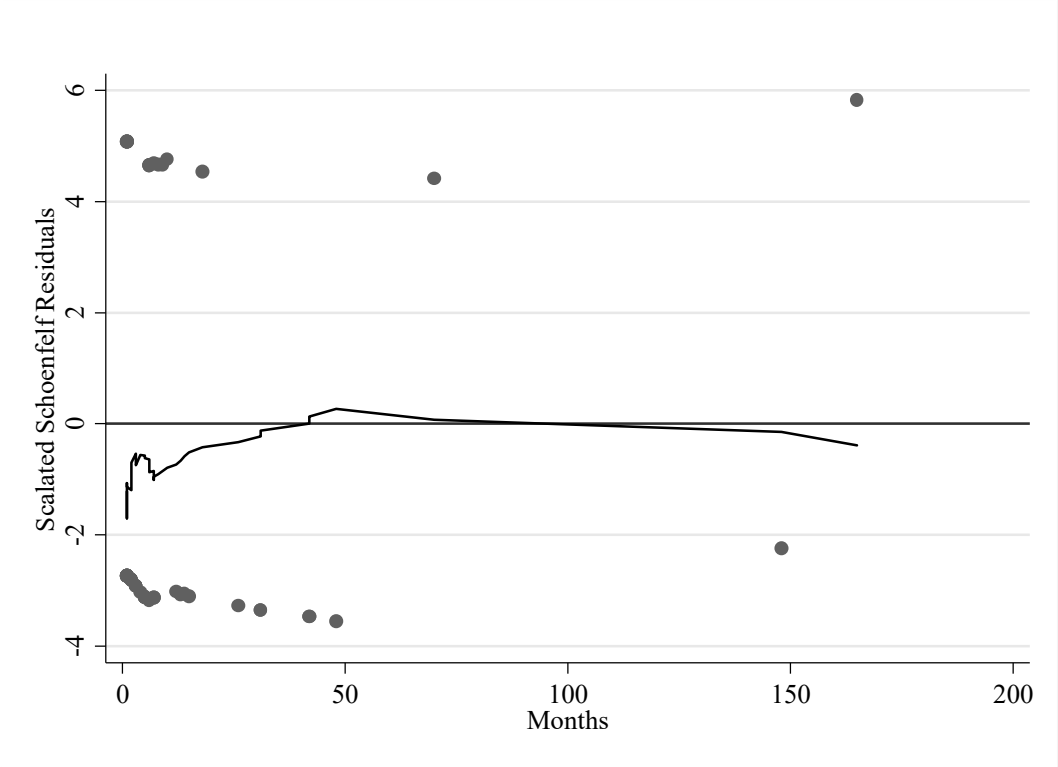


Note: Left graph corresponds to the estimation of model 10, whereas right graph corresponds to model 12.

Testing the proportionality assumption

Like all models, the Cox model has assumptions that underpin it, including the proportionality assumption. There are a number of tests for non-proportionality.[5] One such test is on the Schoenfeld Residuals. The idea is that if the residual is random, then the evidence does not suggest systematic dependence with time. I conducted the non-proportionality test using the basic specification, where the covariate is electoral participation provisions. Examination of the figure below suggests that the PH assumption holds, as the slope with respect to time is basically at zero. The table below shows a slightly more sophisticated test of the same. Both the visual and statistical tests suggest that the proportional hazards assumption holds for the basic specification. This lends confidence to the estimated Cox models in the previous sections.

Figure A5: Test of PH Assumptions



Note: This is a plot of scaled Schoenfeld Residuals against time and scatter of electoral participation provisions in peace agreements.

