

Do Democracies Make Inferior Counterinsurgents?

Supplemental Appendix

December 16, 2008

1 Introduction

This appendix details provides additional information and tests that were omitted from the manuscript due to space considerations. More specifically, the appendix: (1) provides summary statistics for the unmatched dataset; (2) re-estimates all regressions with an interactive term (DOCC), which interacts DEMOCRACY and OCCUPY; (3) provides kernel density plots to represent visually the pre-matching imbalance in key characteristics across democratic and non-democratic combatants; (4) provides descriptive stats on war duration over time; (5) details all 286 cases with outcomes.

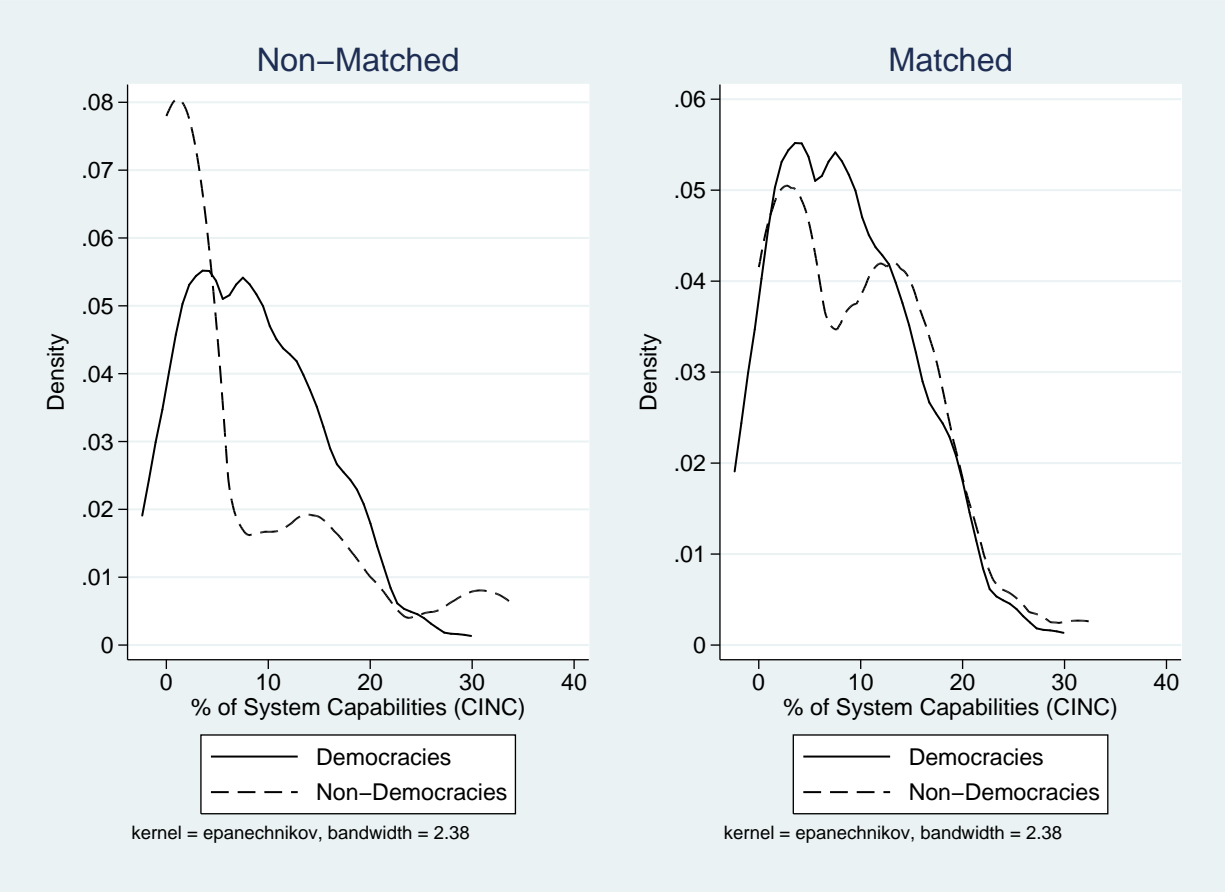
2 Summary Statistics

3 Democracy and Occupation: Ordered Logistic and Logistic Regression

4 Kernel Density Plots

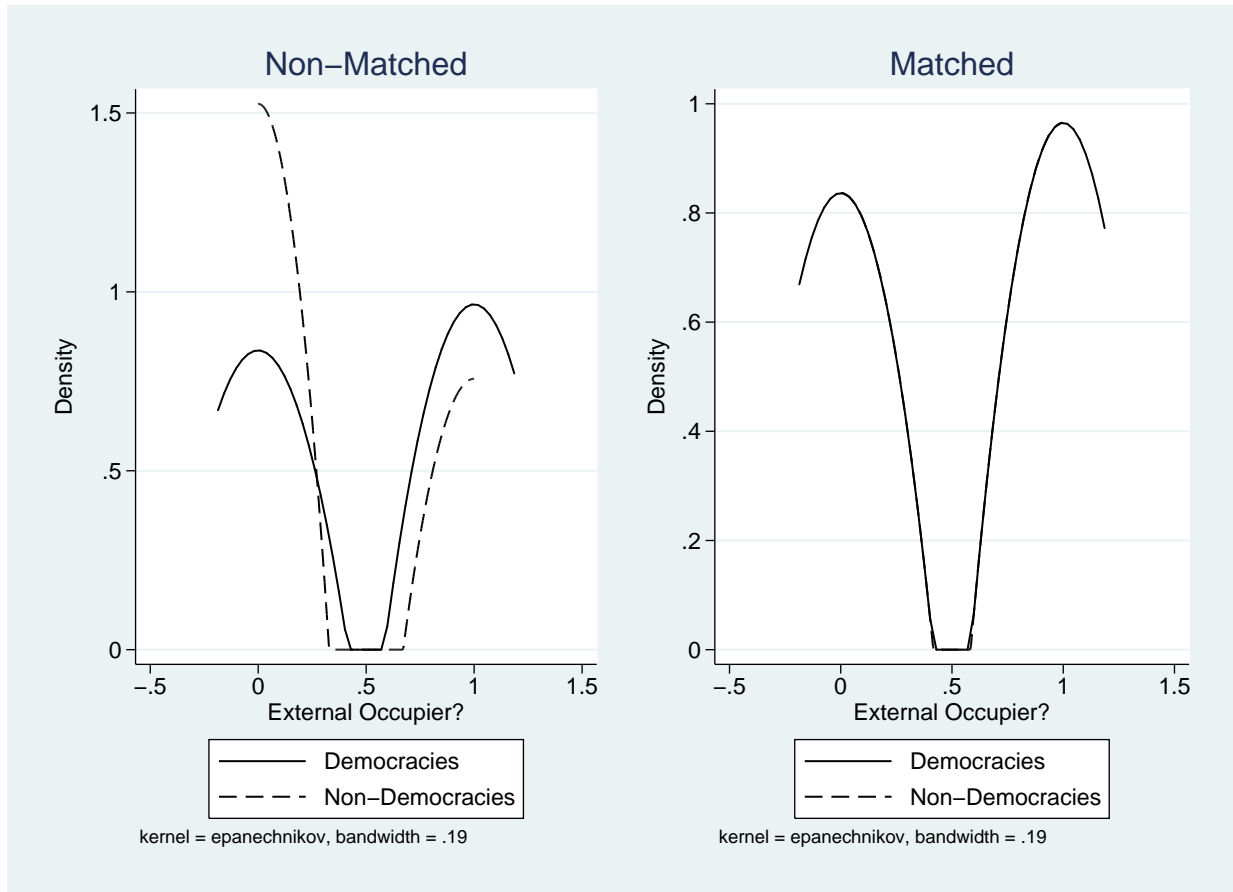
Causal inferences can be biased if there populations of treated (democracies) and control (non-democracies) are too disjoint — hinges on modeling assumptions about how to handle these gaps. I plot three of the sharpest imbalances found in the unmatched dataset.

Figure 1: Kernel Density Estimate (Power)



N=286.

Figure 2: Kernel Density Estimate (Occupier Status)



N=286. External occupier? (1==Yes, 0==No)

