Why Insurgents Kill Civilians in Capital Cities: A Disaggregated Analysis of Mechanisms and Trends*

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December 31, 2017

Forthcoming in *Political Geography*

Abstract

Research into the causes of violence against civilians has increased significantly in recent years, yet the mechanisms governing spatial patterns of victimization remain poorly understood. My investigation explores if and why one specific locality, capital cities, experiences a higher frequency of violence against civilians perpetrated by armed insurgent organizations. I argue that the political value associated with capitals allows these groups to asymmetrically impose higher costs on the regime by targeting civilians in these localities. I lay out and validate three specific mechanisms to explain this pattern: elite coercion, popular intimidation, and international persuasion. In the first scenario insurgents aim to influence domestic elites directly. In the second, they aim is to affect domestic civilians' resolve. In the third, they seek to influence international audiences. Using new geolocated global atrocities data for the years 1996-2009, I evaluate this linkage by employing different methodological approaches and accounting for potential reporting biases. Finally, I show that ethnic and secessionist wars are more likely to experience atrocities in the capital compared with other conflicts. The findings illustrate potential benefits from explaining the temporal and spatial variation in violence by insurgents, with a focus on strategic conditions and power asymmetries.

Keywords: Political violence; Civilian Victimization; Conflict; Spatial analysis

Running Title: **Why Insurgents Kill Civilians in Capital Cities**

*The author would like to thank John Freeman, James Hollyer, Ron Krebs, Jim Ron, Anoop Sarbahi, participants in the *Comparative Politics Colloquium* at the University of Minnesota and the *Variations in Violence* panel at the International Studies Association Annual Conference, and Ben Bagozzi for their invaluable input.

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On March 19, 2015, two armed men entered a museum in Tunis, the capital of Tunisia, and opened fire, killing 19 people. The assailants specifically targeted a popular tourist destination with the alleged goal of introducing the Islamic State (IS) to the region in a manner "timed to precede a pledge of allegiance from Tunisian jihadis for maximum impact" (Botelho and Tawfeeq, 2015). This is just one of many examples of civilian victimization designed to inflict damage and fear in the government center, even when doing so is more difficult than attacking closer locations that offer a high number of civilian targets. For instance, on July 11, 2010, El-Shabaab, a rebel group based in Somalia, carried out a series of suicide bombings in Kampala, Uganda's capital, killing 74 people. The group's official justification for the bombings was to "wage war against the 6,000 collaborators," a reference to the 6,000 Ugandan peacekeepers stationed in Somalia (CNN, 2010). Rather than directly attacking these peacekeepers, El-Shabaab chose to target the Ugandan capital, located about 700 miles from the nearest Somalian border (with Kenya).

The frequency with which insurgents[1] perpetrate violence against civilians in capital cities strongly suggests that focused analysis that explains why capitals attract high levels of violence, as well as the related policy implications, is warranted. Despite a large and growing literature about intentional civilian killings by non-state actors – to which, for convenience, I refer simply as "atrocities"[2] – researchers note that more work is needed in order to understand and carefully explain one of the most basic choices insurgents make: *where* to kill civilians in a manner that maximizes political gain (e.g., Raleigh, 2014; Fjelde and Hultman, 2014). Indeed, a close examination of a *global sample* of newly released data on civilian deaths resulting from political violence at the *disaggregated* 0.5 degree geospatial grid level[3] (PITF, 2009) reveals that a staggering 24% of atrocities against civilians perpetrated by insurgents between 1996 and 2009 occurred in capital cities, although these grid cells

[1] I discuss the definition of "insurgents" in greater detail below.

[2] An atrocity incident is defined as a violent event "involving five or more non-combatant deaths," and perpetrated "in a single locality within a 24-hour period" (PITF, 2009, 5-6). This variable is discussed in more detail below and in the Supplemental Appendix.

[3] I.e., "cells" of approximately 55 x 55 kilometers around the equator, which decrease in size as one moves toward the Poles (Tollefsen et al., 2012).

constitute only a tiny fraction ($\approx 1\%$) of the total number of terrestrial grid cells worldwide.

This grid cell level evidence and the anecdotal stories mentioned above suggest an important pattern of civilian victimization, which encompasses a large number of contemporary atrocity incidents that has arguably not received sufficient attention in current analyses. Are these concentrations of violence evidence of the unique effect of these localities? More broadly, do violent insurgents make strategic choices to perpetrate significantly higher levels of victimization in these locations, and if so, why? The answers to these questions are both normatively and substantively important for scholars and policymakers interested in ameliorating the human costs of atrocities and forecasting such attacks.

Considering the importance of capitals as a source of regime legitimacy, the relative absence of research on violence in these locations is surprising. Current approaches to political violence emphasize the instrumentalist logic behind it (Valentino, 2014), namely that insurgents target civilians as one of several strategies designed to impose costs on the regime and its supporters, exhibit territorial control, and shape local civilians' behavior. An important implication of the instrumentalist logic is that insurgents will adapt their strategies in response to different geospatial characteristics (Schutte and Weidmann, 2011; Buhaug and Rød, 2006; Deiwiks, Cederman and Gleditsch, 2012). Research on insurgent attacks in Kabul, for instance, suggests that increasing indiscriminate violence closer to the capital shows the weaknesses of the target government (Schutte, Forthcoming). Numerous studies establish the motivations behind the use of violence by insurgents in urban settings (e.g., Jenkins, 1974; Raleigh and Hegre, 2009; Staniland, 2010; Fair, 2004; Kilcullen, 2006-07), but these studies stop short of explaining *civilian victimization* in these locations. Establishing clear theoretical and empirical linkages between centers of political power and patterns of victimization would contribute to the field's understanding of the motives for violence by armed non-state actors. Moreover, evidence of a systematic relationship would allow policymakers, military strategists, and state authorities to better anticipate the *timing and location* of attacks on civilians and respond to such incidents more effectively.