Table A9: PH Assumption Test, Based on Schoenfeld Residuals

Time: Time				
propartNC	0.13790	1.52	1	0.2184
global test		1.52	1	0.2184

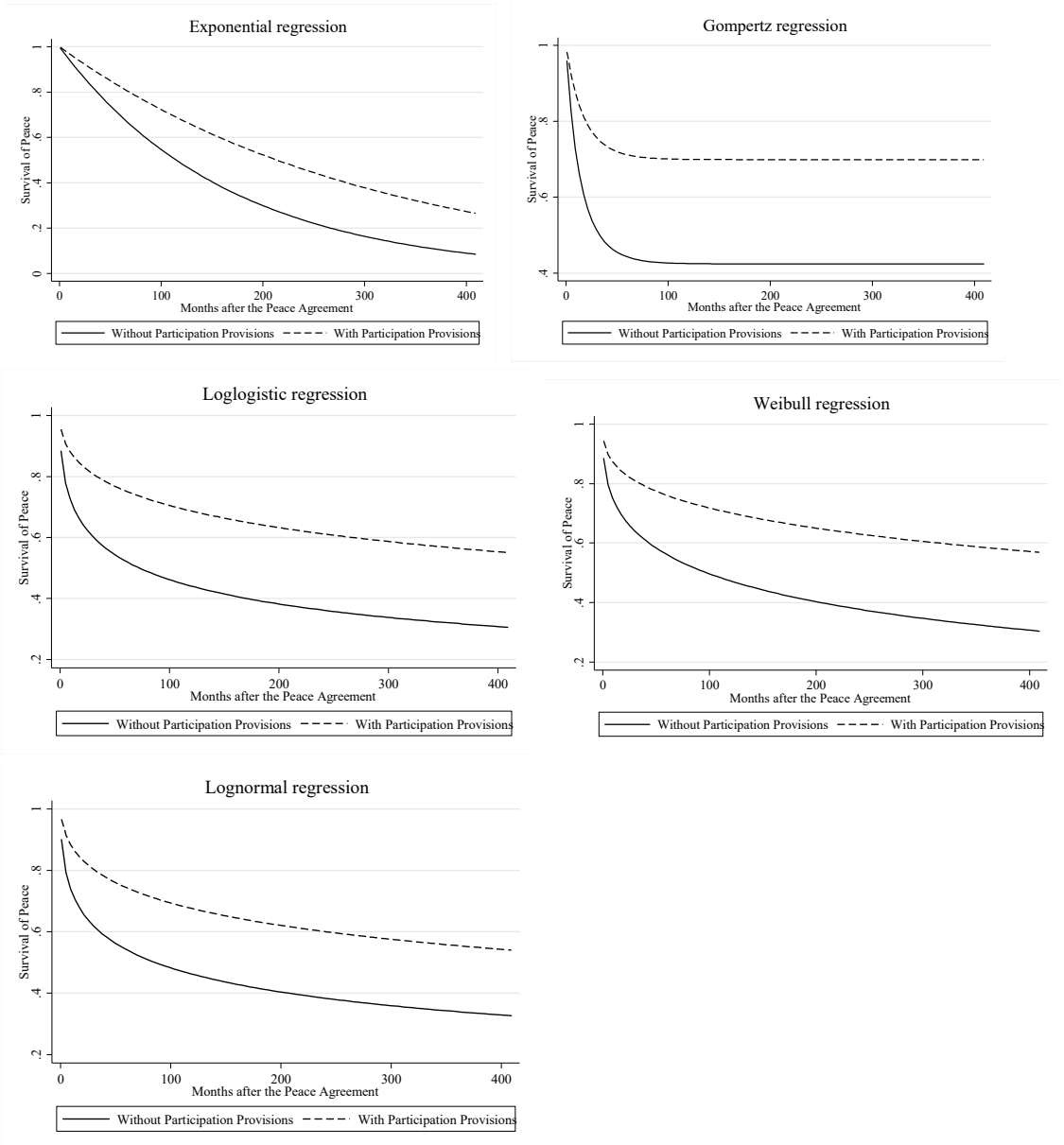
Note: Robust variance-covariance matrix used; null hypothesis is that the PH assumption holds.

[5] On these models, in general, as well as this specific point, see Janet M. Box-Steffensmeier and Christopher J.W. Zorn. 2001. "Duration Models and Proportional Hazards in Political Science." *American Journal of Political Science* 45(4): 972–988.

Parametric models

There are other methods for estimating duration models. Parametric models assume the "shape" of how the hazard is affected by time. According to theoretical or modeled expectations about what the time dependency will look like, I can also use the following parametric models: Exponential, Weibull, Lognormal, Log-Logistic, Gompertz, or Generalized Gamma. I present the estimation of the baseline equation with only one covariate (*propart*) in the figures below to examine the shapes. Notice that there is no estimation for the generalized gamma distribution, because the maximum likelihood estimation does not converge for this specification.

