

Civilians as Pawns in the Game of Civil War?

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Introduction

In every armed conflict civilians suffer from the consequences of the war in various ways, but in many conflicts civilians are also the deliberate targets of violence. Considering the political costs attached to targeting civilians in civil wars, which should both complicate future popular support in a post-conflict society and risk the condemnation of the international community, it is puzzling that warring parties choose such tactics. When targeting of civilians takes place during an armed conflict one can suspect it to be used instrumentally by the warring parties in order to improve their positions militarily in the war. However, surprisingly few studies focus on how violence against civilians in war is related to the military outcome on the battlefield. Furthermore, most research on targeting of civilians tends to study either governments or rebel groups.¹ When only taking the behaviour of one of the actors into consideration, most of the interaction process of the conflict dynamics is lost.

The aim of this paper is to study how targeting civilians may be used by governments and rebel groups as a technique of violence in intrastate conflicts. More specifically, this study focuses on how direct violence against civilians may be linked to the bargaining process of the war. In short, I argue that extreme parties experiencing a military setback may choose to change their tactics in order to stay in the game. Targeting civilians becomes a way of displaying one's resolve to improve one's future bargaining range and to raise the price for continued fighting. The empirical findings

¹ Indeed, there are exceptions to both of these statements, and they will be presented in the next section.

from this paper partly corroborate this argument. Firstly, it is found that when either of the warring parties is losing, i.e. when there is a battlefield asymmetry, violence against civilians is more likely to occur. Moreover, while rebel groups tend to target civilians to a greater extent when losing on the battlefield, this does not hold for governments.

In the next section I will present some explanations for instrumental violence against civilians. I will do so by first giving a brief overview of what previous studies have proposed, then discuss the bargaining process of war and the role of signalling resolve in conflicts, and lastly present some predictions for violence that can be drawn from that. Thereafter, the data and operationalisations used in the study are discussed. Subsequently, the results from the statistical tests are presented, followed by a discussion and analysis of the findings. Lastly, I end the paper with some conclusions and ideas for future research.

Explaining instrumental violence against civilians

Previous studies²

Many studies explain targeting of civilians as instrumental acts by the perpetrators. It has been suggested that civilians may constitute an important source of support for either of the warring parties and therefore one group sometimes chooses to target the population in order to undermine what nurtures the other party. Azam & Hoeffler (2002), who represent this view, propose, in simple terms, that it is sometimes cheaper for a government to raid civilians than to engage in proper fighting since a decreasing population density also means a decreasing support for the rebels. They are then weakened in their struggle and thus constitute an easier target for the government. A similar view has also been expressed by Cairns (1997:17) who states that the enemy's 'social capital' is sometimes targeted by killing a few and terrorising the rest to flee. Moreover, Valentino (2000:47) presents a theory of 'coercive mass killings', proposing that governments unable to defeat their opponents with conventional military methods may choose to target civilians suspected of supporting the enemy forces. In another study Valentino, Huth and Balch-Lindsay (2002) accordingly claim that regimes often use mass killings as an attempt to defeat major guerrilla insurgencies, with the

² Since the aim of this paper is to examine why warring parties target civilians during an armed conflict, the literature on terrorism, which is usually treated as a slightly different phenomenon, will not be presented here.

argument that guerrilla armies often rely directly on the local civilian population for logistical support. All studies mentioned above are restricted to explaining why governments engage in raiding civilians. Restrepo, Spagat and Vargas (2003) present a similar theory that is applicable also to the behaviour of non-state actors. Their study focuses on the Colombian conflict where the paramilitary and the guerrillas have targeted civilian “infrastructure” believed to be supporting the other group.³

Another explanation for civilian victimisation focuses on the terrorising aspect of violence; it suggests that warring parties in need of territorial control or the loyalty of the people may terrorise civilians into compliance. Kalyvas (2000:5-6) argues that the targeted audience often enjoys a degree of choice in shifting loyalties and resources to the rival actor. Such shifts matter because they affect the outcome of the conflict and this characteristic gives civil war violence its strategic dimension. Thus, the key to defeating an opponent in a civil war is to control access to the civilian population. This can be done “by providing benefits (such as land distribution) and sanctions (such as attaching a high cost to defection to the opponent)”⁴ and sanctions are in general cheaper than benefits (Kalyvas 1999:251). Even indiscriminate violence is sometimes used by incumbents to seek civilian support when insurgents are weak and cannot protect their own supporters (Kalyvas 2004:134-5). Mkandawire (2002), although presenting a somewhat different theoretical perspective, suggests that rebels in some African conflicts, because of their roving nature, need to control areas in the country where they have no support and therefore must strike terror into the population in these areas by indiscriminate violence against the people.

None of these studies examine how the violence is related to the actual results on the battlefield, which should be important when trying to understand why civilians are targeted during an armed conflict. One exception is Downes (2004) who argues that targeting of civilians should be understood in terms of military utility. Through a systematic study of interstate conflicts he concludes that costly conflicts are more likely to produce civilian victimisation, where the costs of conflict are measured in conflict duration and battle fatalities. Although not tested, he argues that the same argument could be applied to civil wars (Downes 2004:4). These results indicate that the military aspects of the conflict are important for the understanding of violence against civilians. However, when violence against civilians is used in intrastate conflicts is yet to be examined. Another problem with many previous studies is that they focus on either

³ The argument is in the article referred to Spencer 2001.