The relative lack of attention given to capital cities and their political importance in extent scholarship can be explained by (i) more emphasis on political power asymmetries at the state rather than the subnational level, (ii) the absence of fine-grained data allowing scholars to examine these theoretical linkages globally at the subnational levels, and (iii) the problems of relying on news-wire and nongovernmental organization reporting, which can lead to inferential biases. More studies now dedicate attention to power asymmetries at the subnational level (Fjelde and Hultman, 2014; Buhaug and Rød, 2006; McDoom, 2014), while the availability of new geolocated data and quasi-experimental methods opens doors to new investigations in this arena.

I begin by theoretically exploring the notion that capitals have a specific political value other regions within the country lack. Building on this logic, I identify and empirically validate three distinct mechanisms linking atrocities in capitals to higher political costs for the government. Using the PITF worldwide atrocities data for the years 1996-2009, which provides an exceptional *global* coverage of atrocity incidents by exact geographic location, I then validate this trend across the entire terrestrial globe, employing different methodological approaches and accounting for potential reporting biases. Finally, I evaluate how the nature of the conflict impacts the frequency of these attacks, by testing whether ethnic and separatist wars experience higher frequencies of atrocities in capital cities.

Capital Cities and Capital Violence

Concepts and Theory

In this section, I posit a theory that links (i) capital cities as politically distinctive locations within the state with, (ii) insurgents' strategies of violence towards noncombatants. As such, I treat the use of violence against civilians as one strategy of obtaining political gains from governments. The definition of "insurgents" used here thus encompasses any politically motivated, non-state groups operating against the actor who officially holds authority over the state and its institution, and without the latter's consent. This includes rebels, terrorist or-

ganizations, or any other entity that falls under this definition.[4] Understandably, hewing to this definition has both its advantages and disadvantages, but it is preferred for at least three reasons. First, precedence for studying political violence perpetrated by these organizations exists (e.g., Valentino, 2014; Fortna, 2015), which suggests that this type of analysis has been proven useful in the past. Second, many of these groups – e.g., IS, El-Shabaab, the Democratic Forces for the Liberation of Rwanda (FDLR) or the Armed Islamic Group in Algeria (GIA) – employed a combined strategy that includes both operating against military objectives and targeting noncombatants in regions with large concentrations of civilians. Third, this definition corresponds to a variety of conflict-intensity levels, ranging from terrorist attacks to large-scale massacres.

The idea that insurgents use violence against civilians to obtain strategic goals is firmly established in the extant literature (e.g., Kalyvas, 2006; Valentino, 2004; Wood, 2010). Previous studies linked violence against civilians to factors such as asymmetry of control (McDoom, 2014; Kalyvas, 2006, 111-146) and ethnic settlement patterns (Fjelde and Hultman, 2014), and argued that insurgents seek to maximize the damage their attacks inflict on the regime (Hultman, 2007; Wood, 2010). Building on these studies, the emphasis is not on attacking capitals to conquer them or to destroy specific structures, but rather on attacking people to generate political costs. By targeting noncombatants, these groups signal their resolve (Kydd and Walter, 2006) and inflict higher costs on the government compared with other attack types that do not involve intentional civilian casualties. Correspondingly, governments are more likely to face and respond to international and domestic pressures if civilians are being harmed (Hultman, 2007). It is also important to distinguish such deliberate assaults from other attacks where civilian deaths occur as "collateral damages," e.g., when insurgents aim to kill soldiers and some civilians are hurt as a result. Other studies, however, show that attacks on civilians can generate the opposite effect, increasing civilian resolve and support for their leaders, and resulting with right-wing governments (e.g., Fortna, 2015). By

[4]Pro-government militias and similar auxiliary troops are not included because these groups are defined as state-sanctioned.

arguing that this violence is used strategically, I refer to the idea that insurgents intentionally target civilians "when they *perceive* it to be both necessary and effective" (Valentino, 2004, 67, emphasis added).

Building on this definition of strategic targeting, we should expect that insurgents will use violence against noncombatants where it generates the greatest impact. Attacking civilians in urban areas allows a group to efficiently allocate its resources and obtain higher returns, especially considering that the majority of the world's population now resides in cities (Worldwatch-Institute, 2007). Moreover, because capitals are the nation's political and economical centers, insurgents aiming to mount a significant challenge to the state or highlight the group's relevance must be able to exert power not only in urban areas, but specifically in the capital. As Jenkins writes, "the bearded men who took to the hills in the early sixties were still there in the late sixties, but they had advanced no further. They controlled the mountaintops; the government against which they fought still controlled the nations; no cities had been encircled" (1974, 2). Moreover, while urban insurgents make the strategic choice to operate or target civilians in the capital, rural insurgents frequently choose to target civilians in the capital as part of a broader repertoire of strategies designed to show resolve and as a display of force. These killings are especially likely if the group suffers battle loses (Wood, 2010). For example, the vigorous offensive of the Guatemalan army against insurgents in 1966-67 resulted in an increased guerrilla violence in the capital, culminating with the assassination of the American ambassador in 1968 (Jenkins, 1974). Indeed, as shown in the Supplemental Appendix, repeatedly attacking civilians in the capital is associated with instability and regime breakdown (see also Raleigh and Hegre, 2009).