Figure A6: Parametric Estimation of Hazard Function for Peace Agreement



Note: The graphs correspond to the estimation of parametric hazard functions for peace agreement survival including participation provisions as unique covariate. These correspond to the estimation of the models using the distributions named at the top of each figure.

I do not have a strong theoretical prediction about the model with the best fit, so, in order to choose a model, I use the Akaike's Information Criterion to identify which estimation has the lowest log-likelihood. Given that both Gompertz and log-normal have similar AIC criterion scores—and the lowest from among these specifications—I chose the log-normal given that this distributional form implies that risk first rises with time and then fall, whereas the Gompertz assumes a monotone hazard rate that exponentially increases or decreases with time (so from even a weak theoretical standpoint, it is reasonable to think that the lognormal fits best). It also provides ease of interpretation.

Table A10: Comparison of parametric models for peace agreement survival

Model	N	LogLikelihood_NULL	Loglikelihood_model	df	AIC	BIC
Exponential	122	-231.5064545	-229.3994293	2	462.7988586	468.4068909
Gompertz	122	-179.4204865	-175.1685181	3	356.3370361	364.7490845
Loglogistic	122	-182.0186768	-178.3483124	3	362.6966248	371.1086731
Weibull	122	-185.0113373	-181.9229126	3	369.8458252	378.2578735
Lognormal	122	-178.8677673	-175.6760559	3	357.3521118	365.7641602

I therefore estimate the remaining models using the log-normal distribution. An important note here on interpretation is that this model captures the survival time (*"peace survival"*), rather than the time until failure (through conflict recurrence). This is the opposite of the effect in the Cox and logit models. Thus, the external engagement theory implies that we should see a positive effect of electoral participation provisions (as it should prolong peace survival).

Table A11: Effect on Conflict Recurrence (Parametric Models)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Participation Provisions	1.91**	1.24	2.21**	1.73*	2.58***	1.82**	2.65**
	(0.97)	(0.91)	(0.93)	(0.93)	(0.95)	(0.89)	(1.03)
DDR Provisions		1.48					1.93**
		(1.04)					(0.86)
SSR Provisions		-0.12					1.14
		(0.97)					(1.09)
Government Power-Sharing Provisions		0.37					
		(1.24)					
Civil Service Power-Sharing Provisions		-0.02					
		(0.99)					
Major War			-1.55				-2.03*
			(1.29)				(1.04)
Duration of the Dyad's Conflict			-0.05				-0.01
			(0.05)				(0.04)
Real GDP per capita (1,000's, Lagged)			-0.00				-1.10***
			(0.08)				(0.33)
Balance between Group and Government			0.73				
			(0.68)				
Past Agreement(s)				-0.07			
				(0.39)			
Number of Active Factions Not Signing				-0.10			
				(0.18)			
Number of Factions Signing				-0.70**			-0.66
				(0.33)			(0.41)
More Negotiations Stipulated in Agreement				-2.21***			-2.11*
				(0.85)			(1.09)
Territorial Conflict					-0.38		0.62
					(1.11)		(1.14)
Identity Conflict					0.96		
					(0.83)		
Marxist Conflict					0.35		
					(0.89)		
Rebel Groups with Total Goals					-2.60**		-1.71
					(1.25)		(1.37)
Cold War						1.55	
						(1.59)	
Post-9/11						-0.46	
						(1.05)	
U.N. Peacekeeping Mission (Present)						-0.81	-2.53**
						(1.00)	(1.07)
Regional Election Observation (%, Lagged)						3.11*	
						(1.61)	
Regional Democracy Level (Lagged)						2.51	-3.54
						(2.69)	(6.35)
Level of Democracy (Lagged)							
Population (1000's, Lagged)							0.00
							(0.00)
Region, Decade, Interaction							IN
Observations	122	122	120	122	120	122	121
Log pseudolikelihood	-175.68	-173.83	-169.24	-171.16	-167.59	-172.41	-144.68
Sigma	3.47	3.38	3.23	3.29	3.31	3.36	2.55

