"Rage Against the Machines"
Codebook and Replication Information

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1 Overview

This document provides an overview of the variables used in "Rage Against the Machines" (Lyall and Wilson 2009) and also reprints the additional statistical tests and case codings originally provided in an on-line supplemental appendix. This dataset, which we refer to as the Correlates of Insurgency, constitutes Version 1.0. We intend to release updates on a regular (i.e. annual basis) as new information becomes available or as existing wars end (and, less hopefully, as new wars begin). We therefore welcome feedback, and corresponding documentation, on omitted conflicts, confused coding, or mistakes.[1]

2 Variables

2.1 Dependent Variable: War Outcomes

OUTCOME: Coded from the incumbent's viewpoint. Following standard practice in studies of war, we operationalize OUTCOME as a three-fold variable (Win, Draw, Loss). A *win* occurs when the insurgency is militarily defeated and its organization destroyed or the war

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[1]New duration data and alternative codings for "draws" will be released once "Do Democracies Make Inferior Counterinsurgents?" *International Organization*, forthcoming, has been published.

ends without any political concessions granted to insurgent forces. Examples include Argentina's defeat of the ERP (1973-77), the second Boer War (1899-1902), and the crushing of the Huk rebellion in the Philippines (1946-51).

A *draw* occurs when an incumbent is forced to concede to some, but not all, insurgent demands, and neither side obtains its maximal aims. Typical examples of concessions include the voluntary disarmament of insurgents in exchange for greater participation in the state's political affairs (i.e. as a political party or as members of a power-sharing government) or the granting of greater regional autonomy (but not independence). The political settlement reached between Colombia's government and the M-19 insurgent group, in which M-19 voluntarily demobilized in exchange for its participation as a political party, is one example of a draw. Similarly, Djibouti's government struck a deal with its secessionist Afar rebels (FRUD) that traded FRUD's demobilization for two of its leaders becoming cabinet members, thus ending the Afar insurgency (1991-94).

We define a *loss* as a situation in which the incumbent unilaterally concedes to all, or nearly all, insurgent demands, including the granting of independence or the deposition of current leaders. Examples include the United States in Vietnam, the USSR in Afghanistan, the United Kingdom against nationalist insurgents in Aden (1963-67), and the Chinese Nationalist government against PLA insurgents (1945-49).

Note that we do not rely on military indicators of success such as incumbent/insurgent loss-exchange ratios in battle or the pace of rebel recruitment. This is due partly to the difficulties in obtaining accurate information but mostly to the fact that guerrilla warfare privileges influencing populations rather than success in direct battle. Incumbents may in fact win all, or most, direct military engagements and yet still lose the conflict if insurgents can outlast the incumbent or if the credible threat of continued (future) uprisings still lingers, forcing concessions to a "defeated" rebel organization. Militarily ineffectual rebels can nonetheless still win politically if they are able to influence the incumbent's domestic scene, as the FLN did in France, or retain broad support among the population itself. A too-narrow focus on military performance overlooks the fact that outcomes in COIN wars are shaped by political processes — particularly, the battle to win the support, if only passive, of a population — rather than success in direct battle with insurgents. Our codings therefore reflect the political, rather than military, outcome of a given war.

2.2 Independent Variables

MODERN: Captures whether an incumbent's military was organized around foraging or machine war practices. Consistent with our discussion above, we code the machine era's dawn at 1917. Post-1917 armies are coded a 1; otherwise, a 0.

RAILWAY: Denotes whether an incumbent used railways to supplement its foraging practices (i.e. to move soldiers or material within the conflict zone) during 1871-1917. A "1" denotes that railways were used; a "0" indicates that railways were not used. The first observed use of railways occurred during France's 1871 suppression of restive Kabylie in

Algeria.

MECH: Mechanization level is a scaled index that records the prewar soldier-to-mechanized vehicle ratio in the state's military. More specifically, the size of the country's military was drawn from the Correlates of War dataset and then divided by the number of mechanized vehicles in the country's arsenal.[2] Data for mechanization values were obtained from numerous sources (see the article) and specific national histories. To avoid endogeneity with war dynamics, both observations are lagged a year prior to the conflict. There are 167 observations for MECH.

These values were then collapsed into a four-fold ordinal variable with cutpoints at the 25% quartiles. A "1" value represents the lowest level of mechanization (>834 soldiers per vehicle), a "4" the highest level (11-108 soldiers per vehicle), and the "2" (288-833 per vehicle) and "3" (109-287 per vehicle) values the midway points between these extremes. This produces a scaled variable that has minimal skewness (0.08) and kurtosis (1.62) and that weights mechanization values by the size of the country's military personnel. Treating MECH as an ordinal variable is also appropriate since it reduces sensitivity to data inaccuracies that inevitably arise from state secrecy.

