

Web Appendix for “The Downstream Effects of Combatant
Fragmentation on Civil War Recurrence”

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Country	Years	Fragmentation
Afghanistan	1978 – 1992	Yes
Afghanistan	1992 – 1996	Yes
Algeria	1962 – 1963	No
Angola	1975 – 1991	No
Angola	1992 – 1994	No
Angola	1997 – 2002	Yes
Argentina	1955	No
Argentina	1975 – 1977	No
Azerbaijan	1991 – 1994	No
Bangladesh	1974 – 1997	No
Bolivia	1952	No
Bosnia	1992 – 1995	No
Burundi	1965 – 1969	No
Burundi	1972	No
Burundi	1988	No
Cambodia	1970 – 1975	No
Cambodia	1975 – 1991	No
CAR	1996 – 1997	No
Chad	1965 – 1979	Yes
Chad	1980 – 1994	Yes
Chad	1994 – 1997	Yes
China	1946 – 1949	No
China	1947	No
China	1950 – 1951	No
China	1956 – 1959	No
China	1967 – 1968	No
Colombia	1948 – 1966	No
Colombia	1978 –	No
Congo-Brazzaville	1993 – 1997	No
Congo-Brazzaville	1998 – 1999	No
Congo-Zaire	1960 – 1965	No
Congo-Zaire	1967	No
Congo-Zaire	1977 – 1978	No
Congo-Zaire	1996 – 1997	No
Costa Rica	1948	No
Croatia	1992 – 1995	No
Cuba	1958 – 1959	No
Cyprus	1963 – 1967	No
Cyprus	1974	No
Djibouti	1991 – 1994	Yes
Dominican Republic	1965	No
Egypt	1994 – 1997	No
El Salvador	1979 – 1992	No
Ethiopia	1974 – 1991	Yes
Ethiopia	1976 – 1988	No
Ethiopia	1978 – 1991	Yes
Georgia	1991 – 1992	No
Georgia	1992 – 1994	No
Greece	1944 – 1949	No
Guatemala	1966 – 1972	No
Guatemala	1978 – 1994	No

Table 1: List of Doyle and Sambanis (2006) Civil Wars Reported in Table 2 of the Text (Part I)

Country	Years	Fragmentation
Haiti	1991 – 1995	No
India	1946 – 1948	No
India	1984 – 1993	Yes
India	1989 –	Yes
Indonesia	1950	No
Indonesia	1953	No
Indonesia	1956 – 1960	No
Indonesia	1975 – 1999	No
Indonesia	1976 – 1978	No
Indonesia	1990 – 1991	No
Iran	1978 – 1979	No
Iran	1979 – 1984	No
Iraq	1959	No
Iraq	1961 – 1970	No
Iraq	1974 – 1975	No
Iraq	1985 – 1996	No
Iraq	1991 – 1993	No
Israel	1987 – 1997	No
Jordan	1970 – 1971	No
Kenya	1963 – 1967	No
Kenya	1991 – 1993	No
Korea	1948 – 1949	No
Laos	1960 – 1973	No
Lebanon	1958	No
Lebanon	1975 – 1991	Yes
Liberia	1989 – 1990	Yes
Liberia	1992 – 1997	Yes
Mali	1990 – 1995	Yes
Moldova	1991 – 1992	No
Morocco	1975 – 1991	No
Mozambique	1976 – 1992	No
Myanmar	1948 – 1988	No
Myanmar	1948 – 1951	No
Myanmar	1960 – 1995	Yes
Namibia	1973 – 1989	No
Nicaragua	1978 – 1979	No
Nicaragua	1981 – 1990	No
Nigeria	1967 – 1970	No
Nigeria	1980 – 1985	No
Oman	1971 – 1975	No
Pakistan	1971	No
Pakistan	1973 – 1977	No
Pakistan	1994 – 1999	No
Papua New Guinea	1988 – 1998	No
Paraguay	1947	No
Peru	1980 – 1996	No
Philippines	1950 – 1952	No
Philippines	1971 –	Yes
Philippines	1972 – 1992	No