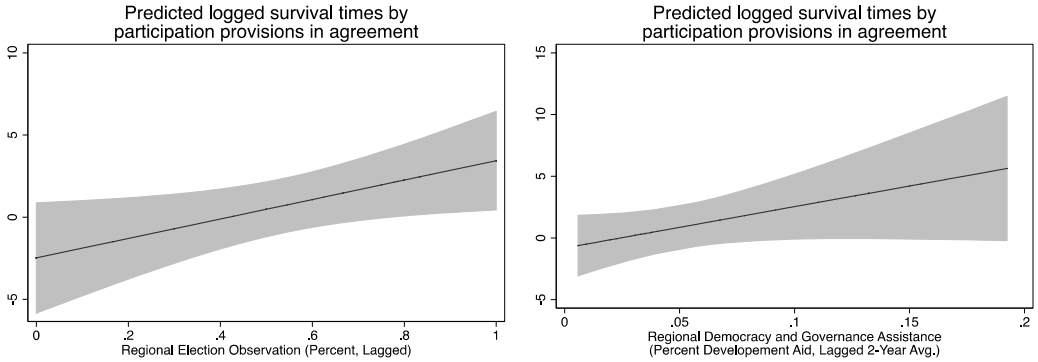
Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Models based on lognormal distribution.
Reminder that the DV is now "peace survival," rather than "conflict failure" (in Cox), so the opposite effect is expected.

Table A11.1: Conditional Effect on Conflict Recurrence (Parametric Models)

	Model 10	Model 11	Model 12	Model 13
Participation Provisions	-2.48	-2.35	-0.82	-0.25
	(1.71)	(2.03)	(1.34)	(1.29)
Regional Election Observation (Percent, Lagged)	1.02	0.65		
	(1.18)	(1.61)		
Part. Provisions*Reg. Election Observation	5.92**	5.90**		
(Interaction of Interest)	(2.76)	(2.92)		
Regional Democracy and Governance Assistance/			-14.81	-24.30*
Development Aid (Lagged Two Year Average)			(10.17)	(12.56)
Part. Provisions*Reg. Dem. and Gov. Assistance			33.50*	28.59
(Interaction of Interest)			(19.94)	(18.10)
Constant	3.91***	21.09***	5.59***	21.78***
	(0.85)	(2.30)	(0.96)	(1.43)
Region, Decade, Interaction		IN		IN
Observations	122	122	107	107
Log pseudolikelihood	-172.4	-164.6	-144.4	-136.1
Sigma	3.40	3.16	3.40	3.08

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Models based on lognormal distribution.
Reminder that the DV is now "peace survival," rather than "conflict failure" (in Cox), so the opposite effect is expected.

Figure A7: Predicted Conflict Recurrence (Parametric Models)



Note: The graphs correspond to the estimation of peace survival. Both use lognormal distributions for baseline hazard function. Left-hand side graph corresponds to the estimation of model 10 in the table above, whereas right-hand side graph corresponds to model 12 in the table above.

Additional controls for the estimation of the duration model

Finally, I also examine the full set of control variations using the duration models, as well (not shown in the interest of space but available from the author—the analyses also can easily be run in the data and code provided). The results are similar to those shown using a logit model, and electoral participation provisions have a negative and statistically significant effect on conflict recurrence throughout, as expected.

More Evidence Testing the Mechanism

Table A13: External Engagement in First Post-Conflict Elections

	Post-Conflict Elections after Settlements with Electoral Participation Provisions	Post-Conflict Elections after Other Types of Termination
International Election Observers	94% (15)	53% (56)
None	6% (1)	47% (41)
Fisher's Exact=0.01		
Democracy and Governance Aid as a Percent of Development Aid (Logged, 2-Yr Avg.)	5.75	3.53
Fisher's Exact=0.17		
Conditionality or Pressure before Elections	77% (10)	44% (26)
None	23% (3)	56% (33)
Fisher's Exact=0.06		

Codebook Describing All Variables Included in the Dataset

Items in "[]'s" indicate alternative variables used in robustness checks (not included in these data).

