Supplementary Material for "A Slippery Slope – The Domestic Diffusion of Ethnic Conflict"

December 8, 2015

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1 Descriptive Statistics

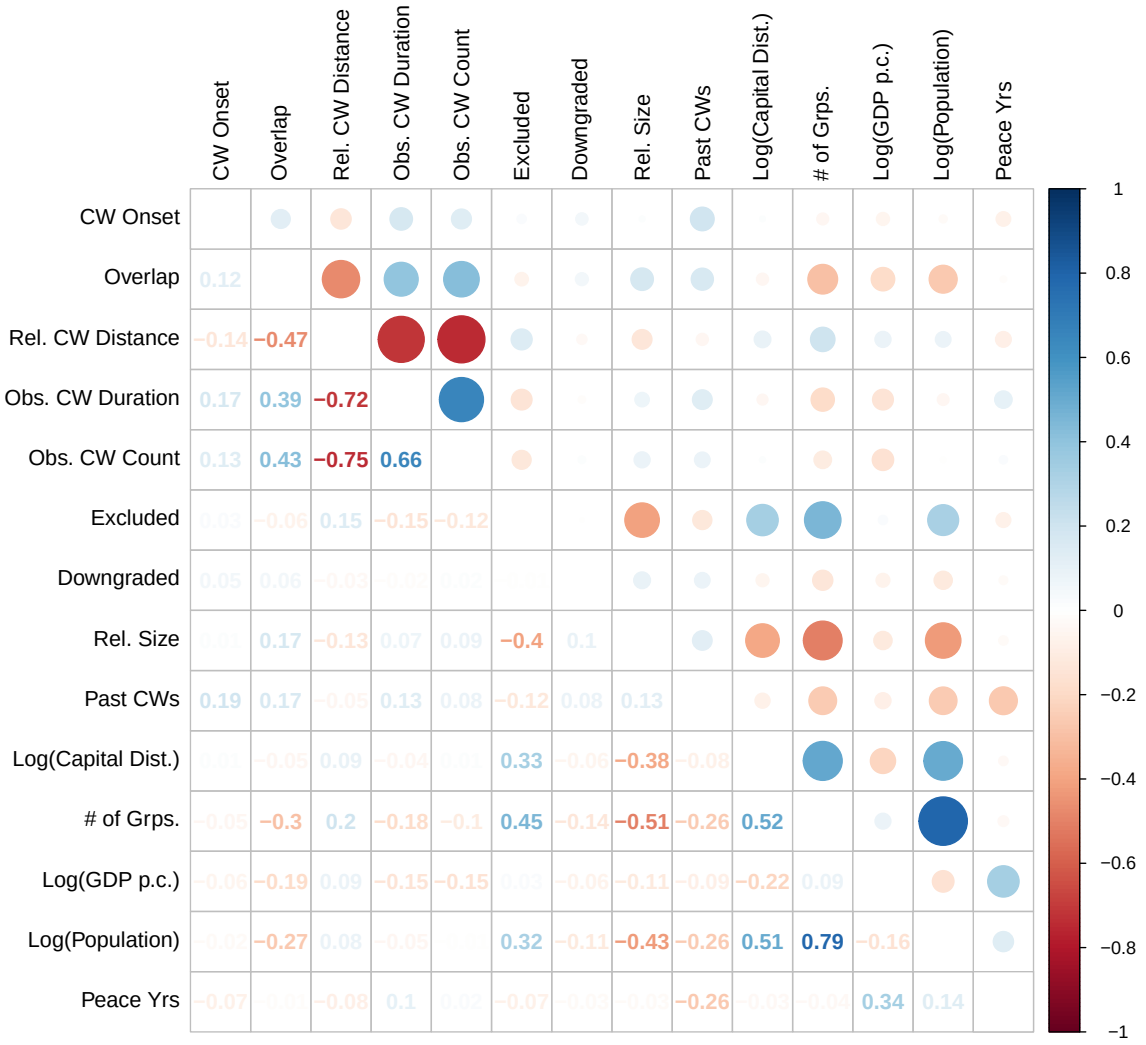
Table S1: Summary statistics of major variables.

