

Supplemental Materials for
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Assuming Abduction is Not Committed by Bloc

I assume that abduction is not committed by bloc, where groups of family or friends who are abducted together—either by states or by insurgents—subsequently serve together. Instead, I argue that it is most likely that those who are abducted into fighting forces are typically in units with people they do not know, and as a result, suffer from a lack of internal cohesion. This assumption is supported by four recent studies. First, a survey of ex-combatants in Sierra Leone (used in the article) found that abducted combatants typically knew few others in their units (Humphreys and Weinstein 2004). Second, Weinstein (2005: 612) similarly argues about Renamo in Mozambique: “Coercive recruitment yielded a rebel movement that lacked any coherent social bonds. The practice of abduction meant that the rebel recruits represented the entire diversity of Mozambique’s ethnic and religious population.” Third, in her study of the socialization processes of abducted child soldiers in the LRA, Vermeij (2009: 63) states, “Most children are taken to Sudan and separated from children from their home village” to prevent children from escaping and to sever ties to their previous lives. Finally, through interviews with members of the Salvadoran Army, which used widespread press-gangng to recruit soldiers, Hoover Green found that few soldiers knew anyone in their units upon joining (personal communication).

Previous Data Collection and Case Study Research on Wartime Rape and Other Forms of Sexual Violence

The most comprehensive attempt to date has been that of sociologist Jennifer Green, who collected an original dataset, based on news media searches, of what she terms “collective rape,” defined as “a pattern of sexual violence perpetrated on civilians by agents of a state, political group and/or politicized ethnic group” (Green 2006: 47).¹ However, because the data are drawn purely from news coverage, they are affected by a variety of biases, including the inaccessibility of especially violent areas to reporters and the likely reluctance of victims to talk about their experiences to journalists while still in the midst of a conflict.²

Another project that collected data on sexual violence across cases of armed conflict includes a report by the Geneva Centre for the Democratic Control of Armed Forces (DCAF) (Bastick et al. 2007). The study, which covers conflicts between 1987-2007, uses the PRIO definition of armed conflict to define the universe of cases, and

¹ Green’s data collection yielded 1,387 news sources on 37 episodes of collective rape in 37 countries between 1980-2003.

² Additionally, the data are collected by country-year, but are not disaggregated by conflict.

includes additional cases that did not meet the formal definition of war but had “significant evidence of conflict-related violence” (2007: 23). The authors report consulting an array of “available sources” for each case, including news media reports, academic research, and documents from Truth and Reconciliation Commissions. The report represents a valiant effort; however, the data are not systematically collected for variables of interest, such as whether the war involved ethnic cleavages, nor is there a way to compare relevant variables across cases. I use the data as a check on the dataset I have created, and I find that there is close agreement.³

Others have collected data on instances of mass rape for shorter periods of time. One example is a study by the United Nations on violence against women during conflict in the period from 1997-2000. All 12 of the cases included in the UN study are captured in my data. An article by sociologist Kathryn Farr examined 27 countries with ongoing or recently ended civil conflicts, as of 2007 (Farr 2009). Farr found that there was evidence of “extreme war rape” in all 27 countries, all but one of which are included in my data.⁴ See Table S2 below for a summary of these previous studies.

Finally, political scientists have studied specific cases of what are believed to be mass rape. Such cases include Bangladesh, Peru, Bosnia Herzegovina and the former Yugoslavia, Iraq, Rwanda and Darfur (Sharlach 2000; Leiby 2009; Bloom 1999; Sharlach 1999; Bloom 2007.) Elisabeth Wood, in particular, has several articles on sexual violence in wartime. One of the central themes in Wood’s work is to emphasize the importance of examining “negative” cases, or conflicts that did not experience mass sexual violence, in conjunction with high-rape cases. In her work, Wood (2009) cites several instances of both mass wartime rape (WWII, Bosnia Herzegovina, Sierra Leone and Rwanda) and of little or no rape (Israel, El Salvador, Sri Lanka). However, Wood does not provide an exhaustive set of such cases.

³ There are two cases that are in my dataset that I code as having experienced no wartime rape (based on the State Department reports), but that are included in the DCAF report: Azerbaijan and South Africa. South Africa deserves a brief note as it is frequently cited for having especially high rates of peacetime rape. Sharlach (2009) writes that rape in South Africa was committed by both insurgents and state actors, but the incidence of rape was largely unknown until the TRC hearings in 1996-1998. Because the Fearon civil war data code the South African conflict as ending in 1994, this is the last year I coded. During the war years in South Africa, there were no reports of wartime rape.

⁴ There is only one case, Cambodia, which Farr coded as having experienced “extreme war rape” that is coded as having little wartime rape in the State Department data. This discrepancy may be because my coding begins in 1980, which does not account for the first two years of the Cambodian conflict.

Using State Department Reports as a Data Source

To increase confidence in the quality of the State Department-based dataset, I have compared my coding from the State Department reports to the coding of the Sexual Violence in Armed Conflict-Africa (SVAC-Africa) dataset, a preliminary version of the African subset of a new data project co-directed by Cohen and researchers at PRIO (www.sexualviolence.data.org). The SVAC data use a broader definition of sexual violence, including a range of violations beyond rape, and a broader set of sources, including the State Department reports, as well as reports from Amnesty International (AI) and Human Rights Watch (HRW). There is not perfect overlap in either conflicts or dates; my data is based on the Fearon (2011) coding (large-scale wars), while the SVAC project is based on PRIO's coding rules (interstate and intrastate wars; both minor and major conflicts). Furthermore, my study period is 1980-2009, while the SVAC study includes 1989-2009. Nonetheless, there is close agreement across the datasets when comparing the highest reported levels of sexual violence/rape in the set of cases that overlap. Of the 18 conflicts that appear in both datasets, the following cases had identical codes for the highest levels of reported sexual violence/rape: DRC, Burundi, Sudan, Uganda, Angola (two conflicts), Mozambique, Rwanda, Senegal, Sierra Leone, Ethiopia.

