

Web Appendix

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“A Porous Humanitarian Shield: The Laws of War, the Red Cross, and the Killing of Civilians”

Table A1. Geneva Convention IV Ratification as Dummy Variables

VARIABLES	(1) OSV by government	(2) OSV by rebels	(3) OSV by government	(4) OSV by rebels
Log (population)	7.5564** (2.936)	1.5872 (3.699)	7.4240** (3.021)	1.2203 (3.501)
Log (real GDP pc)	0.3573 (0.606)	-0.3787 (0.655)	0.3881 (0.613)	-0.3010 (0.614)
Civil war	0.5493*** (0.162)	0.9117*** (0.338)	0.5434*** (0.162)	0.8925** (0.337)
Regime duration	-0.0436*** (0.014)	0.0057 (0.021)	-0.0444*** (0.014)	0.0035 (0.021)
Political regime	-0.0653* (0.035)	0.0512 (0.053)	-0.0670* (0.036)	0.0454 (0.054)
Independence years	-0.1010 (0.064)	0.0529 (0.110)	-0.1027 (0.064)	0.0469 (0.107)
GC-IV-1949 dummy	-0.5755* (0.306)	-0.5811 (0.367)		
AP-II-1977 dummy			0.3192 (0.744)	1.0555 (0.929)
Constant	-68.4628*** (25.073)	-14.3923 (29.939)	-68.0042** (25.957)	-12.0398 (28.296)
Observations	406	406	406	406
R ²	0.111	0.083	0.112	0.092
Number of states	64	64	64	64

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator.

Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A2. Including Controls for Reciprocal Violence

VARIABLES	(1) OSV by government	(2) OSV by rebels	(3) OSV by government	(4) OSV by rebels
Log (OSV by rebels)	0.1079 (0.066)		0.1187* (0.067)	
Log (OSV by govt)		0.1620* (0.092)		0.1707* (0.090)
Log (population)	7.3726** (3.038)	0.3512 (3.643)	7.3387** (3.076)	0.2808 (3.290)
Log (real GDP pc)	0.4050 (0.595)	-0.4300 (0.667)	0.3787 (0.582)	-0.2958 (0.589)
Civil war	0.4509** (0.183)	0.8227** (0.338)	0.4439** (0.186)	0.8061** (0.368)
Regime duration	-0.0443*** (0.013)	0.0127 (0.020)	-0.0452*** (0.013)	0.0160 (0.020)
Political regime	-0.0708** (0.034)	0.0618 (0.052)	-0.0718** (0.033)	0.0645 (0.058)
Independence years	-0.2985** (0.143)	-0.1090 (0.142)	-0.0867 (0.065)	-0.0138 (0.113)
GC-IV-1949 years	0.1919* (0.100)	0.1783 (0.126)		
AP-II-1977 years			-0.0453 (0.044)	0.1865* (0.096)
Constant	-61.1191** (23.837)	2.0695 (29.255)	-67.9652** (26.804)	0.6543 (26.906)
Observations	406	406	406	406
R ²	0.126	0.099	0.130	0.140
Number of states	64	64	64	64

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator.

Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A3. Tests of Geneva Convention IV with Controls for Media Coverage and AI Reports

VARIABLES	(1) OSV by government	(2) OSV by government	(3) OSV by government	(4) OSV by rebels	(5) OSV by rebels	(6) OSV by rebels
Log (population)	7.5004** (2.963)	7.1394** (3.016)	6.9016** (3.006)	1.5467 (3.706)	1.1647 (3.505)	1.1795 (3.574)
Log (real GDP pc)	0.3638 (0.601)	0.4613 (0.671)	0.0652 (0.595)	-0.3717 (0.650)	-0.2734 (0.623)	-0.5549 (0.704)
Civil war	0.5474*** (0.163)	0.5195*** (0.156)	0.4618*** (0.154)	0.9105*** (0.339)	0.8816** (0.343)	0.8580** (0.334)
Regime duration	-0.0438*** (0.013)	-0.0453*** (0.014)	-0.0366*** (0.010)	0.0055 (0.021)	0.0040 (0.021)	0.0100 (0.021)
Political regime	-0.0643* (0.036)	-0.0594 (0.038)	-0.0559 (0.034)	0.0518 (0.053)	0.0571 (0.054)	0.0570 (0.054)
Independence years	-0.3138** (0.136)	-0.3035** (0.145)	-0.2994** (0.140)	-0.1589 (0.141)	-0.1477 (0.130)	-0.1500 (0.137)
Media coverage	0.0681 (0.126)			0.0424 (0.079)		
AI background reports		0.0557* (0.030)			0.0564 (0.034)	
AI news reports			0.3332*** (0.057)			0.2045** (0.099)
GC-IV-1949 years	0.2140** (0.094)	0.2227** (0.101)	0.2073** (0.098)	0.2126* (0.125)	0.2210* (0.123)	0.2084* (0.125)
Constant	-61.6675** (23.439)	-59.9145** (23.215)	-54.3246** (23.553)	-7.7750 (29.404)	-5.8777 (28.235)	-3.2705 (28.725)
Observations	406	406	406	406	406	406
R ²	0.111	0.123	0.163	0.083	0.092	0.097
Number of states	64	64	64	64	64	64