What makes victimization within capital cities a distinct spatial pattern of violence? Briefly stated, capitals have a unique *political value* that other locations within the state lack. Challenging the state in this center of power is thus a more effective strategy of delegitimizing the state (e.g., Crenshaw, 1981; Kydd and Walter, 2006). Insurgents choose to target capitals because doing so signals their strength and the government's inability to

protect its own or a foreign population, thereby undermining both domestic and international confidence in the incumbent regime. For example, the South Sudanese rebel leader Riek Machar stated that, "[i]f we are to remove the dictator, [the capital] Juba is a target" (The-East-African, 2014). Similarly, in justifying a series of suicide bombings in Moscow, the self-proclaimed "Emir of the Caucasus Emirate" Doku Umarov claimed that the purpose of the attacks was to strike as close to home as possible, because "ordinary Russians only knew the war in the Caucasus from television" (Walker, 2010). Moreover, this ability to inflict higher costs will be *asymmetric*, because in most cases – and due to the international and domestic importance of capitals to legitimizing the regime in power – insurgents rarely have a "capital city equivalent" that the government can target in retaliation. Because this value is inherently emblematic, it is unlikely to be captured by standard indicators of economic worth or population density.

Discussion of Causal Mechanisms

Attacking civilians in the capital can impact the regime through several pathways. Below, I discuss and empirically confirm three specific mechanisms linking violence in capital cities to political costs, which I term *elite coercion*, *popular intimidation*, and *international persuasion*. In common to these three mechanisms is their broad ability to relate to a variety of different atrocities, ranging from terrorist attacks to massacres.

The *elite coercion* mechanism operates in situations where atrocities against civilians are perpetrated to influence political elites. Especially in the developing world, elites and other groups that constitute the regime's most important source of support are likely to reside in the capital (Raleigh and Hegre, 2009), especially if official policies favor urban centers (Wallace, 2013). From this perspective, targeting the capital "brings the war home" to these elites. In these situations, insurgents might use indiscriminate violence in the capital because they hope to harm elites in order to *coerce* them to negotiate, but lack the ability to distinguish between regime functionaries and innocent bystanders (Kalyvas, 2006, 148-149). Insurgent organizations might also be formed as part of an inter-elite "contest" and thus aim

to use violence against other ethnic elites as a show of force (Raleigh, 2014). By punctuating economic activity, such attacks also cause financial losses to cliques and groups that control these resources and depend on the revenues obtained by trading in them. By attacking civilians in the capital, these factors help an insurgent group to pressure elites to adopt a more favorable position on the group's aims.

Because there are several mechanisms at work in national capitals, validating this mechanism requires one to identify locations where elite coercion is the primary motivation for violence. As the state apparatus in a given region is located in these cities (Koren and Sarbahi, Forthcoming), *regional* capitals provide a good case for testing the elite coercion mechanism's validity. At the same time, international presence is likely to be relatively low in regional capitals and other cities within the state, which do not enjoy the status of national capitals. Attacks in regional capitals, especially those located in rural areas, are also less likely to receive media coverage (Weidmann, 2016). Therefore, the political costs arising from civilian victimization in these localities are likely the result of the elite coercion mechanism.

To test this mechanism's validity at the local level and across different contexts I rely on quantitative evidence from four Asian countries – Afghanistan, Pakistan, India, and Iraq. Afghanistan and Iraq are both afflicted by long civil wars and international powers interventions, while both India and Pakistan have experienced low intensity rebellions for decades. These four countries therefore provide a good illustration of where atrocities against civilians concentrate across different contexts and conflict types. Figures 1 – 4 each report a map of insurgent atrocities' frequency by location for each country between 1996 and 2009 (PITF, 2009). In addition to the number of atrocities (marked by circles whose size corresponds to attack frequency), each map plots the location of regional or national capitals (marked by triangles), alongside and other cities without political importance (marked by squares). Information on cities was obtained from the World Cities Database (coded by SimpleMaps, 2015), which records 7,300 medium-sized or greater towns worldwide. A given

city's designation as a regional capital was manually recorded by the author.[5]