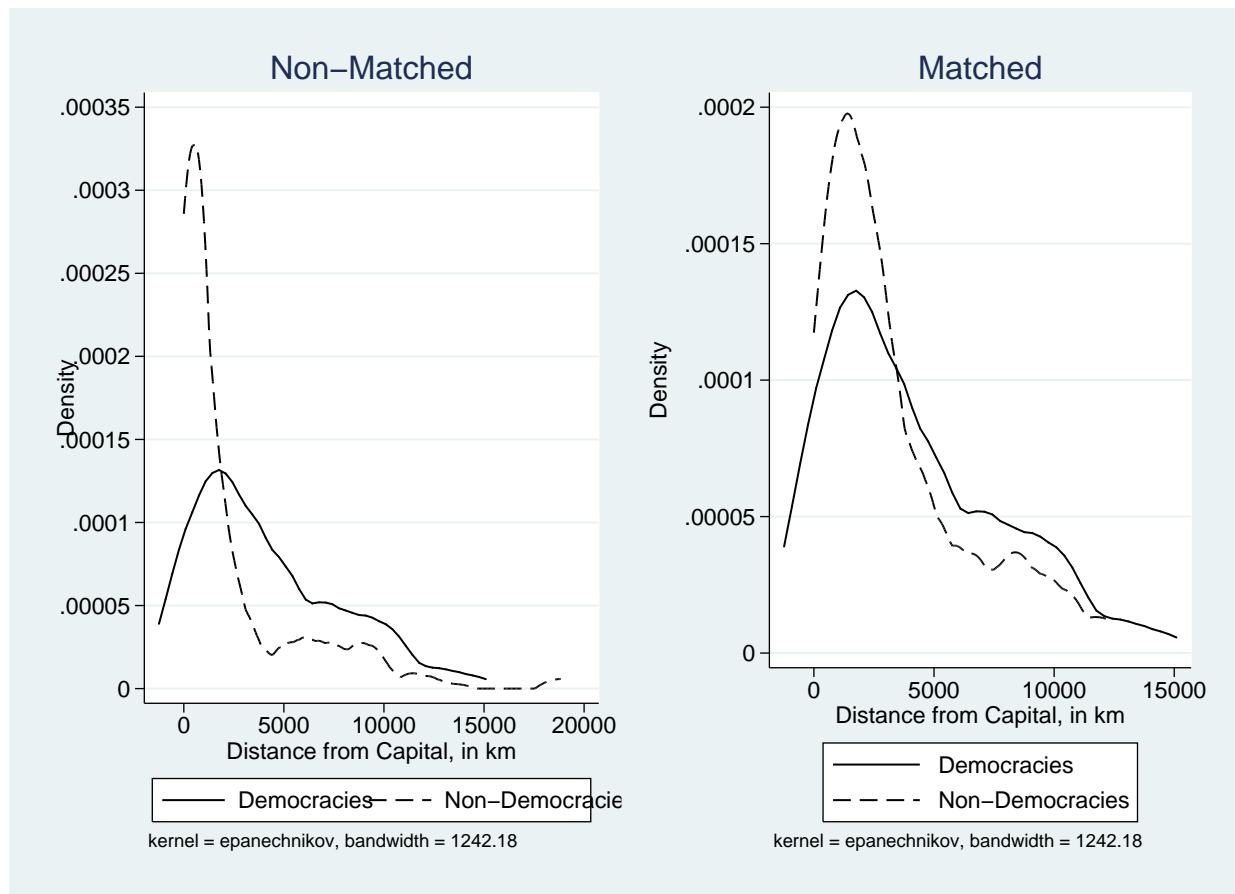
5 War Duration

Figure 4 illustrates the steadily increasing duration of COIN wars over time, regardless of regime type.

6 Cases

The following Tables detail the 286 wars that comprise the dataset. As noted in the paper, OUTCOME is measured from the incumbent's point of view. A "2" therefore refers to an incumbent victory; a "0," to an incumbent loss; and a "1" for a draw.

Figure 3: Kernel Density Estimate (Distance, in km)



N=286.