Table 2: List of Doyle and Sambanis (2006) Civil Wars Reported in Table 2 of the Text (Part II)

Country	Years	Fragmentation
Russia	1994 – 1996	Yes
Rwanda	1963 – 1964	No
Rwanda	1990 – 1993	No
Rwanda	1994	No
Senegal	1989 – 1999	No
Sierra Leone	1991 – 1996	No
Somalia	1988 – 1991	No
Somalia	1991 –	Yes
South Africa	1976 – 1994	No
Sri Lanka	1971	No
Sri Lanka	1983 – 2002	No
Sri Lanka	1987 – 1989	No
Sudan	1963 – 1972	No
Sudan	1983 – 2002	Yes
Syria	1979 – 1982	No
Tajikistan	1992 – 1997	No
Thailand	1966 – 1982	No
Turkey	1984 – 1999	No
Uganda	1966	No
Uganda	1978 – 1979	No
Uganda	1981 – 1987	Yes
Uganda	1990 – 1992	No
United Kingdom	1971 – 1998	No
Vietnam	1960 – 1975	No
Yemen	1994	No
Yemen Arab Republic	1948	No
Yemen Arab Republic	1962 – 1970	No
Yemen People’s Republic	1986	No
Yugoslavia	1991	No
Zimbabwe	1972 – 2979	No
Zimbabwe	1983 – 1987	No

Table 3: List of Doyle and Sambanis (2006) Civil Wars Reported in Table 2 of the Text (Part III)

	Ethnic Civil War	Costs of Civil War	Number of Factions	Strong Peace Operations (All)	Military Outcome	Level of Development/Electricity	Commodity Exports/GDP	Fragmentation
Ethnic Civil War	1.000	-	-	-	-	-	-	-
Costs of Civil War	0.075	1.000	-	-	-	-	-	-
Number of Factions	0.022	0.333	1.000	-	-	-	-	-
Strong Peace Operations (All)	0.024	0.303	0.215	1.000	-	-	-	-
Military Outcome	-0.084	-0.294	-0.240	-0.224	1.000	-	-	-
Level of Development/Electricity	0.133	-0.003	0.167	0.036	-0.217	1.000	-	-
Commodity Exports/GDP	0.078	0.126	-0.128	-0.007	-0.147	-0.063	1.000	-
Fragmentation	0.141	0.218	0.195	0.026	-0.162	-0.114	0.027	1.000

Table 4: Correlation Matrix of Independent Variables

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Fragmentation	2.382**	2.354**	2.251*	2.263*	2.579**	2.209*	2.240*
	(0.772)	(0.756)	(0.705)	(0.726)	(0.728)	(0.738)	(0.718)
Ethnic Civil War	-	1.594 [†]	1.546	1.528	1.395	1.585	1.528
	-	(0.445)	(0.430)	(0.441)	(0.407)	(0.453)	(0.440)
Costs of Civil War	1.106	-	1.089	1.106 [†]	1.119 [†]	1.097	1.095
	(0.070)	-	(0.067)	(0.063)	(0.073)	(0.069)	(0.069)
Number of Factions	1.001	1.040	1.004	1.025	0.973	0.987	1.014
	(0.084)	(0.073)	(0.082)	(0.080)	(0.089)	(0.081)	(0.079)
Strong Peace Operations (All)	0.730	0.846	-	0.787	0.782	0.747	0.764
	(0.301)	(0.347)	-	(0.321)	(0.333)	(0.330)	(0.320)
Military Outcome	0.817	0.721	0.830	-	0.919	0.761	0.816
	(0.220)	(0.182)	(0.223)	-	(0.225)	(0.210)	(0.221)
Level of Development/Electricity	0.565*	0.519*	0.544*	0.571*	-	0.551*	0.556*
	(0.159)	(0.141)	(0.145)	(0.146)	-	(0.152)	(0.150)
Commodity Exports/GDP	3.260**	3.039*	2.986**	3.188**	3.054**	-	2.927**
	(1.183)	(1.404)	(1.133)	(1.220)	(1.230)	-	(1.115)
<i>n</i>	131	131	131	131	134	131	130
Log-likelihood	-278.581	-278.608	-277.546	-277.604	-285.308	-278.772	-277.329
χ^2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Table reports hazard ratios, with robust standard errors in parentheses.
p-values: [†] < 0.1, * < 0.05, ** < 0.01