VEC: The estimated number of vehicles that a military possessed in the year prior to the war's outbreak. Specifically, we counted the number of main battle tanks, medium battle tanks (1917-45 only), armored personnel carriers (APCs), armored fighting vehicles (AFVs), scout cars, and self-propelled artillery in each country's arsenal. Due to data limitations, the number of trucks within a state's arsenal is not recorded.

MILPER: The estimated number of personnel in a state's military (in thousands). These data are drawn almost exclusively from the Correlates of War and are measured in the year prior to war's outbreak.

HELI: Records whether an incumbent deployed $\geq$25 helicopters during a particular war. Beginning with France's fielding of a substantial helicopter force in Algeria in the 1950s, the use of rotary-wing aircraft in combat and support roles has come to viewed as an integral element of modern warfare.

REGIME: We code each country's regime using Polity2 values from the PolityIV dataset. Polity2 is a 21-point scaled composite index of regime type that ranges from highly autocratic (-10) to highly democratic (+10). Values are lagged one year prior to the conflict (1800-2005).

TRADE: The natural log of a country's share of GDP that is derived from imports and

[2]Specifically, we counted the number of main battle tanks, medium battle tanks (1917-45 only), armored personnel carriers (APCs), armored fighting vehicles (AFVs), scout cars, and self-propelled artillery in each country's arsenal.

exports. Measures are taken in the year prior to the war.

SUPPORT: A scaled variable that measures whether insurgents received two critical types of assistance: material economic and military aid, and the ability to use a neighboring country as a sanctuary (with or without the permission of the neighboring state). We score a "2" if the insurgent group received both types of assistance; a "1" if only one type was granted; and a "0" if neither aid nor sanctuary was received by a particular state. The individual components of SUPPORT are also included in the dataset. REAR is a binary variable that denotes whether an insurgent organization possessed a sanctuary in a neighboring state. IPATRON is a binary variable that records whether the insurgency received material support from a third-party state.

POWER: A country's share of global military (army size, military spending) and economic (iron production, energy consumption, and population) power as recorded by the Correlates of War's Composite Index of National Capabilities (CINC) variable. Measures are taken in the year prior to the war.

GP: Following the Correlates of War, this binary variable records whether an incumbent was considered a Great Power in the year prior to the war. This measure acts as an alternative indicator for POWER.

ENERGY: A state's per capita energy consumption, as coded by the Correlates of War. Measures are taken one year prior to war onset.

OCCUPY: Denotes whether a state was an external occupier (a "1") or not (a "0"). A country is coded as an external occupier if its military forces crossed an internationally-recognized border in order to suppress an insurgency.

2.3 Control Variables

ELEVATION: The average of five altitude measures (in meters, logged) taken at the four corners and center of a subnational conflict area (the area in which the preponderance of fighting occurred) or the entire country if conflict was pervasive throughout. Wars that are primarily fought in or near a capital city are assigned a nominal one kilometer in distance (1800-2005).

DISTANCE: Distance in kilometers (logged) from the state's capital city to the conflict area.

LANGUAGE: Drawing on Fearon and Laitin 2003, this variable records the number of languages spoken by greater than one percent of a population within the subnational con-

flict zone or the entire country if conflict was pervasive throughout.

COLD WAR: A dummy variable that denotes the 1949-1989 era as the Cold War.

2.4 Variables Used in Robustness Checks

DECADE: A dummy variable demarcating time units in 10 year intervals. Decades were begun in 1917, so that DECADE1 is 1917-26, followed by DECADE2 (1927-36), DECADE3 (1937-46), DECADE4 (1947-56), DECADE5 (1957-66), DECADE6 (1967-76), DECADE7 (1977-86), and DECADE8 (1987-96). We do not add a DECADE9 (1997-2006) variable because our data is right-censored, ending in 2005. Note that there are only three cases between 1997 and 2005.

POST-1945: A dummy variable denoting whether the war occurred after 1945 (a "1") or before (a "0").

POST-1989: A dummy variable denoting whether the war occurred after 1989 (a "1") or before (a "0").

ABOVE: A dummy variable that denotes whether a state with more than one observation possessed a mean OUTCOME score significantly above the mean OUTCOME value for all states (1.26). Above-average incumbents include USA, Argentina, Austria-Hungary, Russia/Soviet Union, Algeria, and the Philippines. We defined "significantly" as .5 standard deviations above the mean OUTCOME.