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A4. Tests of Additional Protocol II with Controls for Media Coverage and AI Reports

VARIABLES	(1) OSV by government	(2) OSV by government	(3) OSV by government	(4) OSV by rebels	(5) OSV by rebels	(6) OSV by rebels
Log (population)	7.4788** (2.985)	7.0680** (3.023)	6.8876** (3.019)	1.5669 (3.329)	1.3506 (3.285)	1.1351 (3.173)
Log (real GDP pc)	0.3489 (0.596)	0.4434 (0.654)	0.0589 (0.602)	-0.2358 (0.589)	-0.1924 (0.575)	-0.4329 (0.623)
Civil war	0.5487*** (0.161)	0.5186*** (0.153)	0.4630*** (0.153)	0.9002** (0.366)	0.8850** (0.366)	0.8409** (0.366)
Regime duration	-0.0443*** (0.014)	-0.0463*** (0.014)	-0.0369*** (0.010)	0.0085 (0.020)	0.0075 (0.020)	0.0134 (0.020)
Political regime	-0.0644* (0.035)	-0.0591 (0.036)	-0.0561* (0.033)	0.0533 (0.060)	0.0563 (0.060)	0.0597 (0.061)
Independence years	-0.0886 (0.065)	-0.0574 (0.063)	-0.0855 (0.062)	-0.0293 (0.115)	-0.0138 (0.118)	-0.0261 (0.111)
Media coverage	0.0743 (0.131)			-0.0030 (0.111)		
AI background reports		0.0629** (0.031)			0.0295 (0.031)	
AI news reports			0.3318*** (0.060)			0.2240** (0.098)
AP-II-1977 years	-0.0244 (0.042)	-0.0460 (0.043)	-0.0144 (0.039)	0.1825* (0.097)	0.1719* (0.099)	0.1886* (0.095)
Constant	-68.9387** (25.974)	-67.6831** (26.164)	-61.2491** (26.183)	-11.1863 (26.858)	-10.4168 (26.586)	-5.7428 (25.645)
Observations	406	406	406	406	406	406
R ²	0.112	0.126	0.163	0.123	0.125	0.139
Number of states	64	64	64	64	64	64

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A5. Fixed-Effects Estimation with Yearly Dummy Variables

VARIABLES	(1) OSV by government	(2) OSV by rebels	(3) OSV by government	(4) OSV by rebels
Log (population)	8.1116** (3.064)	2.0200 (3.850)	8.1083** (3.066)	1.8441 (3.461)
Log (real GDP pc)	0.1725 (0.592)	-0.4824 (0.632)	0.1305 (0.576)	-0.2948 (0.598)
Civil war	0.5357*** (0.190)	0.9534*** (0.335)	0.5322*** (0.189)	0.9693*** (0.355)
Regime duration	-0.0447*** (0.013)	0.0044 (0.020)	-0.0457*** (0.013)	0.0078 (0.019)
Political regime	-0.0513 (0.034)	0.0598 (0.047)	-0.0510 (0.032)	0.0605 (0.054)
Independence years	-0.4980** (0.247)	-0.4494 (0.346)	-0.0969 (0.062)	-0.0190 (0.112)
GC-IV-1949 years	0.3820* (0.215)	0.4993* (0.297)		
AP-II-1977 years			-0.0468 (0.043)	0.1753* (0.095)
1990.year	-0.0959 (0.432)	0.0298 (0.347)	-0.1120 (0.430)	0.0892 (0.354)
1991.year	-0.1574 (0.395)	-0.2669 (0.412)	-0.1894 (0.399)	-0.1493 (0.400)
1992.year	-0.5139 (0.373)	-0.4605 (0.393)	-0.5556 (0.374)	-0.3045 (0.391)
1993.year	-0.7685** (0.367)	-0.4342 (0.486)	-0.8263** (0.376)	-0.2146 (0.464)
1994.year	-0.8339** (0.338)	-0.4294 (0.452)	-0.8874** (0.349)	-0.2247 (0.446)
1995.year	-0.6087 (0.504)	-0.3415 (0.392)	-0.6577 (0.509)	-0.1513 (0.413)
1996.year	-0.2625 (0.518)	-0.2961 (0.448)	-0.3052 (0.523)	-0.1263 (0.459)
1997.year	-0.4866 (0.517)	-0.8792* (0.520)	-0.4849 (0.509)	-0.7698 (0.532)
1998.year	-0.4881 (0.526)	-0.4747 (0.498)	-0.5097 (0.521)	-0.3861 (0.544)
1999.year	-0.3501 (0.614)	-0.4632 (0.539)	-0.3721 (0.612)	-0.4299 (0.572)
2000.year	-0.6611 (0.632)	-0.7727 (0.547)	-0.6818 (0.632)	-0.6892 (0.554)
2001.year	-0.8964* (0.531)	-0.8193 (0.584)	-0.9147* (0.534)	-0.7464 (0.572)
2002.year	0.1822 (0.697)	0.6289 (0.386)	0.1802 (0.700)	0.6447* (0.364)
2003.year	0.0265 (0.612)	-0.2320 (0.649)	0.0194 (0.616)	-0.2767 (0.621)
Constant	-59.2165** (23.054)	-1.6479 (31.036)	-72.3102*** (26.991)	-13.8954 (28.922)
Observations	406	406	406	406
R ²	0.154	0.119	0.158	0.153
Number of states	64	64	64	64