Table 5: Alternative Specifications of Main Cox Proportional Hazards Model - Doyle and Sambanis (2006) Data

	Model 1	Model 2	Model 3	Model 4	Model 5
Fragmentation	2.432**	2.599**	2.360*	1.953*	2.240**
	(0.785)	(0.942)	(0.866)	(0.646)	(0.652)
Length of Civil War	0.998	0.999	0.999	0.999	-
	(0.002)	(0.002)	(0.002)	(0.002)	-
Ethnic Civil War	1.488	1.461	1.345	1.525	1.528
	(0.426)	(0.413)	(0.399)	(0.439)	(0.424)
Costs of Civil War	1.102	1.121*	1.124*	1.091	1.095
	(0.069)	(0.065)	(0.065)	(0.066)	(0.062)
Number of Factions	1.028	1.045	1.068	1.036	1.014
	(0.078)	(0.075)	(0.076)	(0.087)	(0.086)
Strong Peace Operations (All)	0.767	0.849	1.028	0.673	0.765
	(0.314)	(0.358)	(0.419)	(0.285)	(0.318)
Military Outcome	0.773	-	-	0.747	0.816
	(0.210)	-	-	(0.191)	(0.237)
Peace Treaty	-	0.816	-	-	-
	-	(0.234)	-	-	-
Implemented Peace Treaty	-	-	0.404*	-	-
	-	-	(0.148)	-	-
Level of Development/Electricity	0.538*	0.568*	0.615 [†]	0.515*	0.553*
	(0.148)	(0.146)	(0.161)	(0.135)	(0.140)
Commodity Exports/GDP	2.810**	3.511**	3.007**	3.013**	2.930*
	(1.067)	(1.538)	(1.149)	(1.088)	(1.347)
Years Since Independence	-	-	-	1.017 [†]	-
	-	-	-	(0.009)	-
<i>n</i>	131	131	131	131	131
Log-likelihood	-276.936	-277.145	-274.858	-275.679	-277.343
χ^2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Table reports hazard ratios, with standard errors in parentheses
(First four columns contain clustered errors, last column robust).
p-values: [†] < 0.1, * < 0.05, ** < 0.01

Table 6: Alternative Specifications of Main Cox Proportional Hazards Model - Doyle and Sambanis (2006) Data

		Signed Treaty		Total
		No	Yes	
Fragmentation	No	83	29	112
	Yes	6	16	22
Total		89	45	134

χ^2 Test: $p < 0.001$

Table 7: Cross-tabulation of Fragmentation and Treaty Signing

		Treaty Implemented		Total
		No	Yes	
Fragmentation	No	89	23	112
	Yes	17	5	22
Total		106	28	134

χ^2 Test: $p = 0.817$

Table 8: Cross-tabulation of Fragmentation and Treaty Implementation

		Military Outcome		Total
		No	Yes	
Fragmentation	No	48	68	116
	Yes	14	8	22
Total		62	76	138

χ^2 Test: $p = 0.054$

Table 9: Cross-tabulation of Fragmentation and Military Outcomes

		Government Victory		Total
		No	Yes	
Fragmentation	No	74	42	116
	Yes	21	1	22
Total		95	43	138

χ^2 Test: $p = 0.003$

Table 10: Cross-tabulation of Fragmentation and Government Victory