BELOW: A dummy variable that denotes whether a state with more than one observation possessed a mean OUTCOME score significantly below the mean OUTCOME value for all states (1.26). Below-average incumbents include Bolivia, Portugal, Serbia/Yugoslavia, Liberia, Chad, Japan, Germany, South Africa, Afghanistan, Pakistan, Cambodia, and South Vietnam. We defined "significantly" as .5 standard deviations below the mean OUTCOME.

WW2: A dummy variable that denotes whether the state was Germany or Japan during World War Two (a "1") or not (a "0").

UK: A dummy variable that denotes whether the state involved in the war was the United Kingdom (a "1") or not (a "0").

REGIONS: Following Fearon and Laitin 2003, we use dummy variables to denote whether a conflict occurred in one of six different regions — Eastern Europe, Latin America, Sub-Saharan Africa, North Africa and the Middle East, Asia, and North America — to control

for the possibility that outcomes cluster in particular regions. Western Europe was coded as the reference category.

NEW STATES: Following Fearon and Laitin 2003, we also re-estimated our models with a variable (NEW STATE) denoting whether war onset occurred during the first two years of a new state's post-colonial existence.

2.5 Replication with other datasets

Our cases have been cross-referenced with four existing datasets: the Correlates of War Intra-State Dataset (Version 3.0); Fearon and Laitin 2003; the Political Instability Task Force's (PITF) Internal Wars dataset; and PRIO-Uppsala's Armed Conflict Dataset (Version 3). A "1" in the respective column denotes that the case is included in the dataset; a "0" signifies it is not. NONE signifies the case is not included in any of these existing datasets.

3 Supplemental Appendix (Reprint)

This appendix details supporting material for *Rage Against the Machines: Explaining Outcomes in Counterinsurgency Wars*. It consists of four sections: (1) a replication of the paper's puzzle with data from an alternative dataset (Fearon and Laitin 2003); (2) additional evidence that mechanization has increased in breadth and depth since World War I; (3) additional robustness checks that were briefly mentioned or omitted from the paper due to space concerns; (4) and a list of all 286 cases and their outcomes.

4 Replication

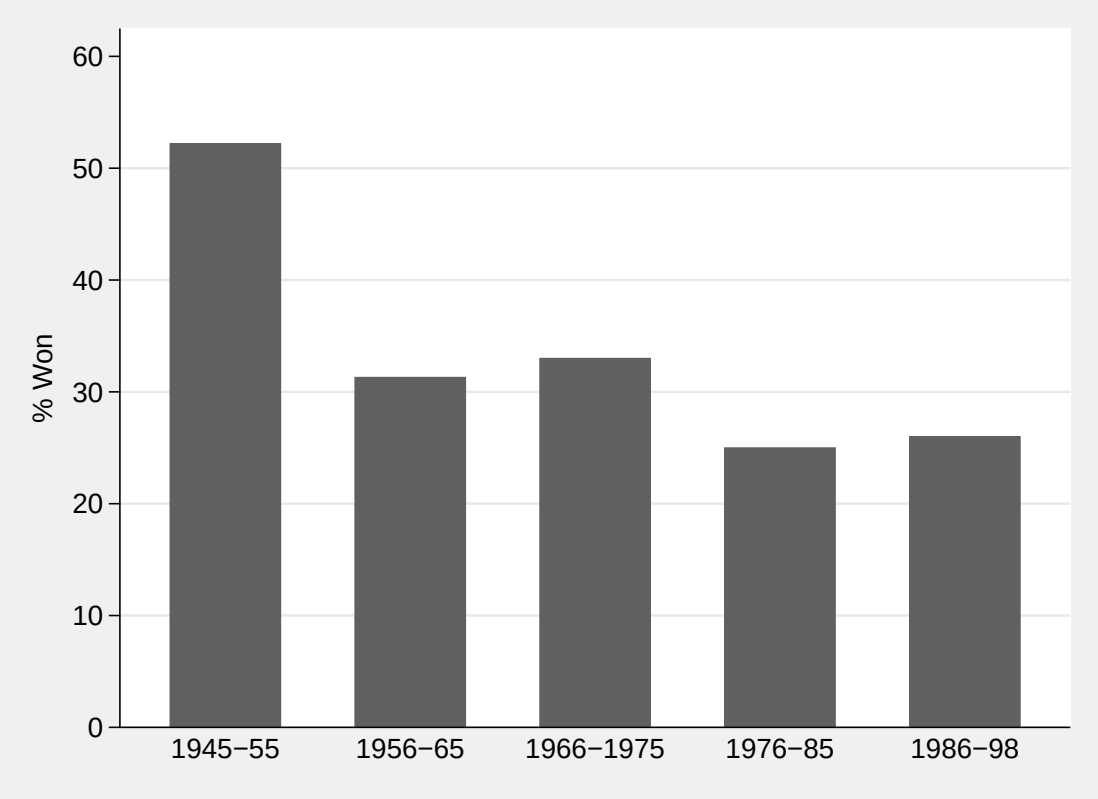
The puzzle at the heart of *Rage* is a simple one: why are incumbents losing or drawing a greater percentage of COIN wars over time? To ensure that this pattern really does exist, we used data from Fearon and Laitin (2003) to replicate our puzzle. More specifically, we included all cases from Fearon and Laitin 2003 that met our two-fold criteria of (1) 1000 battle deaths and (2) insurgent use of guerrilla warfare. In total, 97 of their 120 cases were included. Note that this is a particularly difficult test of our argument since their data only runs from 1945-2000, thereby truncating the observed variation in incumbent win rates prior to 1945. Our dataset also contains 37 more observations over this era, resulting in a loss of 28% of our dataset.