⁴ Kalyvas refers this discussion to Taylor 1988.

state or rebel behaviour, Kalyvas (2000) being an exception. By doing so one loses much information about the conflict dynamics and the inherent strategic element of armed conflicts. My point is that targeting of civilians can be better understood by looking at the result on the battlefield, thereby also taking into account the result of the strategic interaction between the government and the rebel group in intrastate conflicts.

Bargaining in war

Conflict outbreak may be explained as a consequence of a bargaining failure when parties are unable to agree on a mutually preferable negotiated settlement. One way of understanding this failure is in terms of incentives to misrepresent information about factors like military capabilities, resolve and strategy in order to gain a better deal (Fearon 1995). If actors shared such information they would have the same understanding of a conflict outcome, and since wars are costly they would both benefit from a settlement short of war. However, incentives to bluff may lead to miscalculations or strategic dynamics leading to war. During the conflict this information gap should be overcome as the parties, by being put to test, come closer to a common belief of each other's true strength and resolve (Werner & Yuen 2003:2-3). Bluffing is no longer possible since the war has revealed the true military capabilities of the parties. But as many researchers have emphasised, the war itself is a continuation of the bargaining process in which the fighting continuously influences the parties' expectations of the outcome of the war (Schelling 1966; Wagner 2000; Slantchev 2003b; Powell 2004). In other words, the fighting reduces the uncertainty "by providing information about the actual balance of power" (Reiter 2003:31). And bargaining in war differs from pre-war bargaining in that the fighting is a more reliable source of information, since it is less sensitive to manipulation (Wagner 2000:478). However, while the fighting reveals information about the parties' respective military capabilities, it is not always enough to inform the parties about their willingness, or resolve. Slantchev (2003b:622) stresses that the battlefield is not the only source of information, and that strategic behaviour at the bargaining table may also be revealing. Perhaps other factors can also serve as reasons for the parties to update their beliefs about their opponent and the expected outcome of the conflict.

Signalling resolve

Based on the above discussion about bargaining in war, we can conclude that a situation where one warring party is losing on the battlefield should inform the losing party that

winning is difficult within the existing situation and simultaneously inform the enemy party that it is in a favourable position. Slantchev (2003a:128) concludes that “the diminished or eliminated capacity to hurt the enemy is a major reason to terminate war and seek a negotiated settlement”. Nonetheless, inferior parties do not always stop fighting. The reason may be that the party experiencing a military setback has a strong resolve and a willingness to win at any price, being somewhat of an extremist party. A way to signal an extreme resolve may be to target civilians. According to Lake (2002:18-9), extremists compensate their political weakness by adopting extreme methods with the purpose of shifting the future bargaining range to their advantage. In war situations where the fight on the battlefield cannot be won the only way out without surrendering may be extreme methods such as waging the war against civilians. The inferior group then raises the price for continued fighting for the other party, thus shifting the bargaining range. This is in line with the reasoning of Schelling (1966:i) who states that “the power to hurt [...] is a kind of bargaining power”. Targeting civilians is then another way of sharing information about resolve, apart from the regular fighting and the bargaining at the negotiation table. In the words of Pillar (1983:186): “Designing military strategy to shape these perceptions advantageously has several aspects. But the most important one is the use of military activity to make one’s own side appear strong, confident, highly motivated, and unlikely to concede – in short, to demonstrate determination”. The military strategy might be targeting civilians, which accordingly can be interpreted as a signal of extreme resolve. Civilians then simply become pawns in the game of the civil war. Kalyvas (2003:15) has claimed that this was partly what happened in the Algerian case, where violence had a signalling function, demonstrating capability, inducing mobilisation and attracting international attention.

Another dimension of the argument points to the costs inflicted on the adversary, especially acknowledged within the literature on aerial bombing in interstate conflicts. Best (1983:267-8) suggests that the so called ‘collateral damage’ that aerial bombing inflicts may be intended to break down the will of the enemy to fight, which would be tantamount to saying that actors target civilians in order to raise the price for continued fighting. Coercive theory holds that “if a population suffers enough its leaders will concede to the demands of the attacker or the population will rise up and overthrow a leadership it thinks has brought undue destruction on the nation” (Horowitz & Reiter 2001:151). Hence, when civilians are targeted the population is more likely to oppose the war and demand an end to it. However, the logic of intrastate conflicts is somewhat

different. There are not necessarily two clearly divided populations that support the two warring parties, and winning the hearts and minds of the people may be of great importance. Just as claimed by Kalyvas (1999), the support of the civilians cannot be taken for granted and both government and rebels strive for their loyalty. That will be especially important once the conflict is over and a post-conflict society is to be built. Hence, targeting civilians in an intrastate conflict is a very costly action that will signal a determination not to give in. It could be seen as a cost-sunk signal, i.e. a signal that is costly *ex ante* (Fearon 1997).