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A6. Random-Effects Negative Binomial Estimation

VARIABLES	(1) OSV by government	(4) OSV by rebels	(7) OSV by government	(10) OSV by rebels
Log (population)	-0.0798 (0.115)	0.5074*** (0.087)	0.0057 (0.115)	0.5380*** (0.085)
Log (real GDP pc)	0.3659** (0.186)	-0.4632*** (0.154)	0.2913 (0.186)	-0.4652*** (0.155)
Civil war	0.4375 (0.311)	0.8046*** (0.172)	0.4621 (0.309)	0.8655*** (0.171)
Regime duration	-0.0165* (0.010)	0.0155** (0.006)	-0.0081 (0.009)	0.0215*** (0.006)
Political regime	-0.0010 (0.030)	0.0657*** (0.020)	0.0103 (0.029)	0.0548*** (0.020)
Independence years	-0.0053 (0.005)	-0.0066** (0.003)	-0.0021 (0.005)	-0.0069*** (0.002)
GC-IV-1949 years	0.0447** (0.021)	-0.0005 (0.013)		
AP-II-1977 years			0.0262 (0.032)	0.0630*** (0.020)
Constant	-6.2572*** (1.716)	-3.7315*** (1.346)	-5.2521*** (1.660)	-4.3770*** (1.300)
Observations	406	406	406	406
Number of states	64	64	64	64

Notes. Outcome variables are the count of victims of one-sided violence by perpetrator. Random-effects negative-binomial models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A7. ICRC Presence: Tests of Robustness for Government OSV with Additional Control Variables

VARIABLES	(1) OSV by government	(2) OSV by government	(3) OSV by government	(4) OSV by government	(5) OSV by government
Log (population)	3.5666** (1.495)	3.2060*** (1.013)	3.4723** (1.384)	3.0498*** (0.879)	6.8520*** (2.158)
Log (real GDP pc)	0.3790 (0.956)	-0.1603 (0.912)	-0.4322 (0.633)	-0.8704 (0.823)	-0.0050 (0.781)
Civil war	0.5342*** (0.197)	0.7917*** (0.221)	0.6712*** (0.193)	0.8284*** (0.237)	0.7461*** (0.208)
Regime duration	-0.0417 (0.035)	-0.0221* (0.013)			-0.0279** (0.012)
OSV by govt, t-1	0.0012*** (0.000)				
OSV by rebels		-0.0001 (0.000)			
Political regime			-0.0391 (0.036)		
Regime collapse				-0.7352 (0.605)	
Independence yrs					-0.1021* (0.055)
ICRC presence	-0.0353 (0.245)	-0.0526 (0.273)	0.0275 (0.263)	0.0801 (0.241)	-0.0273 (0.251)
Constant	-37.3292** (15.346)	-29.3675*** (9.676)	-30.1864** (11.864)	-22.6325** (9.873)	-59.4569*** (19.663)
Observations	317	415	409	417	415
R ²	0.119	0.099	0.079	0.102	0.113
Number of states	47	65	65	65	65

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A8. ICRC Presence: Tests of Robustness for Rebel OSV with Additional Control Variables