Of the cases where coding differed, it is important to note that only one case of disagreement resulted from the sources used: for the conflict that began in 1989 in Chad, my dataset coded the highest reported rape by state perpetrators as 1, based on State Department reports; the SVAC project coded Chad as 2, based on descriptions in HRW and AI that reports of sexual violence were “numerous.”

The other sources of disagreement all resulted from differences in either the unit of analysis or differences in the coding rules. For example, in the State Department reports, a description of massive rape in Rwanda states that it was committed by “both combatant forces,” meaning that both state and rebel actors were assigned a code in my data. However, because these groups were not named, the SVAC project—which uses the armed group-conflict-year as the unit of analysis—did not use this information for a coding decision. Coding rules also differ slightly between the two projects. For example, the SVAC project includes coding the specific numbers of victims if they are mentioned (e.g. “thousands” is coded as 3) whereas my data uses only qualitative descriptors, not numerical ones.

Even given these differences, there was perfect agreement for the highest level of sexual violence/rape for state actors in 67% of the conflicts, and for rebel actors in 72% of the conflicts. In cases of disagreement, the codes all differed by only one level—there were no cases in which the highest codes differed by two levels or greater.

In sum, these results suggest that the State Department is a comprehensive source for coding data on wartime rape, and, most importantly, does not differ dramatically in its reporting on wartime rape from the other major human rights advocacy organizations. While it is true that the U.S. government had explicit policies supporting a particular side in many conflicts in the study period, there is evidence that the State Department human rights reports still include violations committed by both sides in these conflicts (the case of El Salvador is discussed in the article; a more systematic analysis of alliances with the U.S. and degree violations reported in the reports is beyond the scope of the paper).

Correlation Between Gang Rape and Level of Rape in the U.S. State Department Reports

I did not code gang rape specifically because the State Department reports often are not specific about the forms of rape. However, reports of gang rape are correlated with the intensity of wartime rape. Gang rape was specifically reported in 9 of the 18 wars that had experienced at least one conflict-year coded as 3, and there were incidents of conflict-related gang rape reported in 4 of the 35 wars that were coded 2 as the highest level. There were no other reports of conflict-related gang rape. In addition, available detailed survey data on conflict-related sexual violence in the DRC, Sierra Leone, and Liberia indicate that gang rape was quite frequent in each conflict, in some cases constituting the vast majority of reported rape. All three of these cases are coded 3 in my data.

Measuring State Weakness

GDP/capita is commonly used to proxy for state capacity in cross-national analyses, including Fearon and Laitin (2003), as well as in more recent work, such as Besley and Persson (2011), who demonstrate that state capacity is highly correlated with per capita income. However, because using GDP/capita as a proxy for state capacity may be controversial, drawing from recent literature on this issue, I used two alternative measures of state weakness in addition to the change in GDP/capita from the beginning of the war. First, I used a measure of state

collapse from the Political Instability Task Force (PITF) dataset, *Magfail*, which measures the magnitude of state failure on a 1-4 scale by conflict-year (discussed in more detail in the next section). Following others (e.g. Williams and Masters 2011), I added a zero to the scale to indicate no state failure in that conflict-year.

Second, I used the quality of government variable from De Soysa and Fjelde (2010), who constructed an index variable using the mean values of the individual variables measuring bureaucratic quality, law and order, and corruption from the International Country Risk Guide (ICRG) dataset. In the authors' analysis of civil war onset, the quality of government variable was negatively and significantly associated with the outbreak of internal conflict. Additionally, in a comprehensive analysis of various proxy measures for state capacity, Hendrix (2010: 283) concludes the ICRG bureaucratic quality variable is an "excellent measure of bureaucratic/administrative capacity and supersedes (log) GDP per capita because it is difficult to imagine a theoretical link between bureaucratic quality and civil conflict that does not operate through the state capacity causal channel."

I have estimated the main models using each of these three proxies for state collapse. The results are similar with each of the proxy measures, and the central independent variables (insurgent abduction and state press-ganging) remain significant in each. Because of data availability, I use *Magfail* as the main measure of state collapse in the article. The tables of regression results for the other two proxies are displayed in Tables S9 and S10 (below). As these tables show, Change in GDP/capita is consistently negative and statistically significant, while Quality of Government is negative for state-perpetrated violence and positive for rebel-perpetrated violence, albeit not statistically significant.

Coding Notes on Variables from Existing Sources

State breakdown

The absence of state authority is measured with the *Magfail* variable from the (PITF) dataset. The variable is coded as a four-point scale reflecting the magnitude of the failure of state authority in country-years between 1955-2010. A value of 1 indicates that there has been an "adverse regime change" with no significant failure of the state (1% of conflict-years), 2 indicates a failure in limited parts of a country (2%), 3 indicates failure in substantial parts of the country (3%), and 4 indicates total state collapse (7%). Following others (Williams and Masters 2011), I

added a value of 0 to the scale to indicate no adverse changes in governance and no failure of state authority. As noted above, I also considered two alternative measures of state weakness: first, an index variable reflecting the quality of government (De Soysa and Fjelde 2010), and second, the change in GDP/capita between the current conflict-year and the onset year. Neither proxy changes the main results.

Insurgent material resources

For contraband funding, I use the conflict-level, dichotomous *Drugs* variable from Fearon (2011). A value of 1 indicates “significant contraband financing of rebels” and 0 indicates none. Insurgents were funded by contraband in nineteen (22%) of the conflicts in the period. To measure diaspora funding, the dummy variable *Diaspora* indicates whether the UCDP External Support dataset (2011) reports that an insurgent group received diaspora support in a conflict-year, which was the case in 8% of conflict-years.