Predicting violence

So far, I have argued that the battlefield outcome reveals information about the parties' military capacity, and that targeting of civilians can be interpreted as a signal of extreme resolve in the bargaining process of war. This is so because the battlefield outcome is important for the parties' expectations of the outcome of the conflict. Reiter emphasises the role of fighting in exchanging information about resolve. "Combat might also reduce uncertainty about resolve and about military effectiveness. A defender that takes casualties in a battle may convey resolve to the other side" (Reiter 2003:31). A defender that not only takes casualties, but also proves itself strong by targeting civilians, should thus be perceived as even more determined. When winning battles, there is no need to show determination in any other way, since the effort on the battlefield is enough to display military capabilities and resolve. Therefore we are more likely to experience targeting of civilians by parties who are losing than those who are winning battles. Furthermore, considering the high political costs attached to civilian victimisation it should not be a preferred method by warring parties. Firstly, winning the hearts and minds of the people is important in most intrastate conflicts and civilian victimisation is not the way to win support.⁵ Secondly, there is a risk that the international community will condemn violence against civilians and impose sanctions on the actors. Therefore, winning parties should not choose such a tactic, since it is risky and does not carry with it any direct benefits. Certainly, there are seemingly irrational extremist groups in the world that does not appear to care about popular support or external opinions. The argument, however, is not deterministic, but simply suggests that when a group is losing, the likelihood of civilian victimisation is increased.

⁵ It has been argued, as previously presented in this paper, that in some conflicts people *are* terrorised into compliance through civilian victimisation (Kalyvas 1999). My point, however, is that parties would not choose to do so if they were winning battles, since there are high risks for future support involved.

Battlefield outcome as information about military capabilities should have a short-term effect. Blainey (1973:55) said that "[e]xpectations – and particularly expectations in the short term – seem a crucial clue to the causes of war and peace". If we believe that expectations about the outcome of a conflict are equally important during the conflict as before the actual outbreak, and especially so the short-term expectations, then the parties are likely to react directly on proof of military capabilities, such as battlefield outcome. Hence, the parties constantly update their beliefs about each other's capabilities and resolve and therefore the effect of battlefield losses on the parties' behaviour should be direct in time. The first hypothesis to be derived from this discussion suggests that when there is a battlefield asymmetry, i.e. one party is losing battles, the risk for civilians to be targeted is likely to be increased.

Hypothesis 1: Battlefield asymmetry increases the likelihood of civilians being targeted in armed conflicts.

The second question is whether governments and rebel groups are equally sensitive to losing battles. Most likely, they are not. Being in different power positions governments and rebel groups should act somewhat differently in similar situations. Firstly, states are more sensitive to the opinions of the international community and the risk for sanctions. Since the government is the sovereign power bound by international law it should accordingly hesitate to challenge these principles shared by the international community. Rebel groups, on the other hand, (usually) do not have a position to lose and are therefore not as dependent on the opinions of the international community. Secondly, governments have more flexible resources and do not use all its military capabilities in one conflict. When a government is losing it can increase military presence in a territory or buy military equipment to fight the rebels. The rebel group, on the contrary, is usually constituted for the sole purpose of fighting the government and therefore it will spend as much military resources as it is capable of. Hence, when the government is losing both parties know that in the short-term it is not a sign of weakness that will alter the present bargaining range. Only when the government has been losing during a longer period of time would there be a reason for the parties to update their beliefs about the relative military capabilities. When the rebels lose the information shared is different than in the case of government losses, since it usually means that they do not have greater military capabilities than is shown in the conflict.

Consequently, rebel groups should be more sensitive to losing battles and thereby more likely to target civilians when losing, compared to governments.

It is reasonable to assume that the correlation between rebels losing and targeting of civilians is not simply a matter of likelihood, but rather an increasing function. The logic behind this is that the more a party is losing, the more obvious it becomes that it is the inferior party concerning military capabilities. The consequence is that in order to signal resolve in a credible manner, the signal has to be more and more costly. Hence, the more a party is losing, the more civilians it has to kill in order to convince the opponent about its resolve to continue the conflict. However, all rebel groups losing battles cannot be expected to target civilians, due to the political costs. It should depend on their determination to continue the war. But the less resolved inferior parties are likely to drop out, i.e. give in for the government's superior military capabilities and settle the conflict, and so due to this selection process we should observe a correlation between rebels losing and targeting of civilians.

Hypothesis 2: Rebel groups are more prone to target civilians when losing battles than are governments.

Data and operationalisations

In the following section I will discuss the data used and how the different variables are coded. I will end by presenting the empirical models that are to be tested.

The dataset

The dataset is based on new data from the Uppsala Conflict Data Program⁶. This data includes information on targeting of civilians by both governments and rebel groups, covering incidents where civilians were (supposedly) deliberately *targeted* by one party, meaning that civilians killed in crossfire are excluded. It also contains data on battle-related deaths, specifying how many casualties each side suffered. Both types of data have a minimum limit for inclusion set at 25 deaths per year. They are both collected as events data, meaning that for each incident of battle-related deaths or one-sided killings of civilians, the date and the actor are specified.