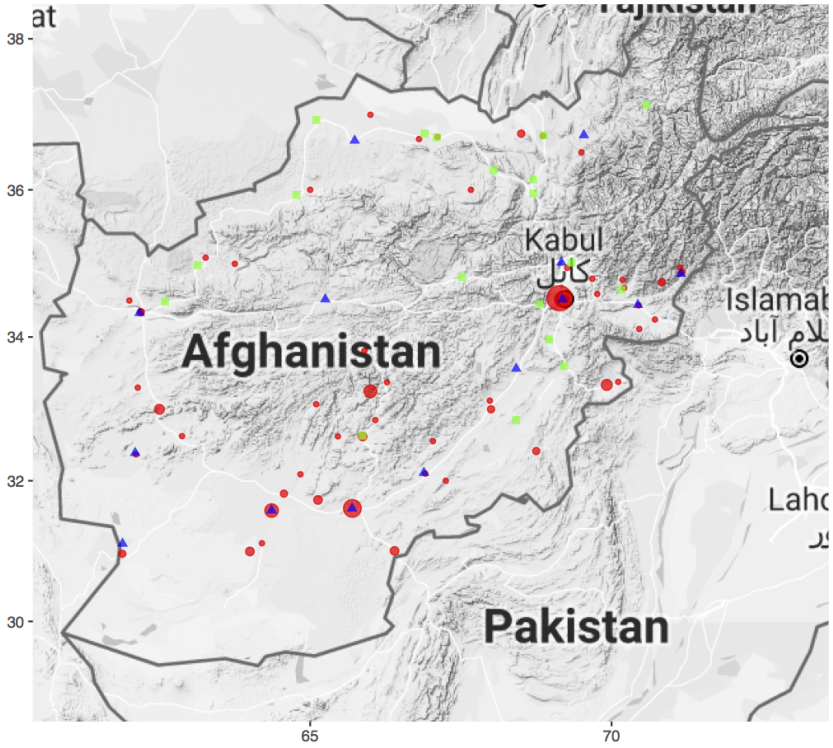


Figure 1: Atrocities by location in Afghanistan

Legend: ▲ District capital ■ City ● Number of atrocities

These maps suggest that regional capitals experience higher atrocity frequencies compared with other locations, urban or rural. However, to verify whether these trends are significant, Table 1 statistically estimates whether regional capitals in these four countries systematically experienced a higher frequency of insurgent atrocities. The dependent variable in each model measures the number of insurgent atrocities occurring in a given 0.5∘ x 0.5∘ grid cell during a given year (PITF, 2009). The variable *reg. capital* codes whether a

[5]National capitals are coded because they serve as the regional capitals of their respective provinces in each country.