Nonetheless, the same downward trend in incumbent win rates is exhibited in the Fearon and Laitin dataset. If we divide their dataset into two equal time periods (1945-73, 1974-2000), which are roughly comparable to our own 25 year increments, we find that

incumbent win rates fall from 42.9% (21/49) in the first time period to only 25% (12/48) in the second (treating draws as losses).[3]

A more fine-grained replication is presented in Figure 1. Here, we divide the Fearon and Laitin dataset by 10 year intervals. Once again we observe a decline in incumbent win rates even at this fine-grained level. The trend, though not identical to our own, is sufficiently close that we conclude a puzzle exists.

Figure 1: The Puzzle Revisited: Replication with Fearon and Laitin (2003) Data, 1945-1998



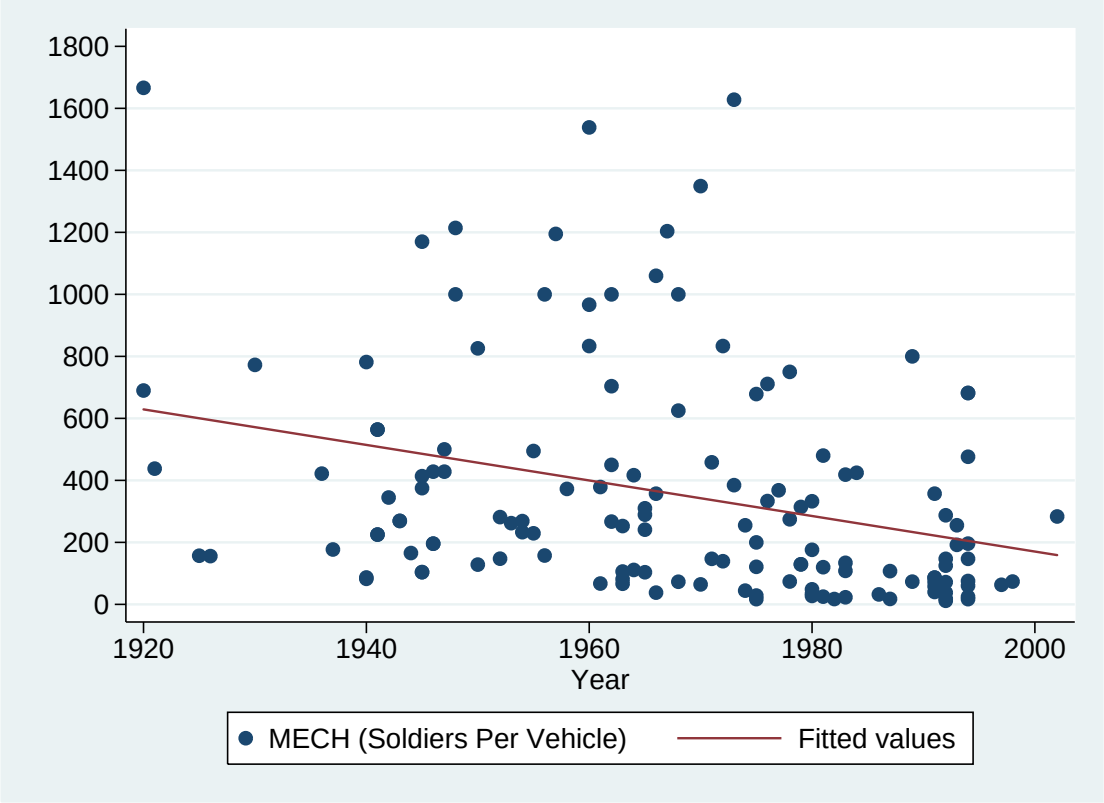
NOTE. N=97. Draws are considered losses here.