Ethnic war

To measure ethnic war, I used Fearon’s (2011) *Ethwar*, a three-level variable in which a value of 0 indicates the war was not ethnic (17% of conflicts), 2 indicates that the war was ethnic (60%), and 1 indicates the war was ambiguous or mixed (23%).

Genocide

Genocide is a dummy variable based on the PITF’s 2006 update of Harff’s (2003) data on genocide and politicide. I coded the variable based on the brief narratives of each event, available at <http://www.systemicpeace.org/inscr/PITF%20Consolidated%20Case%20List2010.pdf>. The PITF identified 40 instances of genocide and politicide between 1955 and 2006. Many began and ended before 1980, the first year in my dataset, or did not occur during conflicts captured by the Fearon (2011) universe of civil wars. Of the 40 cases, 17 coincide with civil conflicts in the period. All conflict-years that were coded by the PITF as years with genocide/politicide take the value of 1, all other conflict-years are coded as 0. A total of 127 conflict-years (13%) experienced genocide/politicide (127 years with state perpetrators, of which 21 years also had non-state perpetrators)

War aims

To measure war goals, I use the variable *Aim* from Fearon (2011). A value of 1 indicates that the rebels aimed at the center, 3 indicates that rebels aimed at exit or autonomy (i.e., wars were secessionist in nature), and 2

indicates that the aim was mixed or ambiguous. In the period, 42 wars (49%) were coded as 1, 32 (37%) as 3, and 12 wars (14%) as 2.

Ethnic cleansing

Because there are no existing cross-national data on ethnic cleansing, I created an approximation, *Ethnic Cleansing*, by combining *Ethnic war* and *Aim*, from Fearon (2011). This dummy variable takes on a value of 1 when the conflict was ethnic in nature (*ethwar*=2) and rebel groups aimed at regional autonomy (*aim*=3); all other conflict-years are coded 0. (Although both variables have a mixed/ambiguous category, I use the most conservative coding (a clearly secessionist aim and a clearly ethnic war) to create the ethnic cleansing variable.) A total of 30 conflicts, or about 35%, are coded as *both* ethnic and secessionist, capturing cases of possible ethnic cleansing.

Gender inequality

I use *Fertility* as the primary measure of gender inequality (Caprioli et al. 2009). Caprioli et al. argue that the fertility rate reflects not only cultural factors, such as personal choice and the need for children, but also discrimination against women and structural gender inequalities like lower levels of education, employment, and political power. Fertility rates are available annually from the World Bank. The fertility variable was missing in a few conflict years; I used the Croatian fertility rate for the 1991 Yugoslavian conflict-year and interpolated values using the Serbian fertility rates for the 1998-1999 Yugoslavian conflict-years.

There are three separate measures of gender rights—*Political Rights*, *Social Rights*, and *Economic Rights*—are available in the CIRI Human Rights Dataset (Cingranelli and Richards 2008), based on information coded from the State Department Human Rights Country reports. Each of these variables ranges from 0 to 3, where a 0 indicates that these rights are not encoded in laws and 3 signifies that all or nearly rights were guaranteed by law and that the government fully enforced them. The CIRI data begin in 1981 and are missing for periods of interruption or interregnum; these observations are dropped from analyses.

Finally, I use an alternate proxy measure of gender equality in the robustness checks, *Female Labor Force Participation*, available from the World Bank. This variable measures the proportion of the female population ages 15 and older that is economically active.

Deaths

Because there are no existing cross-national data of lethal violence against civilians only, I use multiple measures of wartime deaths. The measure in the main analysis is *Kill* from the CIRI data, a three-level variable reflecting extrajudicial killings by government officials and by private groups if instigated by the state. A score of 0 indicates that extrajudicial killings were practiced frequently, 1 that extrajudicial killings were practiced occasionally, and 2 that such killings did not occur in a given year. For ease of interpretation, I reversed the coding so that a 2 indicates killing occurred with frequency and a 0 that it did not occur. Second, I use battle deaths (including both soldiers and civilians) as a proxy because of the high correlation with civilian deaths (Weinstein 2007: 306). Battle deaths estimates vary by conflict-year (Lacina and Gleditsch 2005); I used the “best” estimate when it was available, and the low estimate otherwise. There were no death estimates of any type for 187 conflict-years, almost 20% of the dataset; the battle deaths data are based on the UCDP/PRIO Armed Conflict dataset, which has different coding rules than the Fearon data, resulting in the large number of missing data points. To avoid losing so many observations, I include battle deaths in robustness checks but not in the main regressions. Note that because *Kill*, *Battle Deaths*, and *Genocide* all capture lethal violence, they are not included in the same models.

Other controls

I calculated the *Duration* of the war as of 2009. Duration is a constant for each conflict. I also created an incremental duration variable that varies by each conflict-year as a robustness check (not shown); the main results do not change with the incremental duration variable. Controls for *Population* come from Penn World Tables 7 and *Democracy* from Polity2. Finally, I control for *Year*, the conflict-year, in all regressions.

See Table S11 (below) for the summary statistics of all variables.