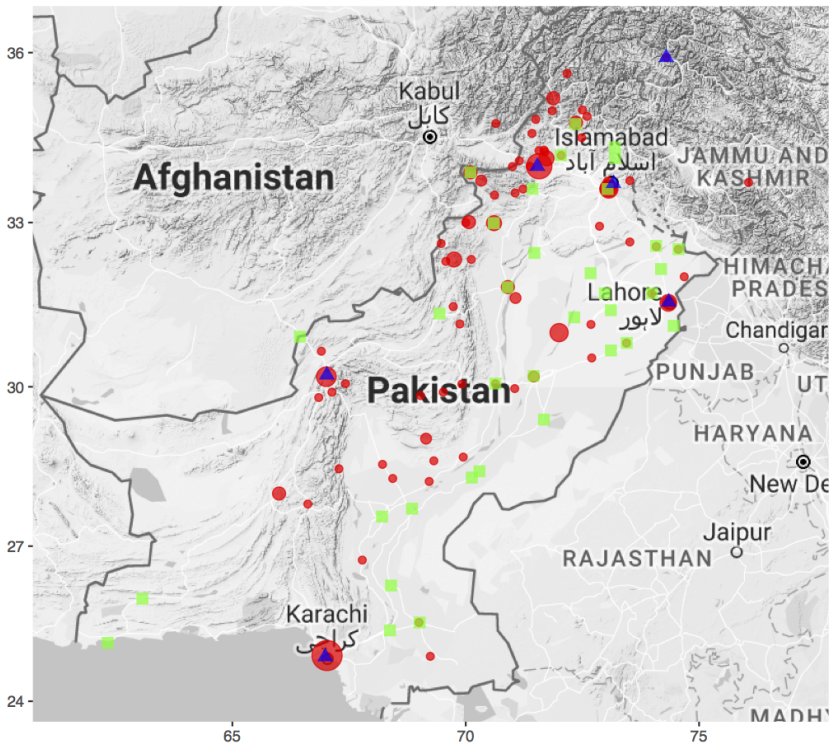


Figure 2: Atrocities by location in Pakistan

Legend: ▲ District capital ■ City ● Number of atrocities

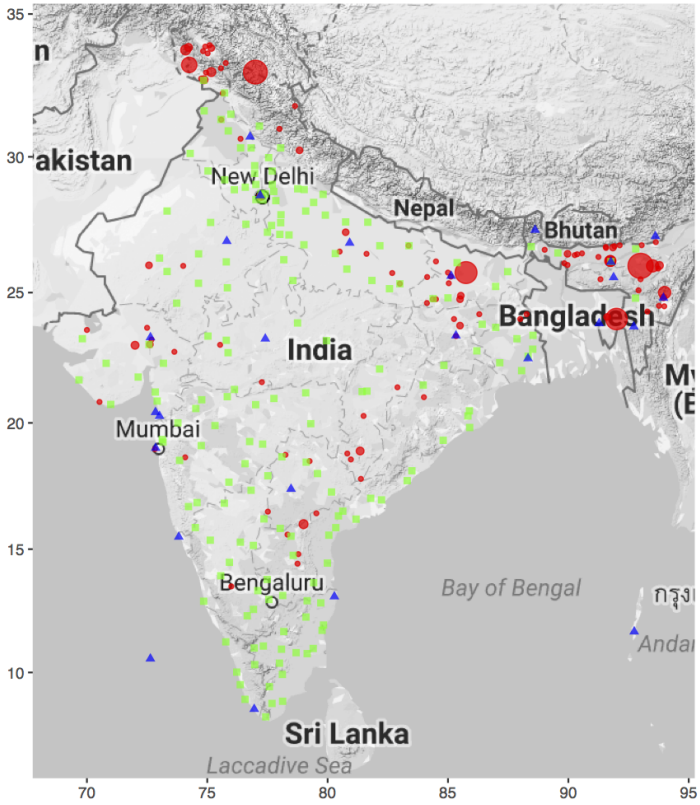


Figure 3: Atrocities by location in India

Legend: ▲ District capital ■ City ● Number of atrocities

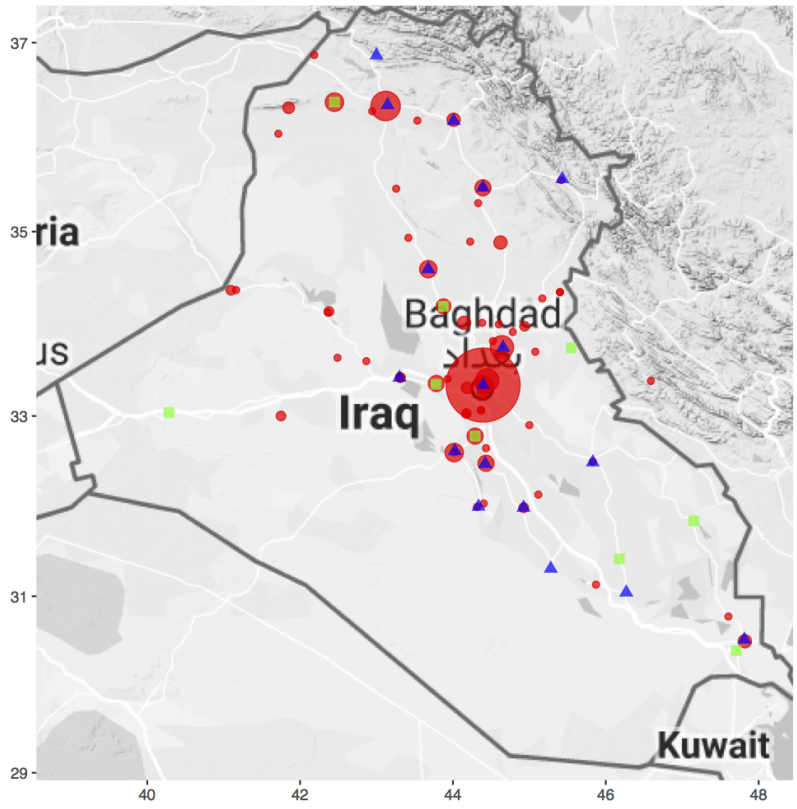


Figure 4: Atrocities by location in Iraq

Legend: ▲ District capital ■ City ● Number of atrocities

given grid cell contained a regional capital or not. Correspondingly, the variable *city* codes whether a given grid cell contained a city coded by the World Cities Database, as described above (SimpleMaps, 2015). I also included some relevant controls, all similarly measured at the 0.5∘ cell level and lagged by one year, to account for conflict dependencies and population densities. Because *insurgent atrocities* is a count variable, I rely on negative binomial regressions to model the effect of these different covariates. For each of the four countries, two models are estimated: a baseline model that includes only the main explanatory variables *reg. capital* and *city*; and a full model with all controls. To account for temporal dependencies, all models include fixed effects by year. Due to space constraints, a detailed discussion of the dependent variable, controls, and methods used is provided in the Data and Methods section, Supplemental Appendix.

As Table 1 clearly shows, regional capitals experience a significantly higher number of insurgent atrocities in all models and across all four countries. In comparison, cities and towns experience a similar robust relationship in only two countries, India and Iraq. These findings support the argument that insurgents frequently attack regional capitals to influence elites and state officials residing therein, thus confirming the elite coercion mechanism.

The *popular intimidation* mechanism operates where insurgents use violence in order to generate "mass fear" among the civilians (Crenshaw, 1981; Kydd and Walter, 2006). Attacks in the capital city – a major source of regime power – show not only that the government does not hold a monopoly of violence, but also that it is incapable of defending its own citizens where is should be most able to do so. The insurgents thus hope that their actions will *intimidate* the civilians into pressuring the regime to negotiate with the group (Kydd and Walter, 2006), or at least withhold their support from the government's counterinsurgency efforts. This is not only the case with remote attacks such as suicide bombings or mass shooting sprees. For instance, in the few days following their 1999 assault on Freetown, Revolutionary United Front (RUF) and military junta troops executed approximately 5,000

Table 1: Negative Binomial Estimates of Insurgent Atrocities in Four Countries, 1996-2009

	Afghanistan		**Pakistan**		**India**		**Iraq**	
	Baseline	Full	Baseline	Full	Baseline	Full	Baseline	Full
Reg. capital	2.790***	1.378***	2.002**	1.451**	1.739***	1.352***	1.476***	0.641**
	(0.473)	(0.433)	(0.838)	(0.684)	(0.436)	(0.317)	(0.389)	(0.325)
City	0.667	−0.133	1.153**	0.117	0.587***	0.615***	2.412***	1.986***
	(0.417)	(0.401)	(0.479)	(0.457)	(0.207)	(0.193)	(0.368)	(0.320)
Civil conflict	–	0.941	–	−0.706	–	0.965***	–	30.442
		(0.759)		(0.622)		(0.224)		(2,719,245.000)
Atrocities	–	1.257***	–	0.816***	–	2.141***	–	0.077***
		(0.161)		(0.299)		(0.147)		(0.018)
Population[1]	–	0.513***	–	0.756***	–	0.217***	–	0.394***
		(0.109)		(0.169)		(0.073)		(0.104)
Constant	−2.715***	−9.675***	−30.336	−43.390	−4.793***	−8.688***	−2.612***	−37.351
	(0.289)	(1.388)	(2,301,854)	(25,540,117)	(0.361)	(1.034)	(0.285)	(2,719,245)
N	3,584		1,704		17,038		2,408	
AIC	897.21	793.17	413.886	373.39	2,788.32	2,555.75	910.07	867.68

Note: *p<0.1; **p<0.05; ***p<0.01; year fixed effects included in each regression, though not reported here. All independent variables are lagged by one year.