[3]Similarly, we find that PRIO-Uppsala's dataset records a drop in incumbent win rates from 61.5% in 1945-55 to 31.5% in 1985-95, treating draws as losses and using the 74% of PRIO's cases that fit our selection criteria.

5 Mechanization and Time

Our argument rests partly on the assumption that mechanization is a *process* marked by both the diffusion of the modern system (i.e. more states are becoming mechanized) and a deepening of it (so that states are becoming more mechanized) over time. Our dataset only records the mechanization levels of incumbents, and so cannot address the question of whether every state independent of war participation is following this pattern. Nonetheless, we can assess whether this process is at work among a more restricted set of states, namely, incumbents who fought COIN wars. Figure 2 plots the raw mechanization scores — soldiers per vehicle — for each combatant by year, with a regression plot providing the fitted values. Figure 2 clearly details the increasingly mechanized nature of incumbent armies over time.

Figure 2: MECH Values of Incumbents, Over Time

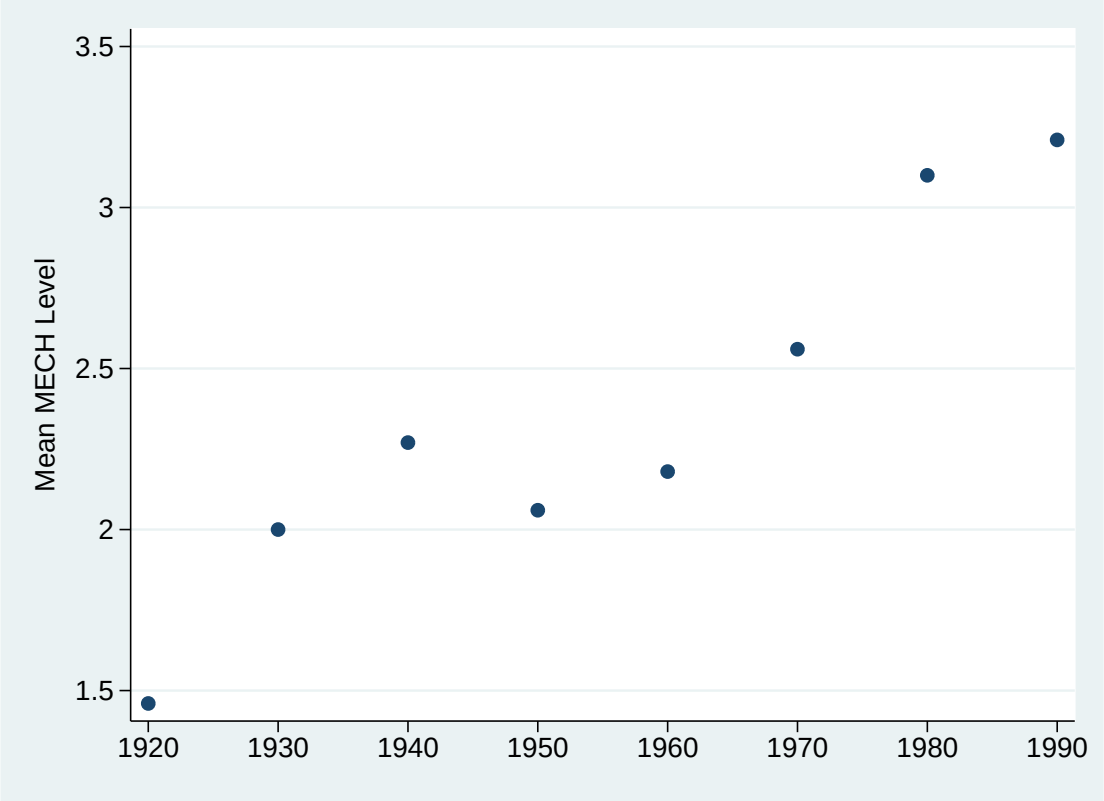


NOTE: N=167.

In addition, plotting the decade-level mean values of MECH highlights the S-curve nature of mechanization's diffusion over time (Figure 3). We observe, for example, the initial "first-movers" followed by a step backward as new entrants begin their mechanization in the post-World War Two era. Finally, we observe a joint movement toward greater

mechanization since the 1960s, a move consistent with the posited export of advanced weapons systems such as tanks to Cold War clients in Africa, Asia, and the Middle East.