⁶ Information about the program is available at www.ucdp.uu.se

The dataset includes intrastate armed conflicts during 2002 and 2003 with one active dyad. Since I am interested in the short-term dynamics of the conflict and the interaction between the warring parties, the unit of analysis is dyad-month. This unit of analysis allows for a more refined analysis of the bargaining process throughout the war. The conflicts where two dyads or more are active the same year are excluded, since it is often impossible to separate the government one-sided violence between the different dyads. In total there are 341 observations included in the dataset, covering 22 dyads. Furthermore, there are two types of cases that are excluded here due to missing information. The first category is the cases with clear indications that civilians are being targeted, but where this information is not available for each party in even remotely plausible numbers, for example in Nepal 2003. These are excluded since including them would equal adding a known error into the data. The second category contains the cases where the information is only available on a too aggregated level. For example in Liberia 2003 there are clear figures of how many people died for each month, but there are no reports of who the victims were. Thus, it would be impossible to code the battlefield outcome variable as anything even resembling reality. However, even if excluding these cases clearly improves the quality of the data, it also raises some questions about possible inherent problems. Firstly, there is a risk that the exclusion of certain cases adds a systematic bias to the data; if the cases where information is lacking are not randomly distributed the results will be biased. Secondly, the line between cases where the data is known to be extremely misrepresentative and those where we can only suspect that information is lacking is likely to be arbitrarily drawn. Since finding out which cases are accurately coded is nearly impossible this problem is not possible to solve. Previous large-n studies have been limited to either use proxies for violence (Azam & Hoeffler 2002), or code only the occurrence of mass killings (Valentino et al 2000; Downes 2004), with the whole conflict as the unit of analysis. Hence, this monthly data is unique in that sense, and I have to accept that the data here is the best existing data on violence against civilians and be aware of the possible problems when interpreting and evaluating the results.

Violence against civilians

In order to test the first hypothesis, a dummy for violence against civilians is created, indicating whether any of the parties targeted civilians that month, and this is called *targeting of civilians*. Since the dataset consists of monthly observations the death figures are usually relatively low and therefore the coding rule is that all observations with at

least one civilian killed are coded as 1, otherwise 0. This means that all violence is included, also the small-scale everyday violence that civilians are subjected to in many armed conflicts. For the second hypothesis I want to test the argument that predicts who violates the civilian population, and therefore I will use two separate variables – one for government violence and one for rebel violence. The variables created are, thus, the number of one-sided killings of civilians by the government, *targeting by government*, and likewise the number of civilians killed by the rebel group, *targeting by rebels*.

Battlefield outcome

The independent variable measuring battlefield outcome is perhaps the most difficult to code in the aspect of striving for high validity, especially since it has to capture a relation between two actors. One recent study of conflict endings actually includes a variable called battlefield outcome (as an independent variable), which is supposed to capture the fact that the fighting during the war reveals information to the warring parties (Ramsay 2004). However, the operational definition is only the number of battles, which does not say anything about the actual information that these battles reveal. In the same study, ‘military capabilities’ is an independent variable to count for asymmetric adversaries and this is measured with an index of material capabilities. Even though I am also interested in asymmetry in capabilities I think that it has to be displayed more explicitly to the warring parties to give any meaningful information about their relative strength. Lastly, the same study by Ramsay measures the ‘imbalance of loss’ between the warring parties, which is closer to what I am interested in capturing. It is operationalised as the difference in cumulative casualty rates, which is “the ratio of the absolute value of the difference between the cumulative casualties of each side in the conflict divided by the total casualties by both sides” (Ramsay 2004:19). It is a good measurement, but I cannot define my variable in the same way since I only have data for two years. Many of the conflicts have been ongoing for a long time and the cumulative casualty figures for each party are unfortunately not available. However, the use of a ratio variable of some other sort is still possible. Another study theorising about battlefield asymmetry is one by Werner and Yuen (2004), who measure ‘battle consistency’ as the time of the last tide of one of the parties continuously winning battles. That operationalisation is not ideal when trying to capture the short-term dynamics of the conflict.

The first independent variable testing hypothesis 1 is a dummy variable called *battlefield asymmetry*, indicating whether there is an asymmetry in battlefield outcome

(coded 1) or not (coded 0). The rationale for this variable is that it might not matter exactly how much a party is losing – the mere fact that one is losing battles indicates inferiority and perhaps that is enough when having passed a certain level of asymmetry. Thus, it has to be decided where this level should be put at. The coding rule here is that asymmetry exists when the ratio of monthly battle-related deaths is more than 2-1 (i.e. either of the parties is suffering more than double as many fatalities as the other), given that at least five people were killed that month. The conditional part of the rule is formulated in order to exclude cases where an observed asymmetry should not really matter due to the low intensity.

For the second hypothesis, battlefield outcome is measured as a logarithmic ratio variable capturing the relation between the numbers of deaths the two parties have experienced each month, and this is labelled *losing battles*. This is created by first dividing battle-related government deaths with battle-related rebel deaths, which results in a ratio varying from 0 to ∞ , where 1 signifies a perfect balance between the parties. When using the logarithm of the ratio the value of 0 equals a ratio of 1, hence a balance between the parties. The negative and the positive numbers are also symmetric in the sense that any given value, positive or negative (i.e. -1 and +1), equals the same asymmetry in number of deaths. In the data the variable now varies from -5.5 to 5.8. Since the ratio variable is created by dividing government deaths with rebel deaths, all positive numbers correspond to how much the government is losing, and all negative numbers to rebel losses. The problem with the ratio is that one loses much interesting information that the absolute numbers give us. For example, it cannot make the possibly important distinction between 5-1 killed and 100-20 killed. The ratio would be the same for the two events. The remedy is to add a control variable that measures the severity of the battles (see the next section).