Table 1: Summary Statistics

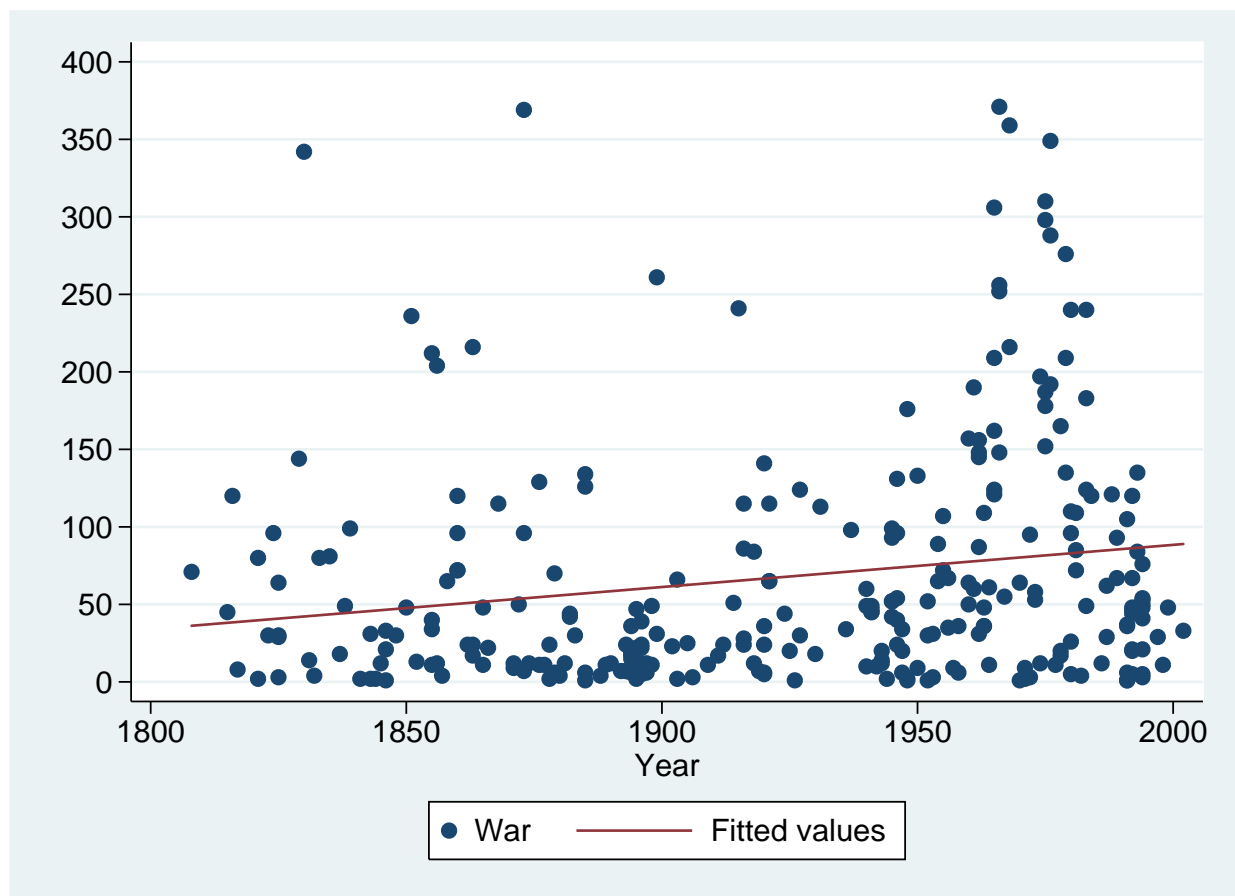
Variable	Definition	Mean	Std. Dev.	Min	Max	Obs
W/D/L	Coded 2 if incumbent wins; 1 draw; 0 loss	1.26	0.86	0	2	286
RESTRICT W/D/L	W/D/L with restrictive draws	1.21	0.91	0	2	286
W/L	Draws omitted; 1 for win	0.66	0.47	0	1	286
<i>Explanatory Variables</i>						
DEMOCRACY	Coded 1 if Polity2 ≥ 7 ; 0 if not	0.29	0.46	0	1	286
OCCUPY	Equals 1 if the incumbent is an external occupier, 0 otherwise (<i>Source: Various</i>)	0.41	0.49	0	1	286
SUPPORT	2 if sanctuary and external support; 1 if only sanctuary or support; 0 if none (<i>Source: Various</i>)	0.62	0.78	0	2	286
POWER	Natural log of an incumbent's share of cumulative index of national capabilities in last prewar year (<i>Source: COW Ver3.02</i>)	0.51	2.23	-4.76	3.51	286
MECH	Soldiers per motorized vehicle in last prewar year Has 5 values: 4 represents highest mechanization level, 1 lowest 0 for pre-1917 cases	1.43	1.49	0	4	286
<i>Control Variables</i>						
ELEVATION	Natural log of average of five elevation readings in conflict area (meters) (<i>Source: Digital Globe</i>)	5.98	1.37	0	8.50	286
DISTANCE	Natural log of distance (in kilometers) from incumbent's capital to conflict area (<i>Source: Digital Globe</i>)	6.14	3.13	0	9.84	286
LANGUAGE	Number of languages in conflict area, 1945-2005 (<i>Source: Modified from Fearon and Laitin 2003; CIA World Factbook</i>)	8.07	7.38	1	30	135
COLD WAR	Dummy variable for Cold War, 1946-1989	0.35	0.48	0	1	286
NEW STATE	1 if a war occurred in state's first two years of existence; 0 if not	0.08	0.27	0	1	286