Statistic	N	Mean	St. Dev.	Min	Max
Ethnic Civil War Onset	12,945	0.010	0.099	0	1
Overlap	14,058	0.095	0.269	0.000	1.000
Rel. Conflict Distance	10,654	0.745	0.420	0.000	1.000
Obs. Conflict Duration	14,058	3.206	7.009	0	44
Obs. Conflict Count	14,058	0.772	1.549	0	11
Excluded	14,058	0.778	0.416	0	1
Downgraded	14,058	0.018	0.132	0	1
Relative Size	14,058	0.113	0.186	0.0001	0.961
Past Conflicts	14,058	0.320	0.678	0	6
Log(Capital Distance)	12,096	4.850	2.912	0.000	8.595
Log(# of Groups)	14,058	2.835	0.972	1.099	4.043
Log(GDP p.c.)	14,058	7.735	1.250	4.764	10.482
Log(Population)	14,058	18.285	1.777	14.434	20.999
Peace Years	14,058	27.119	18.900	0	62

Table S2: Cases in Analysis

Countries	# of Onsets	# of Groups	Start Year	End Year
Afghanistan	3	9	1990	2008
Angola	5	5	1992	2008
Azerbaijan	1	3	1992	2008
Bangladesh	0	4	1976	2008
Bosnia and Herzegovina	1	4	1993	2008
Cameroon	0	6	1985	2008
Central African Republic	0	5	2002	2008
Chad	2	5	1967	2008
China	2	49	1951	2008
Congo	1	6	1999	2008
Croatia	0	6	1993	2008
Democratic Republic of the Congo	3	13	1966	2008
Eritrea	0	4	2004	2008
Ethiopia	9	8	1965	2008
Georgia	2	6	1993	2008
India	15	20	1957	2008
Indonesia	7	15	1951	2008
Iran	7	11	1947	2008
Iraq	7	3	1962	2008
Israel	1	5	1967	2008
Ivory Coast	0	4	2003	2008
Laos	0	6	1990	2008
Lebanon	1	11	1959	2008
Liberia	2	5	1981	2008
Macedonia	0	5	2002	2008
Mali	2	3	1991	2008
Morocco	0	3	1976	2008
Myanmar	20	12	1949	2008
Nepal	0	6	1997	2008
Nicaragua	0	4	1983	2008
Niger	3	5	1992	2008
Nigeria	1	6	1968	2008
Pakistan	4	8	1972	2008
Philippines	1	4	1971	2008
Russia	14	57	1947	2008
Senegal	0	5	1991	2008
South Africa	0	14	1982	2008
Spain	2	5	1979	2008
Sri Lanka	0	4	1985	2008
Sudan	7	16	1964	2008
Syria	0	5	1980	2008
Tajikistan	0	4	1999	2008
Thailand	0	4	2004	2008
Turkey	0	3	1985	2008
Uganda	2	8	1972	2008
United Kingdom	1	7	1972	2008
Yemen	0	3	1995	2008
Yugoslavia	1	7	1992	2008
Zimbabwe	0	5	1980	2008

Figure S1: Correlation matrix of main variables.



2 Robustness Tests

- The models in Table S3 add various fixed-effects specifications to test for omitted variable bias. Models 1 to 3 subject the motivation mechanisms (Table 1 in the main text) to country and year-fixed effects which control for unobserved country variables and common global time shocks such as global financial and oil crises. Both overlap and distance to conflict are time-invariant measure that do not allow us to evaluate within-group changes over time. However, by restricting the comparison to variation within countries and years, we can rule out several alternative explanations. The overlap variable is only statistically significant at the 0.1 level but the relative distance to conflict remains strongly significant. In contrast, we are less certain about the interaction effect in Model 3. The stable effect sizes reassure us that there is validity to the effect we report.

- Models 4 and 5 in Table S3 add group-level fixed effects to our opportunity models (Table 2 in the main text). Essentially, we ask what effects one additional observed conflict year or one additional observed civil war have on the likelihood of civil war onset for the observing group. Both estimated effects remain substantively positive and highly statistically significant. We are thus very confident that omitted variable bias is of little concern in these models.