Control variables

Some control variables are coded to enable a more robust test of the argument. Downes (2004) claims that violence against civilians may either be used in protracted wars as an act of desperation to win the war, or as a cost-reducing strategy when the costs of fighting exceeds the initial expectations. If that is true there are two implications. Firstly, conflict duration should have a positive effect on targeting of civilians. Therefore, the control variable *conflict duration* is created, operationalised as the number of years since the conflict in that particular dyad began.

Secondly, conflict intensity should have a positive effect on targeting of civilians, since intensive conflicts are more costly for the warring parties. Two variables measuring intensity are coded. The first is *conflict intensity*, which is a yearly measure in categories, and this variable is to control for the effect of the argument presented by Downes. The categories of Uppsala Conflict Data Program are used; a minor armed conflict (coded 0) means 25-999 battle-related deaths during one year, and war (coded 1) is at least 1000 deaths per year (Eriksson 2004:70). The other variable for intensity is created with the purpose of controlling for the monthly battlefield outcome, since the independent variable losing battles cannot account for the intensity level. The total number of battle-related deaths each month is used to indicate the *monthly intensity*.

Thirdly, the level of democracy may influence the parties' behaviour. Democracies have previously been shown both to be less likely to engage in mass killings (Valentino et al 2002) and to have no such effect (Downes 2004) and it is thus interesting to include as a control variable. The Polity 2 score from Polity IV, which spans from -10, indicating strongly autocratic, to +10 for strongly democratic, is used here.⁷ Since Polity IV only covers the period until 2002, the Polity scores from 2002 are imputed for 2003 in my dataset. The variable name is *polity*.

Fourthly, the type of *incompatibility* will be included as a control variable. It is coded 0 for conflicts over governmental power and 1 for territorial conflicts, definitions and coding according to the Uppsala Conflict Data Program. This variable is supposed to control for the fact that certain types of conflicts may be more violent than others, and especially, that there may be a difference in how important winning battles are in the two types of conflict which may then have implications for targeting of civilians.

Lastly, I must control for the fact that the observations are likely to be dependent on each other in time. The decision to target civilians in one month may well depend on whether civilians were targeted the previous month, since actors learn from the conflict situation and adapt their behaviour accordingly. My argument, however, is that even if that is true, actors experiencing a military setback are more likely to target civilians. The dependent variable is lagged one month, and is instead called *targeting previous month*. Hence, it is a dummy variable, coded 1 if any of the parties targeted civilians the previous month, and 0 if no civilians were targeted.

⁷ Polity 2 is the Revised Combined Polity Score, where all instances of "standardized authority scores" (i.e. -66, -77, and -88) are converted to conventional Polity scores within the range of -10 to +10. See Polity IV Dataset Users' Manual, available at <http://www.cidcm.umd.edu/inscr/polity/>.

Empirical tests and findings

In this section I will first present some descriptive statistics. Thereafter each of the empirical models constructed to test the hypotheses are presented and the results are discussed. The hypotheses are evaluated on a 0.05 security level.

Descriptive statistics

The dataset covers 22 dyads and there are in total 341 observations, dyad-month being the unit of analysis. Some conflicts are only covered for one of the two years, either because they are only active for one year, or because other dyads are active in the same conflict for one of the years (which means they are then excluded). One conflict started in 2002, and so only the months after the first battle-related death are included. Looking at the 22 dyads, civilians were targeted in 12 of them: in six by the government and in 10 by the rebel group. Hence, only in four conflicts civilians were targeted by both the government and the rebel group, and these are Indonesia (Aceh), Nepal, Russia (Chechnya), and Sudan (Southern Sudan).

Of the 341 observations, civilians were targeted in 122 cases. On average 6,9 civilians are killed each month, but the standard deviation of 17,2 shows that there is a wide distribution, and the number of civilians killed ranges from 0 to 201 in the monthly observations. The average for targeting by government is 1.5 with a standard deviation of 5.5. The same numbers for rebel groups are 5.4 and 16.4. Hence, there is a great difference between governments and rebel groups in the sense that the latter in general target civilians to a larger extent. The average ratio between battle-related deaths and civilians killed is 9.8; so for the months when civilians are killed there are on average almost ten times more battle-related than civilian deaths. This may seem perplexing considering the commonly stated figure that between 75 and 90 percent of all victims in recent wars are civilians (Ahlström 1991:19; Sivard 1991:20; Azam 2002:132). However, oftentimes the category of civilian victims of war includes civilians killed in crossfire or indirect deaths, whereas this study is strictly limited to including deliberately killed civilians. Moreover, it should be noted that no large-scale killings of civilians or genocides took place in the conflicts included in this study during the years 2002 and 2003.

Hypothesis 1

The first hypothesis suggests that targeting of civilians is more likely when there is battlefield asymmetry. Since the dependent variable is a dummy, it is tested using logit

regression, with targeting of civilians as the dependent variable and battlefield asymmetry as the independent variable. Six control variables are included in the regression: conflict duration, conflict intensity, monthly intensity, polity, targeting previous month and incompatibility. Two regressions are run; one where all the variables are measured the same month, and one where the battlefield asymmetry and monthly intensity are lagged one month. This makes it possible to discuss time order and how immediate in time an effect is. The results are presented below in table 1.