Identification variables:
region: Region
ccode: COW state code
state: State
[**conflictid:** UCDP conflict ID]
paname: Peace agreement name from UCDP Peace Agreement Dataset
payear: year
pamg: Rebel group signing the peace agreement
yrdum: Decade indicator (1975-1984, 1985-1994, 1995-2005)
coldwar: Following Fortna 2008, I code all agreements before January 1, 1989 as Cold War
p911: Indicator of post-9/11

[Other regional indicators:
regionc: Continental regions (7)
regionu: UCDP regions (6)
regioncow: COW regions (9)
regionorg: Organizational coverage regions (OAS, AU, etc.) (7)
regionsub: Sub-regions based on Hensel and Diehl's 1994 shatterbelt data (9)]

Electoral variables:
propart: Indicator of electoral participation provisions (with renegotiations without a return to conflict dropped)
propartNC: Indicator of electoral participation provisions
[**propartMT:** Cases with missing text in the peace agreement coded as missing]
[**maxpropart:** Indicator coded by peace agreement rather than dyad]
proapart: Indicator of electoral participation provisions and participation
censored: Indicator that the dyadic peace agreement ended without failure, either due to the end of the data collection or a renegotiation of the peace agreement (without a return to conflict)
[**transition:** Indicator of electoral participation provisions only after a transitional government]
[**otherelec:** Indicator of another electoral provision]
[**allelec:** Indicator of any regular elections or provisions for elections coded from Hyde and Marinov 2012]

Peace variables:
mbreak: Years of peace following the peace agreement from UCDP (assuming it fails in first month)
failure: Peace fails within five years (including allies)
f10: Peace fails within ten years (including allies)

Conflict variables:
mgduration: Years the rebel group fought
[**cduration:** Years that the conflict lasted]
[**kbtech:** Type of conflict (insurgency, conventional, or symmetric non-conventional) hand matched from Kalyvas and Balcells 2010 (missing many groups because they do not produce 1000 battle deaths)]
[**rebpolwing1:** Indicator of a rebel wing during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (1 is alleged, acknowledged, or established) (missing groups because they are not coded in Cunningham et al. 2009)]
[**rebpolwinglegal1:** Indicator of a legal rebel wing during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (1 is legal) (missing groups because they are not coded in Cunningham et al. 2009)]
[**rebstrength1:** Estimate of rebel strength during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (- is weaker, + is stronger) (missing groups because they are not coded in Cunningham et al. 2009)]

[**rebest1:** rebel best estimate during prior period of the conflict from Cunningham et al. 2009, which I carry forward up to 8 years unless a new conflict in the dyad breaks out (missing groups because they are not coded in Cunningham et al. 2009)]
lrebest: Logged "rebest" (missing groups because they are not coded in Cunningham et al. 2009)
balance1: Based on Cunningham et al. 2009 "rebstrength," but in this case, 0 means parity, 1 means either side somewhat stronger, and 2 means either side much stronger; 2005 cases coded by hand (missing groups because they are not coded in Cunningham et al. 2009, but did add 2005 cases based on author's own notes, which are in the variable creation notes on the PA data)
cumint: Major war reaching 1000+ battle deaths up to that point (including current year) coded from UCDP, which I carry forward up by conflict
[**totalbd:** Battle deaths (maximum) up to that point (including current year) from Lacina et al. 2005 v3.0, which I carry forward up by conflict]
ltot: Logged "totalbd"
[**lcinc:** COW capability scores, including military expenditure, disputes, power status and distance between states from Singer et al. 1972, lagged]
[**lmilex:** Military expenditure (% of central government expenditure) coded from Singer et al. 1972 replacing "-9" with missing, lagged]
[**ulmilper:** Troops coded from Singer et al. 1972 replacing "-9" with missing, lagged]
lmilper: Logged "ulmilper"
[**lmilexpc:** "lmilex" per capita]
[**lmilperpc:** "lmilper" per capita]
[**mtnest:** Estimated % mountainous terrain from Fearon and Laitin 2003 (missing "micro-states")]
lmtnest: Logged "mtnest" (missing "micro-states")
[**conflict_border:** Indicator of a boarder country with at least one active conflict from UCDP. Indicator of a border country with at least one active conflict from UCDP. Borders are defined by Correlates of War Project, using the "Direct Contiguity Data, 1816-2006. Version 3.1," available online at http://correlatesofwar.org]