- Table S4 uses different lag structures of our conflict distance measures and also demonstrates that the motivation and opportunity mechanisms operate in combination. Admittedly, the observed civil war duration variable in Models 6 and 8 is only statistically significant at the .1 level but the relative distance to conflict estimates remain robust and sizable as does the observed conflict count.

- In Table S5 we probe the validity of our distance to conflict measures by employing relative distance to conflict-center variables, rather than conflict-border, in Models 10 and 11, and absolute distance in Models 12 and 13. In all specifications, the estimates remain statistically significant at least at the .05-level. The estimated effects of absolute conflict distance appear much smaller which results from the different scale on which relative and absolute distance is measured.

- Finally, Table S6 presents a variety of specifications that further probe the opportunity mechanism. Models 14 and 15 add the X-Polity scale (Vreeland, 2008) to our main opportunity specifications to evaluate whether other country-wide measures of repressiveness affect our capacity interpretation of observed civil war duration and count. They do not.

- As opposed to focusing on ongoing ethnic civil wars within a state, we introduce the duration of ongoing interstate and non-ethnic wars as proxies for state

capacity (see Models 16 and 17 in Table S6; the data are from Gleditsch et al. (2002) and Harbom and Wallensteen (2010)). We also add the log of observed battle deaths in a given year to account for the fact that some durable conflicts might not be indicators of very intense civil wars that reduce the capacity of the government (Model 18; data from Lacina and Gleditsch (2005)). Across all those models, the relationship is positive and statistically significant as expected by our opportunity mechanism.

Table S3: Domestic conflict diffusion and fixed effects, 1946-2009.

	(1)	(2)	(3)	(4)	(5)
Overlap	0.570				
	(0.372)				
Rel. Conflict Distance		−3.525***	−2.126		
		(0.841)	(1.578)		
Obs. Conflict Duration				0.243*	
				(0.095)	
Obs. Conflict Count					2.436**
					(0.903)
Excluded	3.461***	4.471***	4.906***	10.522**	11.824***
	(0.526)	(1.031)	(1.162)	(3.503)	(3.322)
Excl. × Confl. Dist.			−1.802		
			(1.815)		
Downgraded	1.384**	2.110*	2.069*	−1.093	−1.886
	(0.432)	(0.903)	(0.903)	(1.407)	(1.722)
Relative Size	12.978***	17.528**	18.146**	33.927	55.608
	(3.002)	(5.974)	(6.132)	(31.214)	(32.940)
Relative Size^2	−16.747***	−24.722*	−25.797**	−25.859	−40.566
	(4.314)	(9.653)	(9.933)	(27.966)	(29.167)
Past Conflicts	−0.059	−1.172	−1.094	−4.916***	−4.756***
	(0.274)	(0.631)	(0.631)	(1.274)	(1.259)
Log(Capital Distance)	0.420***	0.415**	0.410**	7.505	8.203
	(0.070)	(0.149)	(0.153)	(1,617.218)	(2,380.244)
Log(# of Groups)	−3.126***	3.837	4.269	−2.102	−2.113
	(0.896)	(7.330)	(7.156)	(1.728)	(1.606)
Log(GDP p.c.)	−1.152**	−0.491	−0.413	−2.801*	−4.272**
	(0.427)	(1.057)	(1.069)	(1.383)	(1.455)
Log(Population)	−2.151**	−2.233	−2.428	20.256***	22.156***
	(0.777)	(3.058)	(3.044)	(5.433)	(5.418)
Peace Years	−0.132*	−0.492***	−0.495***	0.953**	0.469
	(0.066)	(0.128)	(0.130)	(0.326)	(0.297)
Peace Years^2	0.0003	0.018**	0.018**	−0.058***	−0.026
	(0.003)	(0.006)	(0.006)	(0.017)	(0.017)
Peace Years^3	0.00000	−0.0002**	−0.0002**	0.001***	0.0004
	(0.00003)	(0.0001)	(0.0001)	(0.0002)	(0.0003)
Constant	−5.475	−19.988	−18.365		−416.580
	(8,287.951)	(23,566.730)	(23,662.140)		(32,872.670)
Group-FEs	Yes	Yes	Yes	Yes	Yes
Observations	11,013	10,092	10,092	11,013	11,013
Log Likelihood	−356.676	−121.444	−120.993	−48.974	−39.997
Akaike Inf. Crit.	959.352	486.889	487.987	901.949	883.995

Note: *p<0.05; **p<0.01; ***p<0.001
Standard errors in parentheses.