Table 1: Logit models of targeting of civilians.

Dependent variable:		
<i>Targeting of civilians</i>	Regression 1	Regression 2
<i>Battlefield asymmetry</i>	1.055* (0.412)	
<i>Battlefield asymmetry (lagged)</i>		-0.32 (0.435)
<i>Monthly intensity</i>	0.001 (0.002)	
<i>Monthly intensity (lagged)</i>		0.004 (0.003)
<i>Conflict duration</i>	-0.006 (0.014)	-0.003 (0.015)
<i>Conflict intensity</i>	1.854* (0.788)	1.566* (0.748)
<i>Polity</i>	0.049 (0.039)	0.065 (0.038)
<i>Targeting previous month</i>	3.402** (0.365)	3.448** (0.375)
<i>Incompatibility</i>	-0.302 (0.423)	-0.377 (0.431)
constant	-2.463** (0.438)	-2.266** (0.42)
Number of observations	308	308
Pseudo R ²	0.491	0.482
Log Likelihood	-104.365	-106.293

Estimations performed using Stata 8.0. For each independent variable its coefficient is given, standard errors in parentheses. ** p < .01; * p < .05.

To sum up the results, the hypothesis is supported in the first regression, when the independent and the dependent variables are measured simultaneously, but not in the second regression when it is lagged one month. In regression 1, we see that battlefield asymmetry has a positive effect that is statistically significant, just as predicted. Four of the control variables do not have a significant effect: monthly intensity, duration, polity and incompatibility. Conflict intensity, indicating whether the conflict is a war or not, has a significant positive effect, meaning that civilians are more likely to be targeted in

wars than in low-intensity conflicts. Targeting previous month is also significant. This is not surprising since the parties are likely to be affected by what took place the previous month and continue with such behaviour. The results from regression 2 look very similar for all the control variables, but the difference is the effect of battlefield asymmetry (lagged). It has changed sign (and now has a negative effect) but is no longer significant. That means that battlefield asymmetry one month does not seem to have any effect on whether civilians are targeted or not the following month.

As an extra regression, testing the robustness of the results, I have clustered on conflict, which controls for the fact that the standard errors of the observations within the dyads are not independent from each other (StataCorp 2003:273)⁸. The results from regression 1 do not change when clustering on dyad; the same variables are significant. For regression 2, the only change with clustering is that the effect of monthly intensity becomes significant.

Hypothesis 2

The second hypothesis predicts that rebel groups are more prone to target civilians when losing battles than are governments, and that the more they are losing the more civilians they are likely to target. This hypothesis is tested by running two separate regressions, testing the argument for the two dependent variables, targeting by government and targeting by rebels respectively, and comparing the results. The argument will be tested using OLS regression since it predicts a linear correlation between losing and targeting, where the more a party is losing the more civilians it is likely to kill. Due to the nature of the logarithmic ratio variable used as the independent variable the predicted effect on targeting civilians is positive for the government and negative for the rebels. Since the model aims at explaining the parties' behaviour the time order needs to be established. Therefore the independent variables losing battles and monthly intensity are lagged one month to ensure that the battlefield losses (and the monthly intensity which is to account for the severity of the losses) are measured before the parties target civilians.

As shown in table 2, the main independent variable, losing battles, does not have a significant effect on targeting by government, but it does have a significant negative effect on targeting by rebels, just as predicted. The effect can easily be interpreted since

⁸ Since only conflicts with one active dyad are included, this is the same as clustering on dyad. Note that one country can be involved in more than one conflict at the same time, e.g. India where there are several territorial conflicts in different parts of the country.

it is a linear regression; recalling that the average number of civilians killed during one month was 6.9, and the independent variable varies from -5.5 to 5.8 , the effect of -1.9 can be seen as fairly strong. However, if comparing with the control variables, we see that targeting previous month (which is the only other variable with a significant effect) has a substantially stronger effect of 9.7. This is, just as discussed above, not surprising since a continuation of violent behaviour is likely to be much higher once a party has started to target civilians. What is interesting is that losing battles has a significant effect even when controlling for whether civilians were targeted the previous month or not. Furthermore, one can look at the adjusted R^2 -values; the model for targeting by rebels has a higher value and thus also a better fit than the other, which is another indication that the hypothesis is reasonable. Another interesting result is that polity is significant for government violence but not rebel violence. Hence, the more democratic a state is the fewer civilians will be killed by the government, whereas that does not have any significant effect on rebel behaviour.

Table 2: OLS models of targeting of civilians by government and rebel groups.

	<i>Targeting by government</i>	<i>Targeting by rebels</i>
<i>Losing battles (lagged)</i>	-0.089 (0.182)	-1.933** (0.576)
<i>Monthly intensity (lagged)</i>	0.012** (0.004)	0.004 (0.012)
<i>Conflict duration</i>	-0.026 (0.022)	-0.017 (0.071)
<i>Conflict intensity</i>	-0.467 (1.025)	5.811 (3.244)
<i>Polity</i>	-0.136* (0.056)	-0.117 (0.179)
<i>Targeting previous month</i>	2.446** (0.648)	9.711** (2.049)
<i>Incompatibility</i>	1.148 (0.693)	-3.243 (2.191)
constant	0.072 (0.638)	3.102 (2.019)
Number of observations	308	308
Adj R ²	0.118	0.185

Estimations performed using Stata 8.0. For each independent variable its coefficient is given, standard errors in parentheses. ** $p < .01$; * $p < .05$.