Table 2: DEMOCRACY, DOCC, and War Outcomes

Variables	<i>Full Sample: 1800-2005</i>			<i>Subset: Post-1945 Only</i>		
	1	2	3	4	5	6
	(W/D/L)	(W/D/L)	(W/L)	(W/D/L)	(W/D/L)	(W/L)
		<i>Restrictive Draws</i>	<i>Draws Dropped</i>		<i>Restrictive Draws</i>	<i>Draws Dropped</i>
DEMOCRACY	-0.48 (0.49)	-0.59 (0.50)	0.58 (0.85)	-0.53 (0.48)	-0.77 (0.54)	0.61 (1.05)
OCCUPY	-0.92** (0.49)	-0.80* (0.47)	-0.83 (0.57)	-2.11*** (0.79)	-1.80** (0.75)	-2.29** (0.97)
DOCC	0.19 (0.55)	0.13 (0.54)	-0.95 (1.02)	0.56 (0.95)	0.32 (0.95)	-1.52 (1.19)
SUPPORT	-0.98*** (0.17)	-1.00*** (0.20)	-1.17*** (0.24)	-0.59*** (0.20)	-0.63*** (0.24)	-0.73*** (0.28)
POWER	0.19* (0.11)	0.19 (0.12)	0.21 (0.16)	0.13 (0.13)	0.16 (0.13)	0.25 (0.19)
MECH	-0.40*** (0.11)	-0.38*** (0.10)	-0.37*** (0.14)	-0.28* (0.15)	-0.27** (0.14)	-0.20 (0.24)
ELEVATION	0.01 (0.08)	-0.01 (0.08)	-0.00 (0.14)	0.13 (0.11)	0.12 (0.10)	0.12 (0.18)
DISTANCE	-0.06 (0.07)	-0.06 (0.07)	-0.09 (0.10)	0.01 (0.07)	0.01 (0.08)	0.10 (0.10)
NEW STATE	0.38 (0.52)	0.45 (0.53)	0.65 (0.65)	0.60 (0.61)	0.61 (0.59)	0.76 (0.79)
COLD WAR	0.31 (0.35)	0.22 (0.34)	0.43 (0.47)			
LANGUAGE				-0.05 (0.03)	-0.03 (0.03)	-0.06 (0.04)
<i>Cutpoints/Constant</i>	-3.05 -1.94	-2.79 -2.03	2.61** (1.10)	-2.18 -0.54	-1.79 -0.62	1.54 (1.51)
N (Clusters)	286 (85)	286 (85)	231 (70)	135 (76)	135 (76)	91 (58)
Wald chi2	51.75***	46.18***	44.17***	32.77***	40.35***	31.21***
Log-(pseudo)likelihood	-243.14	-234.27	-131.44	-131.62	-129.68	-48.34
r^2	0.16	0.16	0.25	0.11	0.10	0.23