Figure 3: Mean MECH Values of Incumbents, By Decade



NOTE: N=167.

6 Additional Robustness Checks

We also conducted additional robustness checks (Tables 1-3). Specifically, we re-estimated our models with (1) decade-level fixed effects (N-1) in Table 1;[4] (2) period fixed effects for the pre/post-1945 era and the post-1989 level (both as 0/1 dummy variables) in Table 2; (3) with WWII cases for Germany and Japan dropped due to concerns that these outcomes might be determined by external processes (i.e. WWII itself); and (4) with a dummy variable for the United Kingdom, which has long been touted in qualitative studies as possessing one of the most proficient COIN forces in history (Table 3). Our findings do not change in any of these models.

[4]Decades were begun in 1917, so that DECADE1 is 1917-26, followed by DECADE2 (1927-36), DECADE3 (1937-46), DECADE4 (1947-56), DECADE5 (1957-66), DECADE6 (1967-76), DECADE7 (1977-86), and DECADE8 (1987-96). We do not add a DECADE9 (1997-2006) variable because our data is right-censored, ending in 2005. Note that there are only three cases between 1997 and 2005.

7 Outcome as a Binary Variable

It might be argued, however, that a better estimation technique is to treat OUTCOME as a binary, rather than an ordered, variable. Indeed, "draws" are often dropped or treated as losses in quantitative IR studies. We therefore recoded OUTCOME as a binary variable (win/no win) and re-estimated models for each of our key explanatory variables. We repeated these regressions with an alternative operationalization of OUTCOME, defeat/no defeat. The results are presented in Table 4. Note that all of our mechanization measures retain their predicted statistical and substantive importance.

8 Cases

The following Tables detail the 286 wars that comprise our dataset. As noted in the article, 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.

9 Errata

There are several minor typos in the published results for Model 12, Table 4 (p.93). Specifically, the cutpoints were incorrectly reported, and the coefficient estimate for COLD WAR is incorrect. I reprint the corrected results below.

Table 1: Additional Robustness Checks: Time Fixed Effects, Part 1

Variables	Mech			Heli		
	Model 1 (MECH ONLY)	Model 2 (FULL MODEL)	Model 3 (MECH DROPPED)	Model 4 (HELI ONLY)	Model 5 (FULL MODEL)	Model 6 (HELI DROPPED)
MECH	-0.36***	-0.29*				
	(0.14)	(0.15)				
HELI				-0.85**	-1.30***	
				(0.34)	(0.45)	
REGIME		-0.03	-0.03		-0.04	-0.03
		(0.02)	(0.02)		(0.03)	(0.02)
SUPPORT		-0.79***	-0.80***		-0.69***	-0.83***
		(0.17)	(0.18)		(0.19)	(0.17)
POWER		0.08	0.09		0.25	0.08
		(0.14)	(0.13)		(0.17)	(0.14)
ENERGY		0.01	-0.05		-0.00	-0.04
		(0.11)	(0.11)		(0.10)	(0.10)
OCCUPY		-1.17**	-1.22***		-1.85***	-1.37***
		(0.49)	(0.48)		(0.66)	(0.43)
ELEVATION		0.11	0.08		0.13	0.08
		(0.11)	(0.11)		(0.12)	(0.10)
DISTANCE		-0.01	-0.02		-0.00	-0.02
		(0.06)	(0.06)		(0.07)	(0.06)
DECADE2	-0.47	-0.90	-0.72			
	(0.70)	(0.99)	(0.95)			
DECADE3	-1.50**	-1.13	-1.31*			
	(0.65)	(0.71)	(0.69)			
DECADE4	-0.68	-0.63	-0.70			
	(1.05)	(1.17)	(1.10)			
DECADE5	-0.68	-0.58	-0.77	0.31	0.35	-0.14
	(0.73)	(0.83)	(0.82)	(0.61)	(0.66)	(0.53)
DECADE6	-0.20	-0.38	-0.62	0.71	0.45	-0.04
	(0.73)	(0.89)	(0.89)	(0.47)	(0.66)	(0.65)
DECADE7	-0.02	-0.30	-0.60	0.78	0.46	-0.03
	(0.73)	(0.88)	(0.88)	(0.49)	(0.69)	(0.61)
DECADE8	-0.58	-0.79	-1.13	0.01	-0.14	-0.58
	(0.69)	(0.84)	(0.85)	(0.44)	(0.60)	(0.56)
Cutpoints	-2.02	-2.51	-2.19	-0.56	-1.51	-1.62
	-0.73	-1.05	-0.74	0.86	0.18	-0.20
N (Clusters)	166 (80)	166 (80)	166 (80)	135 (76)	135 (76)	167 (80)
Wald chi2	20.24***	53.46***	45.50***	11.19**	31.06***	35.16***
Loglikelihood	-173.73	-160.07	-161.66	-144.31	-128.93	-164.09
r^2	0.04	0.12	0.11	0.03	0.13	0.10