VARIABLES	(1) OSV by rebels	(2) OSV by rebels	(3) OSV by rebels	(4) OSV by rebels	(5) OSV by rebels
Log (population)	3.4846* (1.795)	4.1054** (1.658)	3.4900* (1.953)	4.0571** (1.710)	2.3951 (3.019)
Log (real GDP pc)	0.2608 (0.676)	0.0378 (0.672)	-0.2200 (0.605)	-0.3750 (0.764)	-0.0454 (0.656)
Civil war	0.5453 (0.343)	0.7740** (0.325)	0.8672** (0.333)	0.7955** (0.318)	0.8013** (0.325)
Regime duration	-0.0016 (0.034)	-0.0146 (0.014)			-0.0119 (0.018)
OSV by rebels, t-1	0.0012 (0.001)				
OSB by govt		0.0001 (0.000)			
Political regime			0.0577 (0.040)		
Regime collaps				-0.3872 (0.467)	
Independence yrs					0.0487 (0.098)
Constant	-35.2358* (18.337)	-39.0612** (16.654)	-31.3316 (19.382)	-35.6083* (17.932)	-24.9130 (24.098)
ICRC presence	0.2478 (0.383)	0.1826 (0.294)	0.2015 (0.302)	0.2518 (0.265)	0.1612 (0.283)
Observations	317	415	409	417	415
R ²	0.077	0.086	0.082	0.085	0.088
Number of states	47	65	65	65	65

Notes. Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. Fixed-effects linear models with robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A9. First-stage regression of ICRC presence

VARIABLES	ICRC presence
Log (population)	-0.5834** (0.2599)
Log (real GDP pc)	-0.1017 (0.0694)
Civil war	0.0906** (0.03819)
Regime duration	-0.0017 (0.0021)
Years ICRC presence	0.0296*** (0.0062)
Observations	415
	Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Partial R-squared of excluded instruments: 0.0955

Test of excluded instruments:

F(1, 345) = 22.54

Prob > F = 0.0000

Table A10. 2SLS with additional instruments (models of government OSV)

VARIABLES	(1) OSV by government	(2) OSV by government	(3) OSV by government	(4) OSV by government	(5) OSV by government
ICRC presence	-0.0651 (0.932)	-12.3296 (12.043)	0.2169 (4.250)	-4.4352 (4.781)	-0.0590 (1.889)
Log (population)	3.3191*** (0.809)	5.6361** (2.705)	-0.0441 (0.195)	4.1202*** (1.310)	3.1987*** (0.866)
Log (real GDP pc)	-0.0409 (0.597)	-0.4455 (0.970)	-0.1225 (0.223)	-0.2770 (0.625)	-0.1709 (0.593)
Civil war		1.9157 (1.354)	0.3324 (0.860)	1.1931** (0.514)	0.7927*** (0.256)
Regime duration	-0.0270** (0.012)	-0.0611 (0.040)	-0.0006 (0.010)	-0.0363 (0.022)	-0.0220* (0.012)
War duration	0.0830*** (0.029)				
Observations	415	415	415	413	415
Kleibergen-Paap F	21.64	1.16	1.15	2.98	9.10
Instrument	Years of ICRC presence	Years of independence	Common law tradition (dummy)	ICRC in neighborhood (dummy)	No of countries with ICRC presence

Notes: Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. All models contain country dummies. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A11. 2SLS with additional instruments (models of rebel OSV)

VARIABLES	(6) OSV by rebels	(7) OSV by rebels	(8) OSV by rebels	(9) OSV by rebels	(10) OSV by rebels
ICRC presence	2.6003** (1.147)	6.0290 (7.677)	-8.4157 (9.414)	0.0351 (6.091)	-0.4874 (2.294)
Log (population)	3.4910*** (0.961)	2.9751* (1.741)	0.7335* (0.439)	4.2074*** (1.444)	4.2695*** (1.098)
Log (real GDP pc)	0.0309 (0.477)	0.1646 (0.579)	-0.6860 (0.539)	0.0240 (0.437)	0.0188 (0.467)
Civil war		0.2434 (0.815)	2.7622 (1.784)	0.7919 (0.585)	0.8398** (0.333)
Regime duration	-0.0087 (0.015)	0.0039 (0.030)	0.0307 (0.026)	-0.0155 (0.025)	-0.0169 (0.012)
War duration	-0.0145 (0.039)				
Observations	415	415	415	413	415
Kleibergen-Paap F	21.64	1.16	1.15	2.98	9.10
Instrument	Years of ICRC presence	Years of independence	Common law tradition (dummy)	ICRC in neighborhood (dummy)	No of countries with ICRC presence

Notes: Outcome variables are the natural logarithm of victims of one-sided violence by perpetrator. All models contain country dummies. Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1