Note: *Significant at 10% **Significant at 5% ***Significant at 1%

Figure 4: War Duration (in Months)



N=286.

Table 3: List of Insurgencies

Case	Incumbent	War	Start	End Date	Outcome
1	France	Peninsular War	1808	1814	0
2	UKG	Kandhian Rebellion	1815	1818	2
3	Russia	Russo-Georgian	1816	1825	2
4	UKG	Pindari War/3rd Anglo-Maratha War	1817	1818	2
5	Turkey	Greek War of Independence	1821	1827	0
6	Turkey	Romanian Independence	1821	1821	2
7	UKG	First Anglo-Burmese	1823	1826	2
8	UKG	First Ashanti	1824	1831	2
9	China	Kashgaria Campaigns	1825	1828	2
10	Mexico	Yaqui-Mayo War	1825	1827	1
11	Netherlands	Javanese War	1825	1830	2
12	UKG	Bharatpuran Insurgency	1825	1826	2
13	Russia	Russo-Circassian	1829	1840	2
14	Russia	Murid War (Greater Gazavat)	1830	1859	2
15	Turkey	First Syrian	1831	1832	0
16	USA	Blackhawk's War	1832	1832	2
17	Spain	First Carlist War	1833	1839	2
18	USA	Second Seminole War	1835	1842	2
19	Egypt	Druze Rebellion	1837	1838	2
20	UKG	First British-Afghan	1838	1842	0
21	France	Franco-Algerian	1839	1847	2
22	Turkey	Bosnian-Turkish	1841	1841	2
23	UKG	First Maori	1843	1846	2
24	UKG	Sind War	1843	1843	2
25	France	Franco-Moroccan	1844	1844	2
26	UKG	First British-Sikh	1845	1846	2
27	AUH	Cracow Revolt	1846	1846	2
28	Spain	Second Carlist War	1846	1849	2
29	UKG	First Kaffir War	1846	1847	2
30	Mexico	Mayan Revolt/Caste War	1847	1901	2
31	Turkey	Wallachian Independence	1848	1851	2
32	UKG	Second Kaffir	1850	1853	2
33	China	Nien Rebellion	1851	1868	2
34	China	Taiping Rebellion	1851	1864	2
35	UKG	Second Anglo-Burmese	1852	1853	2

Table 4: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
36	China	Miao Rebellion	1855	1872	2
37	UKG	Santal Insurrection	1855	1856	2
38	USA	Yakima War	1855	1858	2
39	USA	Third Seminole War	1855	1858	2
40	China	Panthay Revolt	1856	1873	2
41	France	Kabylia Uprising	1856	1857	2
42	France	Tukulor-French War	1857	1857	2
43	France	French-Indochinese	1858	1863	2
44	UKG	Second Maori	1860	1870	2
45	USA	Navajo War	1860	1865	2
46	USA	Apache War	1860	1865	2
47	USA	First Sioux War	1862	1864	2
48	China	Sinkiang	1863	1877	2
49	Russia	Second Polish	1863	1864	2
50	Spain	War of the Restoration	1863	1865	0
51	UKG	British-Bhutanese	1865	1865	2
52	USA	Second Sioux War	1865	1868	2
53	Turkey	First Cretan	1866	1868	2
54	Spain	Ten Years' War	1868	1878	2
55	France	Algerian	1871	1872	2
56	USA	Second Apache	1871	1872	2
57	Spain	Third Carlist War	1872	1876	2
58	France	Tonkin I	1873	1881	0
59	Netherlands	Achinese War	1873	1904	2
60	UKG	Third Ashanti	1873	1874	2
61	USA	Red River Indian War	1874	1875	2
62	USA	Third Apache War	1876	1886	2
63	USA	Third Sioux War	1876	1877	2
64	Russia	Lesser Gazavat	1877	1878	2
65	AUH	Conquest of Bosnia	1878	1878	2
66	UKG	Second British-Afghan	1878	1880	2
67	Argentina	War of the Desert	1879	1884	2
68	UKG	British-Zulu	1879	1879	2
69	UKG	First Boer War	1880	1881	0
70	France	Tunisian Independence	1881	1882	2