Table S1. Summary of Coding Rules: Levels of Wartime Rape⁵

Level of Rape	Coding Rules
3	Rape likely related to the civil conflict, and: <ul style="list-style-type: none"> • Was described as “systematic,” or “massive.” • Was used as a “means of intimidation,” an “instrument of control and punishment,” a “weapon,” a “tactic to terrorize the populace,” a “terror tactic,” a “tool of war,” on a “massive scale.”
2	Rape likely related to the civil conflict, but did not meet the requirements for a 3 coding, and: <ul style="list-style-type: none"> • Was described as “widespread,” “common,” “commonplace,” “extensive,” “frequent,” “often,” “innumerable,” “persistent,” “recurring,” a “pattern,” a “common pattern,” or a “spree.” • Occurred “commonly,” “frequently,” in “large numbers,” “periodically,” “regularly,” “routinely,” “widely,” or on a “number of occasions.” • There were “many” or “numerous” instances.
1	Rape likely related to the civil conflict, but did not meet the requirements for a 2 or 3 coding, and: <ul style="list-style-type: none"> • There were “isolated reports,” “some reports,” “reports,” or “there continued to be reports.”
0	No mention of rape or other sexual violence related to the civil conflict

⁵ The coding scheme is based on qualitative descriptions of violence in the State Department reports. Therefore, I have deferred to the common/colloquial use of terms. However, I recognize that, for example, “systematic” and “massive” (both descriptions which result in a code of 3) have distinct meanings. “Systematic” simply implies that the phenomenon is non-random, and in theory, wartime rape could be both infrequent and systematic. However, the terms “systematic,” “massive,” and “tool of war” are often used interchangeably in the advocacy and practitioner literatures to indicate extremely widespread wartime rape.

Table S2. Previous Data Collection Efforts: Rape During Recent Conflicts

“Collective Rape” (1980-2003)	Sexual Violence in Armed Conflict (1987-2007)	Violence Against Women in Conflict (1997-2000)	“Extreme War Rape” in Recent Civil Wars
Green (2006)	Bastick et al. (2007)	UN Report (2001) ⁶	Farr (2009)
Afghanistan	Afghanistan	Afghanistan	Afghanistan
Algeria	Algeria	Burundi	Algeria
Angola	Angola	Colombia	Angola
Argentina	Azerbaijan	Dem. Rep. Congo	Bosnia Herz.
Azerbaijan	Bosnia Herzegovina	East Timor	Burundi
Bangladesh	Burma/Myanmar	Federal Republic of	Cambodia
Bosnia Herz.	Burundi	Yugoslavia (Kosovo)	Chad
Burundi	Cambodia	India	Chechnya
Chile	Central African Republic	Indonesia/West Timor	Colombia
Congo	Chad	Myanmar/Burma	Congo
Dem. Rep. Congo	Colombia	Russian Federation	Cote d'Ivoire
El Salvador	Cote d'Ivoire	(Chechnya)	East Timor
Guatemala	Croatia	Sierra Leone	Guatemala
Haiti	Dem. Rep. Congo	Sri Lanka	Haiti
India	East Timor		Iraq
Indonesia	El Salvador		Kosovo
Kenya	Eritrea		Liberia
Kuwait	Ethiopia		Myanmar/Burma
Liberia	Georgia		Nepal
Mozambique	Guatemala		Peru
Myanmar/Burma	Guinea-Bissau		Rwanda
Nicaragua	Haiti		Sierra Leone
Nigeria	India		Somalia
Peru	Indonesia		Sri Lanka
Philippines	Iraq		Sudan
Russian Federation	Israel/Palestinian Territories		Tajikistan
Rwanda	Kuwait		Uganda
Serbia	Lebanon		
Sierra Leone	Liberia		
Solomon Islands	Mozambique		
Somalia	Nepal		
Sri Lanka	Nicaragua		
Sudan	Papua New Guinea		
Turkey	Peru		
Uganda	Philippines		
Uruguay	Republic of Congo		
Zimbabwe	Russia		
	Rwanda		
	Serbia (Kosovo)		
	Sierra Leone		
	Solomon Islands		
	Somalia		
	South Africa		
	Sri Lanka		
	Sudan		
	Tajikistan		
	Turkey		
	Uganda		
	United States		
	Yemen		
	Zimbabwe		

⁶ These countries are based on the case studies provided in the report, which the authors note are neither exhaustive nor representative. Each case study specifically mentions rape being perpetrated against noncombatants. The cases are based on data drawn from a variety of sources, including testimony, governmental and non-governmental agencies and human rights organizations. The original list also included Japan, which reflected developments with regard to justice on the comfort women issue.