Table S4: Alternative distance to conflict zone lags and domestic diffusion of civil wars, 1946-2009.

	(6)	(7)	(8)	(9)
Rel. Conflict Distance (2-Yrs)	−6.785**	−6.377**		
	(2.374)	(2.197)		
Rel. Conflict Distance (5-Yrs)			−6.739**	−6.190**
			(2.379)	(2.141)
Obs. Conflict Duration	0.044		0.053	
	(0.029)		(0.030)	
Obs. Conflict Count		0.216*		0.245*
		(0.108)		(0.105)
Excluded	1.466*	2.011**	1.508	2.071**
	(0.737)	(0.694)	(0.778)	(0.740)
Downgraded	1.651*	1.507*	1.710	1.424*
	(0.837)	(0.648)	(0.881)	(0.719)
Relative Size	4.449	2.785	5.342	3.286
	(4.867)	(4.687)	(4.791)	(4.648)
Relative Size^2	−5.200	−5.603	−6.240	−6.488
	(6.189)	(6.116)	(6.035)	(6.077)
Past Conflicts	0.527	0.699**	0.429	0.648**
	(0.361)	(0.239)	(0.341)	(0.227)
Log(Capital Distance)	0.303*	0.0004	0.315*	−0.003
	(0.124)	(0.142)	(0.128)	(0.147)
Log(# of Groups)	−1.362***	−1.547**	−1.322**	−1.491**
	(0.411)	(0.531)	(0.424)	(0.525)
Log(GDP p.c.)	−0.074	−0.209	−0.065	−0.228
	(0.266)	(0.243)	(0.282)	(0.246)
Log(Population)	0.807*	0.954**	0.842*	0.962**
	(0.379)	(0.333)	(0.402)	(0.347)
Peace Years	−0.283**	−0.329**	−0.293**	−0.331**
	(0.097)	(0.123)	(0.101)	(0.126)
Peace Years^2	0.011*	0.013*	0.011*	0.013*
	(0.005)	(0.006)	(0.005)	(0.006)
Peace Years^3	−0.0001***	−0.0002***	−0.0001***	−0.0002***
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	−15.469	−15.210*	−16.432	−15.497*
	(8.005)	(6.131)	(8.611)	(6.411)
Observations	10,010	9,340	10,043	9,361
ℓ	−214.442	−207.624	−217.687	−211.506
AIC	458.883	445.248	465.373	453.012

*p<0.05; **p<0.01; ***p<0.001

Country-clustered standard errors in parentheses.

Table S5: Alternative distance to conflict zone measures and domestic diffusion of civil wars, 1946-2009.