Table 5: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
71	France	Tonkin II	1882	1885	2
72	Turkey	Mahdist(Egypt)	1882	1885	0
73	France	First Franco-Madagascan	1883	1885	1
74	France	Can Vuong War	1885	1896	2
75	France	First Mandingo-French War	1885	1885	2
76	Russia	Russo-Afghan	1885	1885	1
77	UKG	Third Anglo-Burmese	1885	1896	2
78	Turkey	Second Cretan	1888	1889	2
79	France	Dahomey	1889	1890	2
80	France	Second Senegalese	1890	1891	2
81	Belgium	Congo Arabs	1892	1892	2
82	France	Franco-Thai	1893	1893	2
83	Italy	Italian-Mahdist War	1893	1894	2
84	UKG	Third Ashanti	1893	1894	2
85	Australia	Northern Territory Rebellion	1894	1897	2
86	France	Franco-Madagascan	1894	1895	0
87	France	Second Mandingo-French War	1894	1895	0
88	Korea	Tonghak Rebellion	1894	1895	2
89	Netherlands	Balian	1894	1894	2
90	Italy	Italo-Ethiopian	1895	1896	0
91	Japan	Taiwan Rebellion	1895	1895	2
92	Spain	Cuban War of Independence	1895	1898	0
93	UKG	Fourth Ashanti	1895	1896	2
94	Brazil	Canudos Rebellion	1896	1897	2
95	Spain	First Philippine	1896	1898	0
96	Turkey	Third Cretan	1896	1897	0
97	Turkey	Druze-Turkish	1896	1896	1
98	UKG	Sudanese	1896	1899	2
99	UKG	Northwest Frontier Campaign	1897	1898	2
100	UKG	Nigerian (N. Nigeria)	1897	1897	1
101	UKG	Indian Muslim	1897	1898	2
102	UKG	Hut Tax	1898	1898	2
103	USA	Filipino Insurgency	1898	1902	2
104	UKG	Second Boer War/S. African War	1899	1902	2
105	UKG	Somaliland Rebellion	1899	1920	2

Table 6: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
106	Bolivia	Acre Rebellion	1902	1903	0
107	Germany	Hottentot Uprising	1903	1908	2
108	Turkey	Ilinden/VMRO rebels	1903	1903	2
109	Germany	Maji-Maji Revolt	1905	1907	2
110	UKG	Second Zulu War	1906	1906	2
111	Spain	Spanish-Moroccan	1909	1910	2
112	France	First Moroccan	1911	1912	2
113	China	Tibetan War of Independence	1912	1913	0
114	UKG	von Lettow-Vorbeck (East Africa)	1914	1918	1
115	USA	US in Haiti	1915	1934	2
116	France	Second Moroccan	1916	1917	2
117	Turkey	Arab Revolt	1916	1918	0
118	UKG	Irish Rebellion/War of Independence	1916	1923	1
119	USA	Dominican Republic Insurgency v.US	1916	1924	0
120	China	First Sino-Tibetan	1918	1918	0
121	Russia	Russia v. North Caucasus Emirate	1918	1925	2
122	UKG	Third Afghan	1919	1919	0
123	France	Franco-Syrian	1920	1920	2
124	Italy	Sanusi(Libya)	1920	1931	2
125	Russia	Green Rebellion (Tambov Oblast')	1920	1921	2
126	Turkey	Kokiri Rebellion	1920	1922	2
127	UKG	Iraqi-British	1920	1921	1
128	France	Riffian/Rif War I	1921	1926	2
129	Spain	Riffian/Rif War I	1921	1926	2
130	Russia	Soviet-Turkestani(Ibrahim Bek)	1921	1931	2
131	Turkey	Sheikh Said Rebellion	1924	1927	2
132	France	Syrian Rebellion	1925	1927	1
133	France	Riffian II	1926	1926	2
134	China	China v. Communist insurgents	1927	1937	1
135	Mexico	Cristero War (Cristiada)	1927	1929	1
136	UKG	Saya San's Rebellion(Burma)	1930	1932	2
137	Japan	Japan v. Manchurian guerrillas	1931	1940	2
138	UKG	Palestinian Uprising/Arab Revolt	1936	1939	0
139	Japan	Chinese Insurgents	1937	1945	0
140	France	Franco-Thai	1940	1941	0