Table S3. Highest Coded Level of Rape and Reported Perpetrators, 1980-2009

Country (Case name) (Fearon 2011)	War Years	Highest Level	State Perpetrators	Insurgent Perpetrators
AFGHANISTAN (Mujahedeen)	1979-92	2	x	x
AFGHANISTAN (v. Taliban)	1992-2001	2	x	x
AFGHANISTAN (v. Taliban II)	2003-	2	x	x
ALGERIA (FIS,GIA, GSPC)	1992-	2	x	x
ANGOLA (FLEC (Cabinda))	1992-2004	2	x	x
ANGOLA (UNITA)	1975-2002	2	x	x
AZERBAIJAN (Nagorno-Karabagh)	1992-94	0		
BANGLADESH (Chittagong Hills)	1976-97	2	x	
BOSNIA HERZ. (Rep. Srpska/Croats)	1992-95	3	x	x
BURMA (CPB, Karens, etc.)	1948-	2	x	x
BURUNDI (Hutu groups v. govt)	1993-2006	3	x	x
BURUNDI (Org. massacres, both sides)	1988-88	0		
CAMBODIA (Khmer Rouge, FUNCINPEC, etc)	1978-98	1	x	x
CHAD (FROLINAT, various ...)	1965-	1	x	x
CHAD (FARF, other rebels in South)	1992-98	2	x	
CHINA (Xinjiang)	1990-98	0		
COLOMBIA (FARC, ELN, etc)	1963-	2	x	x
CONGO/BRAZZAVILLE (Factional fighting)	1997-99	2	x	x
CROATIA (Krajina)	1992-95	1		x
DEM. REP. CONGO/ZAIRE (AFDL (Kabila))	1996-97	2	x	x
DEM. REP. CONGO/ZAIRE (RCD, etc v. govt)	1998-	3	x	x
DJIBOUTI (FRUD)	1991-94	2	x	x
EL SALVADOR (FMLN)	1979-92	1	x	
ETHIOPIA (Eritrea, Tigray, etc.)	1962-92	1	x	x
ETHIOPIA (Oromo Lib. Front)	1992-	2	x	
GEORGIA (Abkhazia)	1992-94	3		x
GUATEMALA (URNG, various)	1968-96	1	x	
GUINEA BISSAU (Mil. Faction)	1998-99	1	x	
HAITI (Mil. Coup)	1991-95	2	x	x
INDIA (Kashmir)	1989-	3	x	x
INDIA (N.East rebels)	1956-	3	x	x
INDIA (Naxalites)	1988-	2	x	x
INDIA (Sikhs)	1982-93	2	x	
INDONESIA (E. Timor)	1975-99	3	x	x
INDONESIA (GAM I (Aceh))	1989-91	2	x	
INDONESIA (GAM II (Aceh))	1999-2005	2	x	x
INDONESIA (OPM (West Papua))	1965-85	0		
IRAN (KDPI (Kurds))	1979-93	1	x	
IRAN (PJAK)	2004-	2	x	
IRAQ (KDP, PUK (Kurds))	1974-93	3	x	
IRAQ (Shia uprising)	1991-91	0		
IRAQ (Sunni and Shia rebels)	2004-	2	x	x
ISRAEL (Palestinian insurgents)	1949-	1	x	
IVORY COAST (anti-Gbagbo)	2002-07	2	x	x
LEBANON (various militias)	1975-90	1		x
LIBERIA (NPFL (Taylor), INPFL (Johnson))	1989-96	3		x
LIBERIA (LURD)	2000-03	2	x	x
MALI (Tuaregs)	1989-94	0		
MOROCCO (Polisario)	1975-88	0		
MOZAMBIQUE (RENAMO)	1976-92	2		x
NEPAL (CPN-M/UPF (Maoists))	1997-2006	2	x	x
NICARAGUA (Contras)	1981-88	1	x	x
PAKISTAN (MQM:Sindhis v. Mohajirs)	1993-99	2	x	x
PAKISTAN (Baluchistan)	2004-	1	x	
PAKISTAN (Taliban)	2007-	1	x	
PAPUA N.G. (BRA (Bougainville))	1988-98	2	x	x

Country (Case name) (Fearon 2011)	War Years	Highest Level	State Perpetrators	Insurgent Perpetrators
PERU (Sendero Luminoso)	1981-95	2	x	x
PHILIPPINES (MNLF, MILF)	1970-	1	x	x
PHILIPPINES (NPA)	1969-	1	x	x
RUSSIA (Chechnya)	1994-96	2	x	
RUSSIA (Chechnya II)	1999-	2	x	
RWANDA (RPF, genocide)	1990-2002	3	x	x
SENEGAL (MFDC (Casamance))	1989-	2	x	x
SIERRA LEONE (RUF, AFRC, etc.)	1991-2000	3	x	x
SOMALIA (post-Barre war)	1991-	3	x	x
SOMALIA (SSDF, SNM (Isaaqs))	1981-91	3	x	
SOUTH AFRICA (ANC, PAC, Azapo)	1983-94	0		
SRI LANKA (JVP II)	1987-89	0		
SRI LANKA (LTTE, etc.)	1983-2009	2	x	x
SUDAN (SPLA, etc.)	1983-2005	3	x	x
SUDAN (Darfur (SLA, JEM, etc.))	2003-	3	x	x
SYRIA (Muslim Brothers)	1979-1982	1	x	
TAJKISTAN (UTO)	1992-97	3	x	x
THAILAND (Hill Tribes, CPT)	1966-81	0		
THAILAND (Pattani)	2004-	1	x	
TURKEY (Militia-ized party politics)	1977-80	0		
TURKEY (PKK)	1984-	2	x	
UGANDA (LRA, West Nile, etc.)	1989-	3	x	x
UGANDA (NRA, etc.)	1981-88	2	x	x
UK (IRA)	1969-98	0		
YEMEN (South Yemen)	1994-94	0		
YEMEN (al-Houthi rebels)	2004-	1	x	x
YEMEN PEOP. REP. (Faction of Socialist Party)	1986-87	0		
YUGOSLAVIA (Croatia/Krajina)	1991-91	0		
YUGOSLAVIA (UCK)	1998-99	3	x	
ZIMBABWE (Ndebele guerillas)	1983-87	2	x	

Table S4. Reports of Abduction and Forced Recruitment by Insurgent Groups⁷

Were there ever reports of <u>abduction</u> by any insurgent group?	Were there ever reports of <u>forced recruitment</u> by any insurgent group?
Yes in 19 conflicts (22%)	Yes in 39 conflicts (45%)
Afghanistan (Mujahideen; Taliban; Taliban II); Algeria (FIS); Burma; Burundi (Hutu groups); Cambodia; Colombia; DRC (RCD); El Salvador; Liberia (NPFL; LURD); Mozambique; Nepal; Pakistan (Taliban); Sierra Leone; Sudan (SPLA); Turkey (PKK); Uganda (LRA)	Afghanistan (Mujahideen; Taliban; Taliban II); Algeria (FIS); Algeria; Angola (UNITA); Bosnia Herzegovina; Burma; Burundi (Hutu groups); Cambodia; Chad (FROLINAT); Colombia; Croatia; DRC (RCD); El Salvador; Ethiopia (Eritrea); Guatemala; Israel; Ivory Coast; Lebanon; Liberia (NPFL; LURD); Morocco; Mozambique; Nepal; Nicaragua; Pakistan (Taliban); Peru; Philippines (MNLF; NPA); Sierra Leone; Somalia (post-Barre); Sri Lanka (JVP II; LTTE); Sudan (SPLA; Darfur); Tajikistan; Thailand (Pattani); Turkey (PKK); Uganda (LRA)

⁷ Brief case names are in parentheses for countries with more than one conflict in the study period.