Note: Robust standard errors clustered on country in parentheses. *Significant at 10% **Significant at 5% ***Significant at 1%

Table 2: Additional Robustness Checks: Time Fixed Effects, Part 2

Variables	*Post-1945 FE*		*Post-1989 FE*	
	Model 7 (MECH) (1918-2005)	Model 8 (HELI) (1945-2005)	Model 9 (MECH) (1918-2005)	Model 10 (HELI) (1945-2005)
MECH	-0.30**		-0.27*	
	(0.14)		(0.14)	
HELI		-1.27***		-1.22***
		(0.45)		(0.44)
REGIME	-0.03	-0.05*	-0.03	-0.05**
	(0.02)	(0.03)	(0.02)	(0.02)
SUPPORT	-0.80***	-0.65***	-0.81***	-0.65***
	(0.18)	(0.20)	(0.18)	(0.19)
POWER	0.09	0.29	0.06	0.21
	(0.14)	(0.18)	(0.13)	(0.18)
ENERGY	0.01	-0.01	0.03	0.04
	(0.09)	(0.08)	(0.08)	(0.08)
OCCUPY	-1.33***	-1.84***	-1.56***	-2.07***
	(0.39)	(0.60)	(0.42)	(0.62)
ELEVATION	0.09	0.11	0.13	0.14
	(0.10)	(0.12)	(0.10)	(0.13)
DISTANCE	-0.02	-0.01	-0.01	0.00
	(0.06)	(0.07)	(0.06)	(0.07)
POST1945	-0.04	1.01		
	(0.55)	(1.52)		
POST1989			-0.70	-0.91**
			(0.42)	(0.43)
Cutpoints	-2.21	-0.86	-2.04	-1.84
	-0.78	0.82	-0.54	-0.12
N (Clusters)	167 (80)	135 (76)	165 (80)	135 (76)
Wald chi2	34.37***	27.31***	36.26***	28.75***
Loglikelihood	-162.83	-129.56	-157.90	-127.71
r^2	0.11	0.13	0.13	0.14

Note: Robust standard errors clustered on country in parentheses. *Significant at 10% **Significant at 5% ***Significant at 1%

Table 3: Additional Robustness Checks: More Country Fixed Effects

Variables	*WWII Germany/Japan Dropped*		*UK Control*	
	Model 11 (MODERN) (1800-2005)	Model 12 (MECH) (1918-2005)	Model 13 (MODERN) (1800-2005)	Model 14 (MECH) (1918-2005)
MODERN	-1.63***		-1.77***	
	(0.65)		(0.60)	
MECH		-0.28**		-0.30**
		(0.13)		(0.13)
REGIME	-0.04	-0.04*	-0.03	-0.04
	(0.02)	(0.03)	(0.02)	(0.03)
SUPPORT	-0.78***	-0.76***	-0.84***	-0.83***
	(0.16)	(0.18)	(0.16)	(0.18)
POWER	0.20**	0.16	0.17*	0.12
	(0.10)	(0.15)	(0.10)	(0.14)
ENERGY	0.04	0.02	0.04	0.03
	(0.06)	(0.10)	(0.06)	(0.10)
OCCUPY	-0.84**	-1.20***	-0.92***	-1.28***
	(0.38)	(0.40)	(0.36)	(0.37)
ELEVATION	0.01	0.11	0.02	0.11
	(0.08)	(0.11)	(0.08)	(0.10)
DISTANCE	-0.06	-0.02	-0.07	-0.02
	(0.06)	(0.07)	(0.06)	(0.06)
COLDWAR	0.49	0.46	0.56	0.51
	(0.40)	(0.45)	(0.37)	(0.41)
UK			0.03	-0.19
			(0.20)	(0.37)
Cutpoints	-3.33	-1.84	-3.34	-1.81
	-2.15	-0.31	-2.22	-0.36
N (Clusters)	274 (85)	156 (78)	285 (85)	167 (80)
Wald chi2	50.78***	28.47***	83.92***	45.19***
Loglikelihood	-230.74	-152.97	-239.55	-161.68
r^2	0.16	0.11	0.16	0.11

Note: Robust standard errors clustered on country in parentheses. *Significant at 10% **Significant at 5% ***Significant at 1%