Aims variables:
terr: Center-seeking or territorial conflict coded from UCDP (interestingly Sudan is coded differently in the UCDP conflict sets and in the UCDP Peace Agreement Dataset, so mine diverge on this coding, as well).
totalg_kreutz: Indicator of non-total goals based on Walter 2004 from Kreutz 2010, which I carry forward by conflict (because there is no variation across groups within conflicts in these data (missing groups not coded by Kreutz 2010 since he is focused on terminated conflicts for this set, but did add peace agreement cases PA based on author's own notes, which are noted by the "flag" variable in the PA data)
contraband: Evidence of significant contraband financing of rebels hand coded from Fortna 2008 and supplemented by Fearon and Laitin 2003 and author's own notes (see variable creation notes on the PA data, but still missing groups in the CR data)
identity1: Indicator of ethnic mobilization from Eck 2009, which I carry forward by conflict (missing groups because they are not coded in Eck 2009)
kbmarx: Hand matched from Kalyvas and Balcells 2010
[**ethfrac:** Ethnic fractionalization based on Soviet Atlas plus estimates for missing in 1964 from Fearon and Laitin 2003 (missing "micro-states")]
[**ef:** Ethnic fractionalization based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]
plural: Share of largest ethnic group based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]
[**second:** Share of second largest ethnic group based on Fearon 2002 from Fearon and Laitin 2003 (missing "micro-states")]
[**numlang:** Number languages in Ethnologue greater than at a minimum 1% of the population, 1million from Fearon and Laitin 2003 (missing "micro-states")]
[**relfrac:** Religious fractionalization from Fearon and Laitin 2003 (missing "micro-states")]
[**plurrel:** Size of largest confession from Fearon and Laitin 2003 (missing "micro-states")]
[**minrelpc:** Size of second largest confession from Fearon and Laitin 2003 (missing "micro-states")]
[**muslim:** Percent Muslim from Fearon and Laitin 2003 (missing "micro-states")]
[**off:** Binary indicator of conflicts in which the majority ethnic group has more than 49 percent and the minority has more that 7 percent based on "plural" and "second" (missing "micro-states")]
[**roff:** Binary indicator of conflicts in which the majority religious group has more than 49 percent and the minority has more that 7 percent based on "plurrel" and "minrelpc" (missing "micro-states")]

Agreement variables:
pastagree: Number of prior peace agreements (failed)
allfac: Number of all active rebel groups (those that have not definitively ended and are within 8 years of fighting registered in UCDP)
[**pafacnum:** Number of active rebel groups that sign the peace agreement from the UCDP Peace Agreement Dataset as "no_dyad"]
nosignfac: Number of active rebel groups that do not sign
morenegs: Indicator that more negotiations were to occur
[**misstxt:** Indicator of missing full text]
cease ssr ddr withd pp intgov intciv elections interim natalks sharegov aut fed ind ref shaloc regdev cul locgov amn pris recon: Additional provisions from the UCDP Peace Agreement Dataset
[**part_kreutz:** Indicator of conflicts that ended in partition from Kreutz 2010, which I carry forward by conflict (because there is no variation across groups within conflicts in these data) (missing groups not coded by Kreutz 2010 since he is focused on terminated conflicts for this set)]
[**partv2:** Indicator that a conflict prior to that date had resulted in a partition based on Sambanis 2000; updated using Schulhofer-Wohl and Sambanis 2009]

Regional legislative election observation variables (based on Hyde and Marinov 2012):
nexlem: Regional percentage of elections observed excluding the state in question (lagged)
[lelec: Number of elections in the region in the past year (lagged)]
[**plelecmon:** Regional percentage of elections observed including the state in question (lagged)]
[**nexem:** Regional percentage of elections observed excluding the state in question]
[**pelecmon:** Regional percentage of elections observed including the state in question]
[**elec:** Number of elections in the region in the past year **]**
[**nexllem:** Regional percentage of elections observed excluding the state in question (lagged 2 years)]
[**pllelecmon:** Regional percentage of elections observed including the state in question (lagged 2 years)]
[**llelec:** Number of elections in the region in the past year (lagged 2 years)]
[**all3ex:** All three variables (nexem, nexlem and nexllem)]
[**lag2ex:** Both lagged variables (nexlem and nexllem)]
[In addition "r" denotes an alternative coding from NELDA that includes ALL elections, adding presidential and constitutional.]