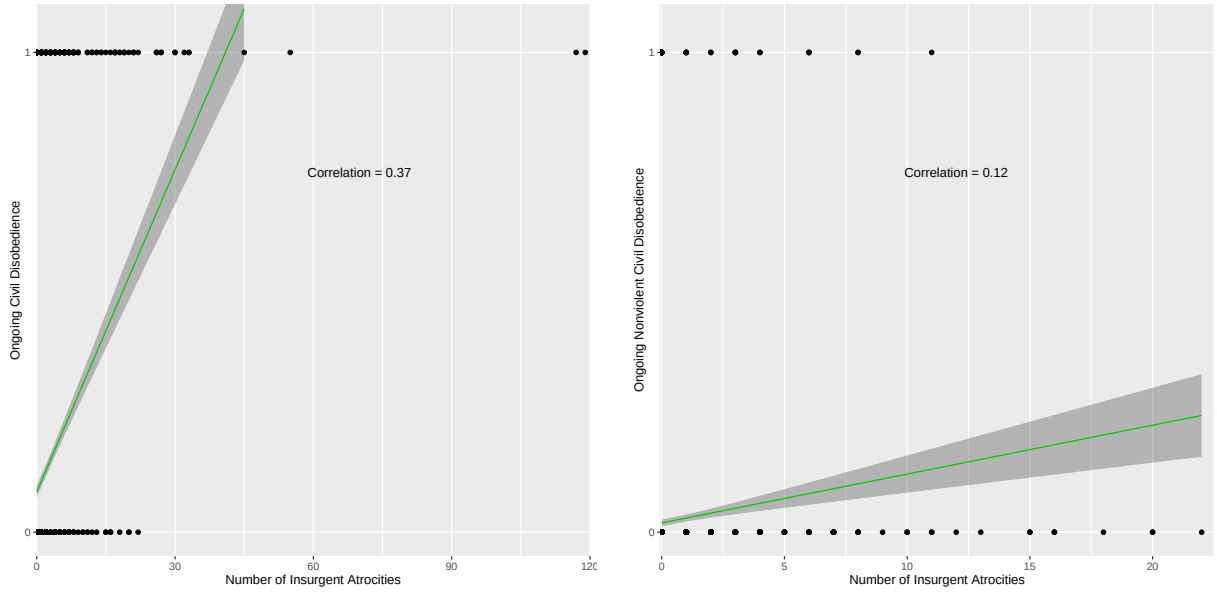
[1] Natural log

civilians blamed for being government "collaborators," an arguably unprecedented number of noncombatant casualties for a single campaign in almost eight years of civil war (Doyle, 1999). The brutal violence's main aim was to pressure the civilians in the capital to withhold popular support from the official government of Sierra Leone, thus significantly impacting the latter's legitimacy to rule the country.

If the popular intimidation mechanism is valid, then one would expect the civilians to show more discontent after experiencing a large number of atrocities by insurgents. To illustrate this relationship, Figure 5 plots the correlations between ongoing civil disobedience campaigns obtained from the NAVCO dataset (Chenoweth and Lewis, 2013) and the number of atrocities by insurgents (PITF, 2009) within a given country for all countries experiencing civil disobedience between 1996 and 2007.[6] The left plot shows all civil disobedience campaigns. The right plot reports only nonviolent campaigns, to account for the possibility that violent campaigns were endogenous with the number of insurgent atrocities. As Figure 5 shows, the correlations between insurgent atrocities and civil disobedience are substantive: $r = 0.37$ for all campaigns, and $r = 0.12$ for nonviolent campaigns.

Next, I statistically estimate whether the number of insurgent atrocities the previous year has a significant effect on the likelihood of civil disobedience using logistic regression (logit) in Table 2. I begin by evaluating the effect of lagged insurgent atrocities on all civil disobedience campaigns, and then again on specifically nonviolent ones. In each case, a baseline model with only *insurgent atrocities* and fixed effects by year is estimated first, and then a second, controls inclusive model. Because the unit of analysis in these models is the country-year, these (lagged) controls include socioeconomic and political indicators of political violence highlighted by past research (e.g., Raleigh, 2014; Wallace, 2013), such as ongoing civil war (Gleditsch et al., 2002), regime openness as measured by the Polity2 indicator (Marshall, Jaggers and Gurr, 2013), and gross domestic product per capita (World-Bank, 2013). Again, due to space constraints, these variables are discussed in the Data and

[6]The temporal period for which information on both measures was available.



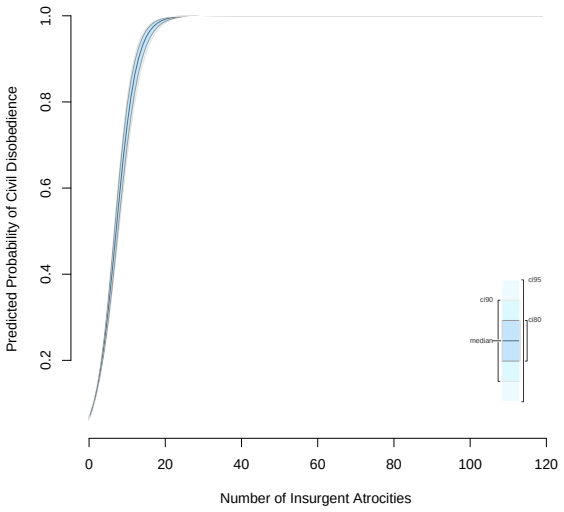
All civil disobedience campaigns Nonviolent campaigns only