Table S5. Insurgent Abduction and Rape by Insurgents

		Insurgent Abduction		
		No	Yes	Total
Rape by Insurgents	No	51% (34)	16% (3)	43% (37)
	Yes	49% (33)	84% (16)	57% (49)
	Total	78% (67)	22% (19)	100% (86)

The cross tabulation shows that insurgencies that abduct their fighters appear to be more likely to commit rape than those that do not (84% vs. 49%). The differences are statistically significant (chi-square with one degree of freedom = 7.38, p=0.01).

Table S6. Reports of Press-Ganging and Conscription by State Forces

Were there ever reports of <u>press-ganging</u> by the state?	Did the state ever recruit through <u>conscription</u> ? (78 conflicts through 2001)
Yes in 27 conflicts (31%)	Yes in 50 conflicts (64%) (50/78)
Afghanistan (Mujahedeen); Angola (FLEC; UNITA); Burma; Cambodia; Chad (FROLINAT; FARF); DRC (RCD); El Salvador; Ethiopia (Eritrea); Guatemala; Iraq (KDP; Shia uprising); Ivory Coast; Liberia (NPFL; LURD); Nicaragua; Peru; Russia (Chechnya II); Rwanda; Somalia (SSDF); Sri Lanka (LTTE); Sudan (SPLA; Darfur); Tajikistan; Yugoslavia (Croatia/Krajina; UCK)	Afghanistan (Mujahedeen; Taliban); Algeria; Angola (FLEC; UNITA); Azerbaijan; Bosnia Herzegovina; Burma; Burundi (Hutu groups); Cambodia; Chad (FROLINAT); China; Colombia; Croatia; Djibouti; El Salvador; Ethiopia (Eritrea); Georgia; Guatemala; Guinea Bissau; Indonesia (East Timor; GAM I; GAM II; OPM); Iran (KDPI); Iraq (KDP; Shia uprising); Israel; Mali; Morocco; Mozambique; Nicaragua; Peru; Russia (Chechnya; Chechnya II); Rwanda; Somalia (post-Barre war; SSDF); South Africa; Sudan (SPLA); Syria; Tajikistan; Thailand (Hill Tribes); Turkey (Militia-ized party politics; PKK); Uganda (LRA); Yemen (South Yemen); Yemen People's Republic (Faction of Socialist Party); Yugoslavia (Croatia/Krajina; UCK)

Table S7. State Press-Ganging vs. Rape by States

		State Press-Ganging		
		No	Yes	Total
Rape by States	No	29% (17)	11% (3)	23% (20)
	Yes	71% (42)	89% (24)	77% (66)
	Total	69% (59)	31% (27)	100% (86)

The cross tabulation shows that states that press-gang their fighters appear to be more likely to commit rape than those that do not, although the difference is smaller than the equivalent comparison for insurgencies (89% vs. 71%). The differences are statistically significant (chi-square with one degree of freedom = 3.25, p=0.07).

Table S8. Conflict Level Analysis (n=86 conflicts)

	(1) Rape by Insurgents	(2) Rape by Insurgents	(3) Rape by State Actors	(4) Rape by State Actors
Ethnic war	0.15 [0.202]	0.16 [0.215]	0.07 [0.181]	-0.06 [0.185]
Magnitude of state failure ^A	0.18+ [0.088]	0.15 [0.084]	0.05 [0.092]	0.11 [0.097]
Conflict aim	-0.19 [0.211]	-0.19 [0.227]	0.08 [0.152]	0.13 [0.181]
Fertility rate ^B	-0.03 [0.093]	0.01 [0.103]	0.07 [0.087]	0.09 [0.094]
<i>Insurgents</i>				
Genocide (by insurgents)	0.58 [0.676]	0.37 [0.851]		
Contraband	0.69* [0.319]	0.79* [0.331]		
Abduction	0.62* [0.301]			
Forced recruitment		0.68+ [0.361]		
<i>State Actors</i>				
Genocide (by governments)			0.57 [0.329]	0.67+ [0.320]
Press-ganging			0.67* [0.270]	
Conscription				-0.13 [0.276]
<i>Controls</i>				
Duration	0.01 [0.008]	0.00 [0.010]	0.02+ [0.009]	0.02* [0.009]
Population ^C	0.00 [0.000]	0.00 [0.000]	0.00 [0.000]	0.00 [0.000]
Cut 1	0.11 [0.675]	0.43 [0.815]	0.47 [0.624]	0.52 [0.706]
Cut 2	0.79 [0.659]	1.11 [0.807]	1.14+ [0.629]	1.14 [0.715]
Cut 3	1.69* [0.692]	2.01* [0.834]	2.54** [0.642]	2.44** [0.732]
Observations	83	83	84	76
Pseudo R-squared	0.12	0.13	0.08	0.07

A. Highest value of MAGFAIL recorded during conflict

B. Mean value of fertility rate variable across all conflict-years for each civil war

C. Mean value of population variable across all conflict-years for each country

Note: Robust standard errors, clustered by conflict, in brackets; ** p<0.01, * p<0.05, + p<0.1

Table S9. Robustness Check with Quality of Government as Alternative Measure of State Weakness