	(10)	(11)	(12)	(13)
Rel. Conflict Center Dist.	−4.731***	−2.431*		
	(0.674)	(1.110)		
Excl. × Conflict-Center Dist.		−2.910*		
		(1.336)		
Excluded	1.590*	2.616**	1.660*	1.899*
	(0.702)	(0.913)	(0.770)	(0.864)
Abs. Conflict-Border Dist.			−0.002*	
			(0.001)	
Abs. Conflict-Center Dist.				−0.002*
				(0.001)
Downgraded	1.533*	1.766**	1.421*	1.560*
	(0.683)	(0.678)	(0.686)	(0.670)
Relative Size	4.423	4.679	3.154	3.864
	(4.159)	(4.254)	(4.536)	(4.061)
Relative Size^2	−5.406	−7.412	−3.503	−3.995
	(5.727)	(5.662)	(6.132)	(5.893)
Past Conflicts	0.916**	0.865*	0.661*	0.675*
	(0.337)	(0.359)	(0.300)	(0.295)
Log(Capital Distance)	0.283*	0.054	0.273*	0.339**
	(0.121)	(0.137)	(0.128)	(0.123)
Log(# of Groups)	−1.362***	−1.346**	−1.329***	−1.297***
	(0.404)	(0.447)	(0.391)	(0.387)
Log(GDP p.c.)	−0.224	−0.239	−0.138	−0.193
	(0.224)	(0.220)	(0.228)	(0.216)
Log(Population)	0.720*	0.874**	0.840*	0.877*
	(0.339)	(0.319)	(0.341)	(0.341)
Peace Years	−0.313**	−0.308**	−0.337*	−0.309*
	(0.111)	(0.116)	(0.132)	(0.130)
Peace Years^2	0.013*	0.012*	0.013*	0.012*
	(0.005)	(0.005)	(0.006)	(0.006)
Peace Years^3	−0.0002***	−0.0002***	−0.0002***	−0.0002***
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	−12.044	−14.128*	−14.701*	−15.440*
	(6.628)	(6.203)	(6.607)	(6.489)
Observations	10,092	9,433	2,480	2,480
ℓ	−215.660	−208.285	−197.811	−193.623
AIC	459.320	446.570	423.622	415.246

*p<0.05; **p<0.01; ***p<0.001

Country-clustered standard errors in parentheses.

Table S6: Domestic conflict diffusion and other conflict types, 1946-2009.

	(14)	(15)	(16)	(17)	(18)
Obs. Conflict Duration	0.063***				
	(0.019)				
Obs. Conflict Count		0.401***			
		(0.068)			
Obs. Interstate Conflict Duration			0.306***		
			(0.092)		
Obs. Non-Ethnic Conflict Duration				0.052	
				(0.029)	
Obs. Log(Battle Deaths)					0.316***
					(0.078)
Excluded	1.710***	1.659**	1.467***	1.331***	1.599***
	(0.498)	(0.622)	(0.250)	(0.271)	(0.452)
Downgraded	1.594**	1.381**	1.419**	1.556**	1.620**
	(0.569)	(0.486)	(0.514)	(0.508)	(0.563)
Relative Size	4.410*	2.446	3.084	3.330	5.936
	(1.963)	(2.043)	(2.397)	(2.214)	(3.177)
Relative Size^2	−4.566	−2.806	−4.153	−4.235	−7.036
	(2.716)	(2.881)	(2.962)	(2.779)	(4.312)
Past Conflicts	0.699**	0.811***	0.898***	0.912***	0.429*
	(0.263)	(0.185)	(0.200)	(0.196)	(0.199)
Log(Capital Distance)	0.287***	0.253**	0.262**	0.274**	0.360***
	(0.081)	(0.080)	(0.091)	(0.096)	(0.109)
Log(# of Groups)	−1.039***	−1.444***	−1.162***	−1.140**	−0.899**
	(0.294)	(0.239)	(0.352)	(0.373)	(0.311)
Log(GDP p.c.)	0.055	−0.020	0.001	0.051	0.135
	(0.200)	(0.166)	(0.238)	(0.212)	(0.189)
Log(Population)	0.317	0.422*	0.272	0.300	0.597**
	(0.212)	(0.176)	(0.249)	(0.268)	(0.210)
X-Polity	0.123	0.076			
	(0.067)	(0.049)			
Peace Years	−0.144*	−0.205***	−0.142*	−0.149*	−0.054
	(0.063)	(0.052)	(0.065)	(0.066)	(0.081)
Peace Years^2	0.003	0.006**	0.003	0.003	−0.003
	(0.003)	(0.002)	(0.003)	(0.003)	(0.004)
Peace Years^3	−0.00001***	−0.0001***	−0.00001***	−0.00002***	0.0001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	−10.095*	−10.104**	−8.056	−8.938	−16.307***
	(4.301)	(3.661)	(5.012)	(4.882)	(3.961)
Observations	10,775	10,775	11,013	10,994	5,149
ℓ	−502.839	−480.018	−532.864	−531.461	−296.211
AIC	1,035.677	990.037	1,093.727	1,090.923	620.422

*p<0.05; **p<0.01; ***p<0.001
Country-clustered standard errors in parentheses.

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