Figure 5: Correlations between ongoing civil disobedience and insurgent atrocities the previous year

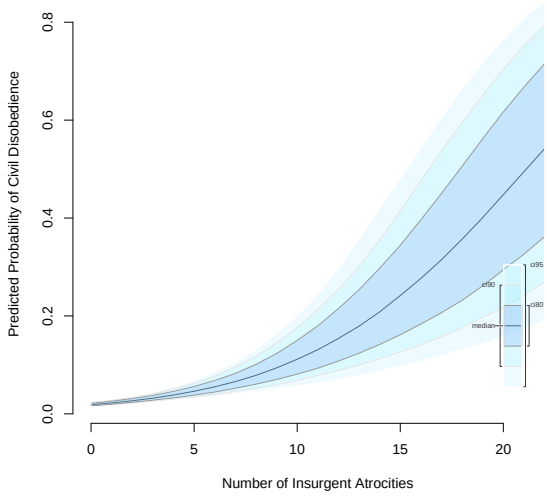
Methods section, Supplemental Appendix.

As Table 2 shows, insurgent atrocities the previous year have a statistically significant effect (to at least $p < 0.05$) on civil disobedience (violent and nonviolent), even after benchmark socioeconomic and political factors are taken into account. Moreover, as Figure 6 illustrates, this effect is substantive – changing the variable *insurgent atrocities* from its minimal to its maximal value increases the average predicted probability of civil disobedience by a staggering 100% for all campaigns, and by 10% (full) to 50% (baseline) for nonviolent campaigns (for each plot, 80%, 90%, and 95% confidence intervals are reported). These analysis' findings suggest that insurgent atrocities have a strong effect on pushing civilians to mobilize against the regime, thus validating the popular intimidation mechanism.

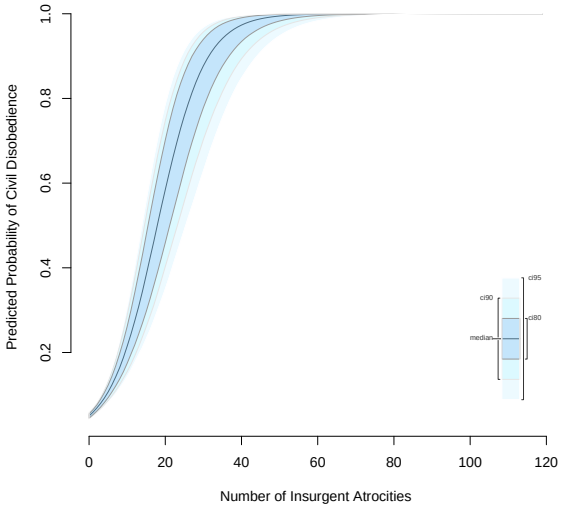
The third mechanism, *international persuasion*, operates when insurgents target the capital to hurt, or at least threaten, the citizens of other countries (e.g., Kydd and Walter, 2006). Diplomatic envoys, non-government organizations, foreign investors, and tourists are



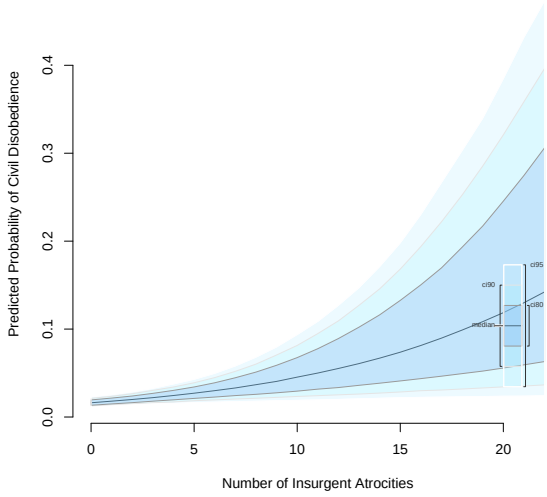
All civil disobedience campaigns – baseline



Nonviolent campaigns only – baseline



All civil disobedience campaigns – full



Nonviolent campaigns only – full

Figure 6: Predicted change in probability of civil disobedience

Table 2: Logit Estimates of Civil Disobedience Campaigns, 1996-2007

	All Campaigns		**Nonviolent campaigns**	
	Baseline	Full	Baseline	Full
Insurgent atrocities	0.372***	0.163***	0.187***	0.105**
	(0.033)	(0.029)	(0.042)	(0.049)
Civil conflict	–	2.844***	–	1.625***
		(0.212)		(0.379)
Polity2	–	-0.023	–	-0.046***
		(0.017)		(0.027)
GDP pc[1]	–	-0.002	–	-0.04
		(0.086)		(0.136)
Constant	-2.812***	-3.429***	-3.608***	-3.449***
	(0.173)	(0.753)	(0.264)	(1.173)
N	2,041	1,702	1,865	1,539
AIC	1,119.9	797.2	416.4	350.0

Note: *p<0.1; **p<0.05; ***p<0.01; year fixed effects included in each regression, though not reported here. All independent variables are lagged by one year.

[1] Natural log

all likely to be based in the capital. By harming foreign citizens, insurgents can generate international impact, which might *persuade* the governments of their victims to pressure the targeted regime to settle with these groups. The embassies of other countries are also located in the capital, which can expand the international impact of an atrocity, especially if the embassies themselves are the target.