	(1) Conflict- Level Rape	(2) Rape by Insurgents	(3) Rape by Insurgents	(4) Rape by State Actors	(5) Rape by State Actors
Ethnic war	-0.07 [0.166]	0.04 [0.169]	0.02 [0.182]	-0.04 [0.156]	0.01 [0.159]
ICRG quality of government	-1.18+ [0.640]	0.08 [0.651]	0.14 [0.666]	-0.69 [0.653]	-1.21+ [0.729]
Conflict aim	-0.19 [0.144]	-0.26* [0.116]	-0.32** [0.119]	-0.14 [0.151]	-0.18 [0.132]
Fertility rate	0.12 [0.087]	0.40** [0.081]	0.36** [0.086]	0.00 [0.098]	-0.02 [0.085]
Extrajudicial killings	0.18 [0.130]				
<i>Insurgents</i>					
Genocide (by insurgents)		-0.85* [0.329]	-1.49** [0.295]		
Contraband		0.68** [0.216]	0.90** [0.240]		
Abduction		0.78** [0.297]			
Forced recruitment			0.39 [0.299]		
<i>State Actors</i>					
Genocide (by governments)				-0.16 [0.231]	0.11 [0.268]
Troop quality (log)				-0.24* [0.101]	-0.25* [0.111]
Press-ganging				0.93** [0.234]	
Conscription					0.11 [0.227]
<i>Controls</i>					
Polity2	-0.02 [0.020]	-0.00 [0.018]	-0.03 [0.018]	0.01 [0.020]	0.00 [0.022]
Duration	0.00 [0.008]	-0.00 [0.008]	-0.00 [0.009]	-0.00 [0.008]	0.00 [0.008]
Year	0.14** [0.014]	0.15** [0.016]	0.15** [0.017]	0.12** [0.018]	0.12** [0.019]
Population (log)	0.21* [0.084]	0.13 [0.092]	0.14 [0.097]	0.33** [0.086]	0.24** [0.075]
Cut 1	286.27** [28.832]	296.65** [33.248]	297.32** [33.916]	249.08** [36.154]	248.35** [38.462]
Cut 2	287.16** [28.831]	297.31** [33.257]	297.96** [33.919]	250.07** [36.153]	249.28** [38.462]
Cut 3	288.79** [28.883]	298.59** [33.310]	299.19** [33.972]	251.65** [36.250]	250.76** [38.548]
Observations	523	560	560	472	472
Pseudo R-squared	0.20	0.30	0.28	0.19	0.15

Note: Robust standard errors, clustered by conflict, in brackets; ** p<0.01, * p<0.05, + p<0.1

Table S10. Robustness Check with Change in GDP/Capita as Alternative Measure of State Weakness

	(1) Conflict- Level Rape	(2) Rape by Insurgents	(3) Rape by Insurgents	(4) Rape by State Actors	(5) Rape by State Actors
Ethnic war	-0.08 [0.126]	0.27 [0.170]	0.25 [0.176]	-0.12 [0.122]	-0.13 [0.123]
Δ GDP/capita (thousands of dollars)	-0.11** [0.031]	-0.15* [0.074]	-0.11+ [0.066]	-0.07+ [0.040]	-0.09* [0.040]
Conflict aim	-0.15 [0.120]	-0.25+ [0.130]	-0.30* [0.133]	-0.08 [0.124]	-0.09 [0.122]
Fertility rate	0.06 [0.078]	0.10 [0.085]	0.10 [0.081]	0.01 [0.078]	0.01 [0.077]
Extrajudicial killings	0.25+ [0.130]				
<i>Insurgents</i>					
Genocide (by insurgents)		-0.58+ [0.348]	-1.06** [0.329]		
Contraband		0.61** [0.231]	0.81** [0.246]		
Abduction		0.63* [0.292]			
Forced recruitment			0.41 [0.288]		
<i>State Actors</i>					
Genocide (by governments)				0.13 [0.257]	0.23 [0.255]
Troop quality (log)				-0.05 [0.085]	-0.07 [0.089]
Press-ganging				0.44* [0.205]	
Conscription					0.01 [0.164]
<i>Controls</i>					
Polity2	-0.00 [0.017]	0.01 [0.015]	-0.01 [0.015]	0.00 [0.019]	-0.00 [0.020]
Duration	0.01 [0.008]	-0.00 [0.010]	-0.01 [0.012]	0.00 [0.007]	0.00 [0.008]
Year	0.10** [0.011]	0.11** [0.016]	0.11** [0.015]	0.10** [0.014]	0.10** [0.015]
Population (log)	0.13* [0.066]	0.00 [0.085]	0.03 [0.083]	0.20** [0.076]	0.16* [0.065]
Cut 1	200.24** [21.379]	229.65** [31.423]	229.20** [30.562]	198.44** [28.863]	201.29** [29.349]
Cut 2	201.20** [21.364]	230.20** [31.433]	229.74** [30.572]	199.38** [28.858]	202.22** [29.341]
Cut 3	202.41** [21.394]	231.15** [31.475]	230.67** [30.617]	200.64** [28.959]	203.45** [29.438]
Observations	825	861	861	687	687
Pseudo R-squared	0.18	0.24	0.23	0.15	0.14

Note: Robust standard errors, clustered by conflict, in brackets; ** p<0.01, * p<0.05, + p<0.1