Table 4: Yet More Robustness Checks: Outcome as a Binary Variable (Win/No Win and Defeat/No Defeat)

Variables	*Win/No Win*				*Defeat/No Defeat*			
	15 (MODERN) (1800-2005)	16 (RAILWAY) (1800-1917)	17 (MECH) (1918-2005)	18 (HELI) (1945-2005)	19 (MODERN) (1800-2005)	20 (RAILWAY) (1800-1917)	21 (MECH) (1918-2005)	22 (HELI) (1945-2005)
MODERN	-1.46***				1.36**			
	(0.57)				(0.55)			
RAILWAY		-1.29*				0.53		
		(0.75)				(0.61)		
MECH			-0.31*				0.32*	
			(0.17)				(0.19)	
HELI				-2.25***				0.94*
				(0.69)				(0.51)
REGIME	-0.03	-0.03	-0.05*	-0.07**	0.03	0.03	0.02	0.06
	(0.02)	(0.04)	(0.03)	(0.03)	(0.02)	(0.06)	(0.03)	(0.04)
SUPPORT	-0.85***	-1.27***	-0.84***	-0.59**	0.95***	1.77***	0.83***	0.54**
	(0.22)	(0.42)	(0.22)	(0.27)	(0.21)	(0.46)	(0.23)	(0.23)
POWER	0.19*	0.42**	0.11	0.34*	-0.14	-0.48**	-0.07	-0.38*
	(0.11)	(0.19)	(0.16)	(0.20)	(0.12)	(0.22)	(0.17)	(0.20)
ENERGY	-0.00	0.07	-0.05	-0.07	-0.13*	-0.12	-0.18	-0.12
	(0.06)	(0.10)	(0.11)	(0.10)	(0.07)	(0.10)	(0.11)	(0.10)
OCCUPY	-0.45	-0.50	-0.28	-1.26*	1.56***	-0.24	2.32***	3.42***
	(0.38)	(0.78)	(0.45)	(0.75)	(0.53)	(0.93)	(0.62)	(0.92)
ELEVATION	0.06	-0.14	0.20	0.33**	0.01	0.04	0.02	0.04
	(0.09)	(0.26)	(0.13)	(0.16)	(0.12)	(0.22)	(0.16)	(0.22)
DISTANCE	-0.09	-0.18	-0.05	0.01	0.05	0.77*	-0.03	-0.10
	(0.07)	(0.59)	(0.07)	(0.09)	(0.08)	(0.43)	(0.08)	(0.09)
COLDWAR	0.20		0.11	0.53	-0.88*		-0.77	-0.98*
	(0.43)		(0.44)	(0.51)	(0.48)		(0.50)	(0.51)
LANGUAGE				-0.05				0.08***
				(0.04)				(0.03)
TRADE				0.03				-0.40
				(0.23)				(0.28)
Constant	1.75**	3.76	-0.07	-1.06	-3.56***	-8.19**	-2.88**	-4.27**
N (Clusters)	285 (85)	118 (20)	167 (80)	135 (76)	285 (80)	118 (20)	167 (80)	135 (76)
Wald chi2	42.00***	36.61***	29.81***	28.35***	33.32***	127.10***	26.80***	30.83***
Loglikelihood	-155.80	-53.10	-95.86	-69.16	-132.06	-38.60	-85.78	-63.42
r^2	0.21	0.15	0.12	0.20	0.20	0.18	0.21	0.27

Note: Logit estimation with robust standard errors clustered on country in parentheses. *Significant at 10% **Significant at 5% ***Significant at 1%

Table 5: 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 6: 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 7: 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 8: 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	1
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	Druze Rebellion	1925	1927	2
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 9: 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 10: 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 11: 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	Bangledesh	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 12: 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 (II)	1999	2003	0
286	Ivory Coast	IC v. PMIC	2002	2005	1

Table 13: Model 12, Table 4

Variables	*Region FE*
	(MECH) (1918-2005)
MECH	-0.47***
	(0.17)
HELI	
REGIME	-0.01
	(0.03)
SUPPORT	-0.76***
	(0.21)
POWER	0.21
	(0.17)
ENERGY	-0.13
	(0.10)
OCCUPY	-1.89***
	(0.51)
ELEVATION	0.24
	(0.12)
DISTANCE	-0.02
	(0.06)
COLD WAR	0.70*
	(0.37)
Cutpoints	-2.33
	-0.78
N (Clusters)	167 (80)
Wald chi2	51.33***
Loglikelihood	-153.74
r^2	0.16

Note: Robust standard errors clustered on country in parentheses. *Significant at 10% **Significant at 5% ***Significant at 1%