Table 7: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
141	Germany	French resistance	1940	1944	0
142	Soviet Union	Chechen Insurgency (Israilov/Sheripov)	1940	1944	2
143	Germany	Soviet Insurgency	1941	1944	0
144	Germany	Germany-Yugoslavia	1941	1945	2
145	Japan	Malayan Insurgency	1941	1945	0
146	Japan	Philippine Insurgency	1941	1945	0
147	Italy	Albanian Communists/Nationalists	1942	1943	0
148	Germany	Albanian Resistance	1943	1944	0
149	Germany	Greek Resistance	1943	1944	0
150	Germany	Italian Resistance	1943	1945	0
151	Germany	Warsaw Uprising	1944	1944	2
152	France	Indochinese	1945	1954	0
153	Greece	Greek civil war	1945	1949	2
154	Netherlands	Indonesian Independence	1945	1949	0
155	UKG	Shifta Insurgency (Eritrea)	1945	1952	0
156	UKG	Zionist movement	1945	1948	0
157	China	China v. PLA	1946	1949	0
158	France	Madagascar	1946	1948	2
159	Philippines	Huk Rebellion	1946	1951	2
160	Russia	Forest Brothers (Estonia); LTS(p)A (Latvia); BDPS (Lithuania)	1946	1956	2
161	Russia	UPA in Ukraine	1946	1953	2
162	China	China v. Taiwanese Insurgents	1947	1949	0
163	France	Malagasy Revolt	1947	1948	2
164	Paraguay	Paraguay v. Febreristas	1947	1947	2
165	Burma	Kachin and Karen (KNU) insurgencies	1948	1994	1
166	Colombia	“La Violencia”	1948	1962	1
167	Costa Rica	Costa Rica v. NLA	1948	1948	0
168	Yemen	Internal opposition	1948	1948	2
169	China	Sino-Tibetan	1950	1951	2
170	UKG	Malayan Insurgency	1950	1960	2
171	Bolivia	Bolivia v. MNR	1952	1952	0
172	France	Tunisian Independence	1952	1954	0
173	UKG	Mau Mau/Emergency	1952	1956	2
174	France	Moroccan Independence	1953	1956	0
175	Indonesia	Indonesia v. Darul Islam	1953	1953	2

Table 8: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
176	France	Algerian	1954	1962	0
177	UKG	British-Cypriot	1954	1959	1
178	France	Cameroon Insurgency	1955	1960	0
179	India	Naga Rebellion	1955	1964	1
180	Belgium	Rwandan Independence	1956	1962	0
181	China	Tibetan	1956	1959	2
182	Spain	Ifni War/Forgotten War	1957	1958	1
183	Cuba	Cuba v. Movimiento 26 De Julio	1958	1959	0
184	Indonesia	Darul Islam, PRRI, Permesta	1958	1960	2
185	DRC	DRC v. Katanga	1960	1965	2
186	Laos	Laos v. Pathet Lao	1960	1973	0
187	South Vietnam	Vietcong	1960	1965	1
188	Iraq	Kurdish	1961	1966	1
189	Portugal	Angola-Portugal	1961	1975	0
190	Algeria	Algeria v. CNDR(Kabylie)	1962	1964	2
191	Oman	Dhofar Rebellion	1962	1975	2
192	Portugal	Guinea Bissau	1962	1974	0
193	Portugal	Mozambique	1962	1975	0
194	Yemen	North Yemen Civil War	1962	1969	0
195	Rwanda	Post-rev strife	1963	1966	2
196	Sudan	Sudan v. Anya Nya	1963	1972	1
197	UKG	UKG in Aden	1963	1967	0
198	Venezuela	FALN	1963	1965	2
199	DRC	Post-Independence War	1964	1964	2
200	Kenya	Kenya v. NFDLM	1964	1969	2
201	Chad	Chad v. FROLINAT	1965	1979	0
202	Colombia	Colombia v. M-19/ELN	1965	1990	1
203	South Vietnam	Vietnam War	1965	1975	0
204	Thailand	War v. Thai Communist Party (CPT)	1965	1982	2
205	USA	Vietnam War	1965	1975	0
206	India	Mizo Revolt(Assam)	1966	1986	1
207	South Africa	Namibia war of independence	1966	1989	0
208	Zimbabwe	Rhodesia War of Independence	1966	1979	2
209	Guatemala	Guatemala v. URNG	1966	1996	1
210	India	India v. Naxalite I	1967	1971	2