Table S11. Summary Statistics of Dependent and Independent Variables

Variable	N	Mean	Standard Deviation	Min	Max	Varies by Conflict-Year
Rape: conflict-wide (0,1,2,3)	983	0.78	0.92	0	3	✓
Rape: insurgent perpetrators (0,1,2,3)	983	0.44	0.83	0	3	✓
Rape: state perpetrators (0,1,2,3)	983	0.60	0.81	0	3	✓
Ethnic war (0,1,2)	983	1.47	0.78	0	2	
Magnitude of state failure (0,1,2,3,4)	983	0.38	1.10	0	4	✓
Conflict aim (1,2,3)	983	1.97	0.91	1	3	
Fertility Rate	983	4.65	1.76	1.17	9.12	✓
Extrajudicial killings (0,1,2)	876	1.60	0.59	0	2	✓
Genocide: insurgents (0,1)	900	0.02	0.15	0	1	✓
Ethnic cleansing (ethnic-secessionist wars) (0,1)	983	0.36	0.48	0	1	
Contraband funding (0,1)	981	0.30	0.46	0	1	
Insurgent abduction (0,1)	983	0.29	0.45	0	1	
Insurgent forced recruitment (0,1)	983	0.59	0.49	0	1	
Genocide: state (0,1)	900	0.14	0.35	0	1	✓
Troop quality (log) (1980-2001)	703	8.80	1.05	5.94	12.07	✓
Press-gangng by the state (0,1)	983	0.35	0.48	0	1	
Conscription by the state (1980-2001) (0,1)	753	0.54	0.50	0	1	✓
Polity2	950	0.73	6.24	-9	10	✓
Duration (as of 2009)	983	23.46	15.99	1	62	
Population (log)	980	10.30	1.58	6.28	14.04	✓
Δ GDP/capita	944	0.89	3.06	-10.61	20.31	✓
Quality of government	565	0.41	0.19	0.04	0.98	✓
Diaspora funding (0,1)	983	0.08	0.26	0	1	✓
Battle deaths (log)	796	6.44	1.86	2.71	11.29	✓
Women's economic rights (0,1,2,3)	845	0.98	0.55	0	2	✓
Women's political rights (0,1,2,3)	876	1.66	0.61	0	3	✓
Women's social rights (0,1,2,3)	742	0.90	0.61	0	3	✓
Government mass killing (0,1)	734	0.15	0.35	0	1	✓
Female labor force participation	981	49.46	19.43	9.8	90.8	✓

Figure S1. Box Plot of Battle Deaths by Level of Wartime Rape

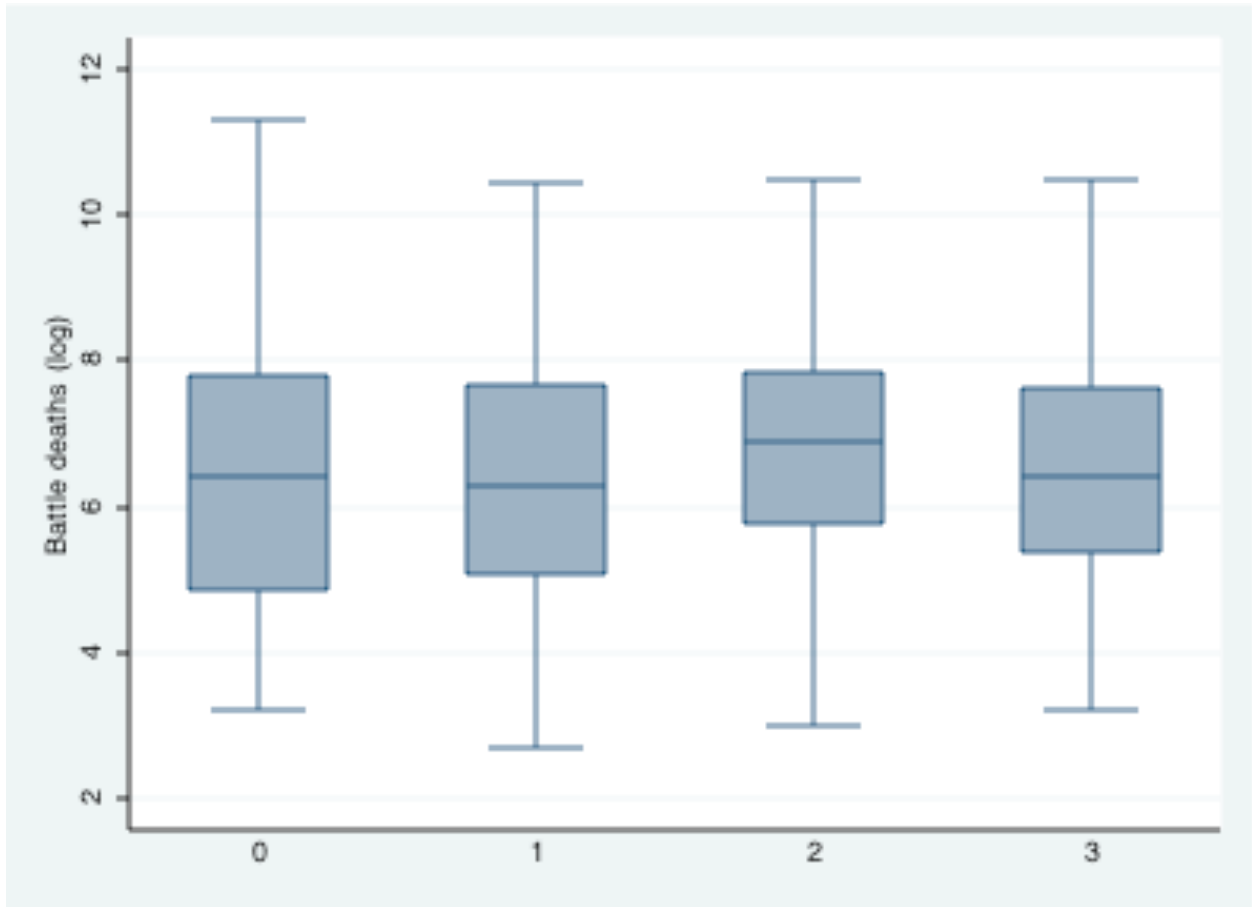


Figure S2. Major Civil Wars by Highest Level of Wartime Rape, 1980-2009