In order to control for dependence within the dyads, the same regressions are run again, this time clustering on conflict. What then happens with the results is that the effect of losing battles on targeting by rebels is no longer statistically significant. When

looking at the data, it becomes apparent that there are a few influential dyads that to a large extent account for the effect of the independent variable. India (Kashmir) accounts for a large part of the cases that support the hypothesis, and Uganda (LRA), Nepal (CPN-M) and Colombia (FARC) also have several observations in line with the theory. Obviously, these observations are interdependent to the extent that the effect cannot be considered significant. Nonetheless, in the first regression, without clustering, the effect is still significant when controlled for dependence over time by lagging the dependent variable (targeting previous month).

Implications of the findings

Analysis of results

In the theory chapter I suggested that civilians are more likely to be targeted when there is a battlefield asymmetry, since the warring parties then, due to lacking military capabilities, have incentives to signal their resolve by targeting civilians. Furthermore, I proposed that the more rebel groups are losing, the more civilians they are likely to kill – a correlation that should not be as strong for governments. In what way do the findings from the regressions support the theory? Concerning the first hypothesis, it is supported by the findings if we look at simultaneous actions; when there is battlefield asymmetry the likelihood for civilians being killed is indeed higher. However, when demanding a clear time order by lagging the independent variable the results do not longer support the hypothesis. One way of interpreting this is that the effect seems to be direct in time. For the more likely explanation, however, we need to consider the results from hypothesis 2. An effect on rebel violence was found when lagging the independent variable, but there was no effect on government violence. A conclusion that can be drawn is that rebel groups and governments reason in different ways, and when trying to understand why they target civilians we may need to look for different explanations for the two phenomena. Hence, when collapsing the two dependent variables from hypothesis 2 into one, targeting of civilians, we try to explain two different phenomena in the same regression. When considering this it is not surprising that the hypothesis is not fully supported.

The second hypothesis is, as already mentioned, supported by the findings. Since the first hypothesis only receives weak support, the main finding from this paper is that the explanation given in the theory section, that warring parties target civilians to

signal resolve in order to improve their position in the bargaining of the war, seems to be plausible for rebels groups but not for governments. A possible explanation for this difference was also presented in the theory part, but the question is whether the results indicate that the theory is not applicable to governments at all or if the logic holds when we change the time aspect. Perhaps governments also signal resolve by targeting civilians, but only after having lost on the battlefield for a longer period. Losing one month does not reveal information about military weakness since governments usually have extra military resources not used, but if losing continuously it will become apparent that the government does not have the capabilities to mobilise enough to win. Targeting civilians could then be a way to signal a determination.

However, it is also possible that we need to consider very different explanations when trying to understand why governments choose to violate its population. As a start it would be interesting to examine the role of incompatibility. If looking at the results in table 2, the effect of incompatibility is positive on governmental violence, but negative on rebel violence. Even though these effects are not significant, they indicate that there might be an interesting correlation that should be studied in more depth. What these effects imply is that governments are more likely to target more civilians in territorial conflicts than in conflicts over government power, whereas rebel groups target less civilians in territorial conflicts compared to government conflicts. This could be explained by possible constituencies that the groups need to consider in the different types of conflicts. In territorial conflicts the rebel group demand control over a piece of territory, and the fighting usually takes place in the contested area. The rebels then (at least wish to) represent the population in that area and are likely to be dependent on the hearts and minds of the civilians. Hence, they are less likely to target the ones they represent. In governmental conflicts the situation is different, and the rebel groups may not strive for the sympathy of everyone in the country. The opposite should then be true for governments; in territorial conflicts the civilians in the contested area may be considered part of the enemy and therefore a more likely target. The conclusion of this discussion is that it would be very interesting to study the role of different types of conflicts, and especially if data on who is targeted, i.e. what group the civilians that are targeted belong to, could be obtained. Another interesting result that points to a difference between governments and rebel groups is the effect that polity has; it has a statistically significant reducing effect on government violence, but no significant effect on rebel violence (although it is also a negative correlation). This implies that governments are more sensitive than rebels to the public opinion, which seems

reasonable to believe. Governments in more democratic countries rely on the people to be re-elected, but rebel groups have, by challenging the government militarily, already challenged the democratic order and should therefore not care as much about the public opinion as the government does in the same situation.

To sum up, losing battles is obviously not enough to explain violence against civilians. The results here indicate that rebel groups do target civilians to a larger extent when losing battles, but that explanation alone cannot account for why civilians are targeted. Moreover, when adjusting for clustering on conflict the significant effect on targeting by rebels disappears. It seems plausible to think that losing battles is an important, but definitely not sufficient, factor for explaining targeting of civilians. This implies that a larger test with more cases is needed. Even though 341 observations are enough for running statistics, the dataset only includes 22 dyads and that naturally limits the possibilities to generalise the results. Another limitation is that only conflicts with one active dyad are included. Possibly, warring parties in conflicts with more than one dyad act differently due to reputation and other considerations.