Regional democracy and governance assistance variables:
regdg: Regional percentage of bilateral assistance devoted to democracy and governance in the region (calculated using the same regions as for international election observation, millions 2000 $, lagged 2-year mean because source database reported actual appropriations but disbursements may have occurred in the year following the appropriation, so 1991 covers Oct. 1, 1989 to Sept. 30, 1990) from Finkel et al. 2008 (missing all years before 1991 and after 2005, given the lag)*
*Note: regional estimate is missing Angola in 1989 (because set begins in 1990), but I replace it with the value from 1990 since they overlap in the PA data given how small the sample is.

Strategic and special relationship variables:
oild: Binary indicator of a positive value of oil production ("oil_value_2000"), lagged*
*Note: value is missing for Senegal, but presumably positive based on author's research, so replaced as such in the PA data given how small the sample is.
[**colbrit**: British colony from Fearon and Laitin 2003 with hand code of micro states.]
[**colfra**: French colony from Fearon and Laitin 2003 with hand code of micro states.]
[**usmilaid:** U.S. military aid coded from the Greenbook in constant dollars, lagged (with missing coded as no aid since USAID, which keeps the Greenbook, notes that "no data available" means that none was provided through that program in that year, except for the U.S. and North and South Yemen, which were not clear in the data)]
[**lusmilaid:** Logged "usmilaid"]
[**milaidd:** Binary indicator of any U.S. military aid ("usmilaid" so also lagged)]
[**oilres:** Oil reserves from Lujala et al. 2007*
*Note: all of the missing values were coded as no reserves, except post-2005, when all had reserves based on the author's research.]

[**col45:** colonies as of 1945 coded from Stein no date.]
[**USally:** Indicator of an alliance with the U.S. from Leeds et al. 2005 (missing years 2005 and on)]
[**USallyod:** Indicator of an offense-defense alliance with the U.S. from Leeds et al. 2005 (missing years 2005 and on)]
[**lmp5ally:** Indicator of an alliance with any of the permanent five members of the U.N. Security Council from Leeds et al. 2005 (missing years 2005 and on)]
[**lmp5allyod:** Indicator of an offense-defense alliance with any of the permanent five members of the U.N. Security Council from Leeds et al. 2005 (missing years 2005 and on)]
[**mpally:** Indicator of an alliance with any of the major powers during this time period (the U.S., the U.K., France, Germany after 1990, Russia, China, and Japan) from Leeds et al. 2005 (missing years 2005 and on)]
[**mpallyod:** Indicator of an offense-defense alliance with any of the major powers during this time period (the U.S., the U.K., France, Germany after 1990, Russia, China, and Japan) from Leeds et al. 2005 (missing years 2005 and on)]

Peacekeeping variables:
unpkIN: Indicator of UN peacekeeping mission on the ground when the agreement is signed based on Nygard et al 2011, and adding from World Bank data (extending Sierra Leone and Cambodia). The cases match the U.N.'s list of Peacekeeping Operations (http://www.un.org/en/peacekeeping/documents/operationslist.pdf), which do not include "political missions" as in Guatemala pre-1997. I drop all primarily interstate peacekeeping and apply the Kosovo mission to Serbia and the East Timor mission to Indonesia until independence. These are all coded by country, but this changes the coding in almost no cases.
pastun: Indicator of any past UN peacekeeping mission from the same sources as "pk"
ds_enforce: Alternative indicator of Chapter VII missions coded by Doyle and Sambanis 2000
per_troop: Number of personnel in UN peacekeping missions—troops—from the World Bank data ("f" means the first year of deployment, which may by y or y+1, and "max_" means the maximum for the mission) (missing for all cases not coded as U.N. missions by the World Bank data)
[**unpk:** Indicator of UN peacekeeping mission on the ground or mandated when the agreement is signed from the same sources as "unpkIN"]
[**postpa:** Indicator of indicator of whether the UN peacekeeping mission was on the ground only after the peace agreement was signed]
[**pk:** Indicator of any peacekeeping mission is coded based on Mullenbach 2005, but examined qualitatively by the author where data is missing]
[**unc7:** Indicator of Chapter VII missions coded based on Fortna 2008, also applying the Kosovo mission to Serbia and the East Timor mission to Indonesia until independence.]
[**ms_guar:** Indicator of an enforcement guarantee following the Mattes and Savun 2009 coding of enforcement, which incorporates Fortna 2008 + their own additional cases outside of the U.N.]