Table 9: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
211	Philippines	Philippines v. MNLF	1968	1987	2
212	UKG	The Troubles	1968	1998	1
213	Cambodia	Cambodia v. FUNK	1970	1975	0
214	Jordan	Jordan v. Fedeyeen/Syria	1970	1970	2
215	Pakistan	Bangladesh	1971	1971	0
216	Sri Lanka	Sri Lanka v. JVP	1971	1971	2
217	Burundi	Burundi v. Hutu Rebels	1972	1972	2
218	Zimbabwe	Zimbabwe v. ZANU, ZAPU	1972	1979	1
219	Argentina	Argentina v. ERP/Montoneros	1973	1977	2
220	Pakistan	Pakistan v. Baluchistan	1973	1977	1
221	Ethiopia	EPRP, TPLF, EPDM, OLF	1974	1991	0
222	Iraq	Kurdish Autonomy	1974	1975	2
223	Angola	Angola (MPLA) v. UNITA	1975	2002	1
224	Chad	Chadian Civil War	1975	1988	0
225	Indonesia	Indonesia v. Fretilin	1975	1999	0
226	Lebanon	Lebanon v. various militias	1975	1990	1
227	Morocco	Morocco v. Polisario	1975	1989	2
228	Bangladesh	Bangladesh-Shanti Bahini	1976	1997	1
229	Indonesia	Indonesia v. GAM (Aceh)	1976	2005	1
230	Mozambique	Mozambique v. RENAMO	1976	1992	1
231	DRC	DRC v. FLNC	1977	1978	2
232	Afghanistan	Afghanistan I	1978	1979	0
233	Cambodia	Cambodia v. FUNCINPEC, KPNLF	1978	1992	1
234	Nicaragua	Nicaragua v. FSLN	1978	1979	1
235	El Salvador	El Salvador v. FMLN	1979	1992	1
236	Iran	Iran v. Kurdish Democratic Party Iran	1979	1996	2
237	Iran	Mujaheedin e Khalq	1979	2001	1
238	Iraq	Kurdish Rebellion	1980	1988	1
239	Nigeria	Nigeria v. Maitatsine sect(Kano)	1980	1985	2
240	Peru	Peru v Sendero Luminoso	1980	1999	2
241	Russia	Afghanistan II	1980	1989	0
242	Syria	Syria v. MB	1980	1982	2
243	Nicaragua	Nicaragua v. Contras	1981	1988	1
244	Somalia	Somalia v. SSDF, SNM (Isaaqs)	1981	1991	2
245	Uganda	Uganda v. NRA	1981	1987	0

Table 10: List of Insurgencies, Continued

Case	Incumbent	War	Start	End Date	Outcome
246	Israel	Israeli-Syria(Lebanon)	1982	1982	1
247	South Africa	South Africa v. ANC, PAC, Azapo	1983	1994	0
248	Sri Lanka	Tamil Rebellion I	1983	1987	1
249	Sudan	Sudan v. SPLM	1983	2004	1
250	Turkey	Turkey v. PKK	1983	1999	1
251	India	India-Sikh Insurgency	1984	1994	1
252	Yemen	Yemen v. Faction of Socialist Party	1986	1987	2
253	Israel	First Intifada	1987	1993	1
254	Sri Lanka	Tamil II	1987	1989	1
255	Papua New	War v. BRA (Bougainville)	1988	1998	1
256	Liberia	Liberian Civil War (II)	1989	1997	1
257	Mali	Mali v. Tuaregs	1989	1995	1
258	Djibouti	Afar Insurgency	1991	1994	1
259	Iraq	Kurdish rebellion	1991	1991	1
260	Iraq	Shia rebellion	1991	1991	1
261	Sierra Leone	Sierra Leone v. RUF, AFRC	1991	1999	2
262	USA	US v. Somali rebels	1991	1993	0
263	Yugoslavia	Yugoslavia v. Croatia, Krajina	1991	1991	0
264	Afghanistan	Afghanistan v. Taliban	1992	1996	0
265	Algeria	Algeria v. MIA/FIS/AIS, GIA, GSPC	1992	2002	2
266	Azerbaijan	Nagorno-Karabakh	1992	1994	0
267	Bosnia	Bosnia v. Rep. Srpska/Croats	1992	1995	2
268	Croatia	Croatia in Krajina	1992	1995	2
269	Georgia	Abkhaz secessionist movement	1992	1994	0
270	Moldova	Moldova v. Dniestr	1992	1992	0
271	Tajikistan	Tajikistan v. UTO	1992	1997	2
272	Burundi	Burundian Civil War	1993	2005	0
273	Pakistan	MQM:Sindhis v. Mohajirs	1993	1999	1
274	CAR	Factional fighting	1994	1997	0
275	Chad	War v. MDD, FNT, CSNDP	1994	1998	1
276	DRC	DRC v. AFDL (Kabila)	1994	1997	0
277	DRC	DRC v. RCD, RCD-ML, MLC	1994	1998	1
278	Russia	Russo-Chechen I	1994	1996	1
279	Rwanda	Rwanda v. RPF	1994	1994	0
280	Rwanda	Kagame Govt (RPF) v. ALiR/FDLR	1994	2000	1
281	Serbia	Kosovo I (Serbs v. KLA)	1994	1999	0
282	Yemen	Yemen v. South Yemen	1994	1994	2
283	Congo	Congo v. Cobras, Ninjas	1997	1999	0
284	Guinea Bissau	GB v. Military Junta	1998	1999	0
285	Liberia	Liberian Civil War ₁₅ (II)	1999	2003	0
286	Ivory Coast	IC v. PMIC	2002	2005	1