Comparison with previous findings

How can these results be related to previous findings? Beginning with the study that has also focused on the battlefield outcome, it has been argued, and partly found empirically, by Downes (2004) that states are more likely to target civilians when the actual or expected costs of fighting are high.⁹ States, and rebel groups that he claims that it is applicable to as well, should thus begin to target civilians when having lost for some time and then continue to do so. The difference between that and my argument is that I claim that targeting of civilians is not used to actually reduce the costs of fighting, but rather to show strength and determination so that the military weakness matters less for the outcome of the conflict. Hence, violence against civilians should vary over time since the warring parties' expectations about the outcome vary. Two control variables, conflict duration and conflict intensity, were included to control for Downes' argument. The former was not significant in any of the regressions, and so it seems plausible to conclude that protracted wars do not produce more violence against civilians, at least not when also including every-day low-intensity violence on a monthly basis as I have done in this study. The latter variable, on the other hand, had a significant positive effect on targeting of civilians in the logit model, but not on the

⁹ He finds that conflict duration and battle deaths both have a significant effect in bivariate analyses of occurrence of civilian victimisation, but not when controlling for types of warfare.

actor specific dependent variables in the linear models. It is rather peculiar that it has an effect on the collapsed variable, but not on its two parts. However, the two models are different; the correlation between conflict intensity and targeting of civilians is probably not linear, but instead a likelihood of occurrence. Wars are more likely to produce violence against civilians in general, but wars do not necessarily produce larger numbers of fatalities than minor armed conflicts. It is enough with a few minor armed conflicts with high levels of civilian deaths to account for that.

I believe the difference in results depend on the fact that Downes only examines interstate conflicts, while this study only includes intrastate conflicts. Although he claims that there should be no difference between the two in the matter of targeting of civilians, I think that there is a fundamental difference, which is partly related to the discussion above about the difference between governments and rebel groups. In interstate wars two governments are at war, whereas civil wars are carried out by two different types of actors – a government and a rebel group – which tend to create asymmetric conflicts. While the government is a legal institution governing the country with obligations towards its people, rebel groups are often created with the sole purpose of challenging the existing power. The government also has far more resources to spend on a war than a rebel group has. Hence, intrastate conflicts are asymmetric both in terms of the nature of the actors and in terms of resources. Furthermore, the role of civilians should be very different in inter- and intrastate wars. According to Kalyvas (1999:251) the key element of civil wars is civilian support, which is crucial for winning the war. The claim by Azam & Hoeffler (2002:463) that “the efficiency of the rebel forces is higher the larger the population among which the guerrillas can hide and find support” also points to this important aspect of civil wars. In interstate conflicts the role of the population may be important in the sense that the government needs to listen to its people, but the two governments at war do not (or at least not often) strive for the loyalty of the same people. It is usually enough to convince the own public about the necessity of going to war, but winning the hearts and minds of the other state’s population is not as important. Of course there are exceptions, for example wars of occupation, but in many interstate wars this is not required.

Since my theory in its present form fails to explain government violence against civilians, these results cannot be compared to the findings of Azam & Hoeffler (2002) or Valentino (2000) that are restricted to explaining government violence. However, the support for hypothesis 2 can be discussed in relation to the findings by Kalyvas (1999). He suggests that massacres can be understood as threats of reprisal for, or reactions to,

denunciation by civilians, and that one empirical implication is that massacres will be more likely in areas and periods of declining rebel control (Kalyvas 1999:251-2). This is not far from the hypothesis that rebels target civilians to a greater extent when losing battles. However, the two explanations for the same correlation are very different, but that does not mean that one of them has to be wrong. It is quite likely that violence against civilians is used both as a signal of resolve and as a way of sanctioning denunciation, and that the two reasons will be more or less important in different conflicts. With more specific data on who is targeted and what areas in the country are controlled by rebel or government forces, it would be possible to examine this in more detail.

Conclusions

In this paper I suggest that targeting of civilians in armed conflicts is sometimes used by warring parties as a signal of resolve when losing battles in order to alter the bargaining range for the future. The war itself is viewed as an ongoing bargaining process where the parties constantly update their beliefs about each other's capabilities and resolve, and about the expected outcome of the conflict. When a party is losing battles it reveals information about its military capabilities and in order to compensate for that the actor can signal a strong determination to continue to fight by targeting civilians (given the assumption that targeting civilians is politically costly). The findings give weak support to the general hypothesis that targeting of civilians should be more likely when there is battlefield asymmetry. Stronger support is found for the hypothesis that rebels are more sensitive than governments to losing battles, and that the more a rebel group is losing the more civilians it is likely to target. The results are merely tentative, but they imply that at least rebel groups use violence against civilians as a strategy when they are not capable of winning battles. Further research is needed both to test the hypothesis on a larger dataset, and to develop explanations for government violence in this context.

Another step in improving the theory will be to formalise the model, which would enable a better assessment of the strategic interaction between the warring parties. The decision to target civilians is likely to depend on the expected reaction by the other party. By taking that into account the prediction of violence may also be improved. The conclusion Azam (2002:132) draws from studying looting and violence against civilians is that "a proper theory of war and conflict should not focus on the fighting proper but

should put a lot of emphasis on looting and violence against civilians in general as the main activity of soldiers during a war". My conclusion is rather that we need to study how the fighting proper and targeting civilians are related to each other and how strategy choices are related to the interaction of the warring parties.

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