Democracy variables:
polity2: Democracy variable (-10 through 10) from Marshall et al. 2006 (Polity 2), lagged (missing values when Polity 2 is coded as missing or prior to state's existence)
[**lpolity2:** Democracy variable (-10 through 10) from Marshall et al. 2006 (Polity 2), lagged to before the conflict (missing values when Polity 2 is coded as missing or prior to state's existence)]
polity2demo45: Indicator of past "democracy_polity" at any time from 1945 to date.
regdemo_p: Regional percentage of democracies out of all states, "democracy_polity," using the same regions as for regional election observation
[**mean_polity_demo:** Regional average "polity2" score for all countries in the region using the same regions as for regional election observation]
[**mag5_change1:** Absolute change in "polity2" compared to the five years ago]
change5: Dummy variable indicating whether the country experienced a change in regime type compared to the five years ago

$$\text{change5} = \begin{Bmatrix} 1 \text{ if changed from autocracy to democracy} \\ 0 \text{ if there was no regime change} \\ -1 \text{ if changed from democracy to autocracy} \end{Bmatrix}$$

[**mag_change1:** Absolute change in "polity2" compared to the past year]

[**change1:** Indicator of whether the country experienced a change in regime type compared to the past year]
[polity2_border: Average polity score of neighboring countries. Borders are defined by Correlates of War Project, using "Direct Contiguity Data, 1816-2006. Version 3.1," available online at http://correlatesofwar.org. Polity2 score comes from the Marshall et al. 2006 database]
ldemocracy: Indicator of democracy from Cheibub et al. 2009, lagged (missing values when prior to state's existence)
[lcdemocracy: Indicator of democracy variable coded from Cheibub et al. 2009, lagged to before the conflict (missing values when prior to state's existence)]
[anydemo_45: Indicator of past "ldemocracy" at any time from 1945 to date]
lregime: Regime variable (0=Parliamentary democracy, 1=Mixed (semi-presidential) democracy, 2=Presidential democracy, 3=Civilian dictatorship, 4=Military dictatorship, 5=Royal dictatorship, so most to least inclusive) from Cheibub et al. 2009, lagged (missing values when prior to state's existence)
[igo_d: This variable corresponds to the maximum average polity score among all IGOs to which the country is member of in that year. This variable comes from Pevehouse database. NOTE: average polity scores for all IGOs do not take into account the polity score in the corresponding country]
[igo_dsd: This variable corresponds to the standard deviation of the polity scores to which the country is member of in that year]

Socio-economic variables:
Penn World Table Version 7.1. Missing values correspond to data not available in original database—
pop_penn7_1: Population (lagged)
rgdpch7_1: PPP Converted GDP Per Capita (Chain Series) at 2005 constant prices (lagged)
openk: Total trade as a percentage of GDP (lagged)
[growth1_7_1: Growth of GDP (t-1 to t) (lagged)]
WDI. Missing values correspond to data not available in original dataset—
[**inf_mortality:** Infant mortality (per 1,000 births)]
[**l_inf_mortality2:** Lagged growth Infant mortality (from t-2 to t-1)]
Aid Data (missing values correspond to data not available in original dataset; when a country has no records in AidData, the following variables are equal to zero)—
share_aid: Share of ODA in total GDP in US 2005 constant prices
[oda_aidta: ODA in constant US 2009 dollars]
Other—
member: Member of either GATT or WTO (=1 Yes)
ICRG variables (the following countries do not appear in the original ICRG data set: Afghanistan, Bosnia and Herzegovina, Burundi, Cambodia, Central Africa, Chad, Comoros, Djibouti, Eritrea, Georgia, Laos, Lesotho, Macedonia, Mauritania, Nepal, Rwanda, Tajikistan, Uzbekistan; missing values in the remaining countries correspond to i) years outside the period of time covered by the original dataset 1984-2011 (e.g., Colombia 1973-1983); or ii) data not available for that year (e.g., Croatia 1991-1994))—
corruption: Corruption
bureaucratic: Bureaucratic quality
laworder: Law and order