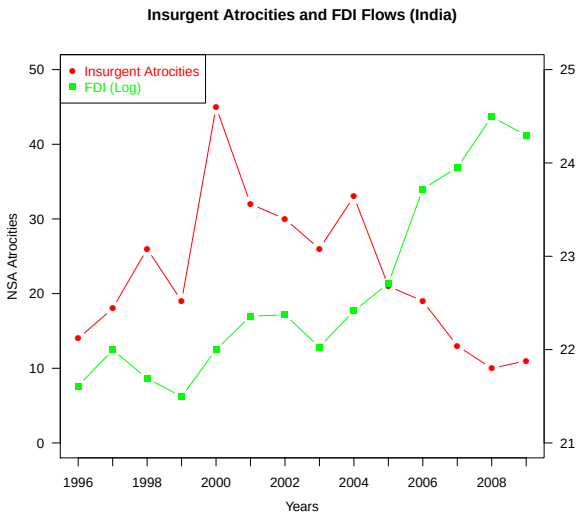
This mechanism operates through both negative and positive pathways. From a negative perspective, violence in the capital punctuates economic operations, which can cause panic among investors and undermine the belief in the regime's ability to maintain a continuous, uninterrupted flow of these resources, more than would an attack on extraction sites such as ore mines or even oil wells (Basedau and Pierskalla, 2014; Buhaug and Rød, 2006). This pathway might be especially salient when the harmed individuals are the citizens of developed democracies, because these countries are more susceptible to attrition (e.g., Kydd and Walter, 2006), and at the same time have more international economic and political leverage.

From a positive perspective, targeting capitals facilitates the group's reach to a larger

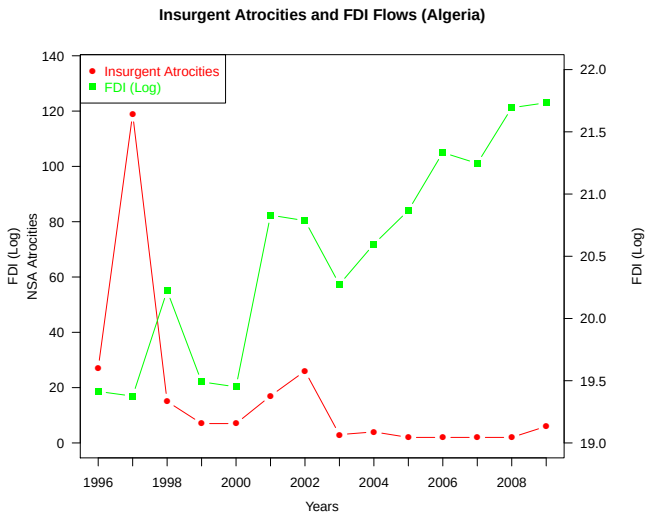
audience of potential recruits and donors. For instance, IS volunteers tend to hail not from poor countries, but rather from wealthier states, where they observe IS's actions via social media channels and come to identify with its goals (Benmelech and Klor, 2016). In both cases, by directly affecting international audiences, killing civilians in the capital is more likely to generate strong international influence on the government's behavior.

Statistically evaluating the international persuasion mechanism is somewhat more complicated due to the different levels of analysis at work. Nevertheless quantitative data from different countries support this mechanism's validity. For instance, if the insurgents aim to increase political costs by pressuring international companies to withdraw their investment, then we should expect that foreign direct investment (FDI) will decrease with higher number of insurgent atrocities. To this end, Figure 7 plots both insurgent atrocity (PITF, 2009) and FDI (World-Bank, 2013) trends for the 1996-2009 period in four countries from different world regions – India, Israel, Algeria, and Colombia – that attract different FDI types, ranging from investment in technology and human capital to oil extraction. In every case, FDI noticeably increases when the number of insurgent atrocities fall, and vice versa.

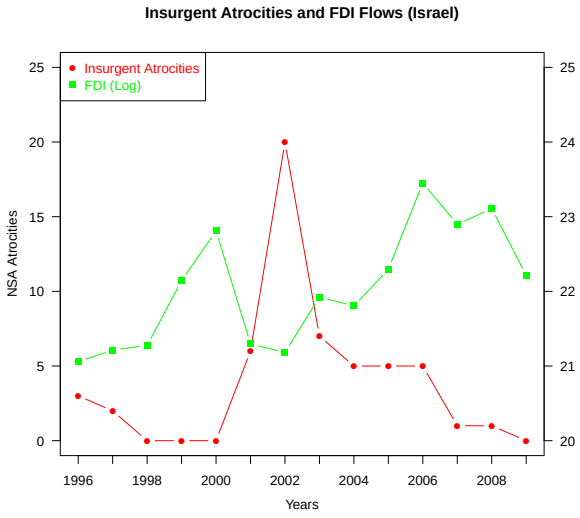
Another way of evaluating the international persuasion mechanism's effect is by looking at diplomatic activity levels (Kydd and Walter, 2006). For instance, one might expect that capitals with *more* international presence should also experience more insurgent attacks against civilians, as the insurgents seek to make their agenda known to wide international audiences. To illustrate this relationship, Figure 8 plots the (log) of the years in which a 0.5∘ cell located within a given country's capital experienced at least one atrocity by insurgents during the 1996-2009 period (PITF, 2009) against the average levels of diplomatic activity – i.e. consulates, embassies, and other envoys – within a given country (Bayer, 2011), with and without outliers on insurgent atrocities, and with 95% confidence intervals. To address potential endogeneity concerns, I used diplomatic activity for 1995. As both plots show,



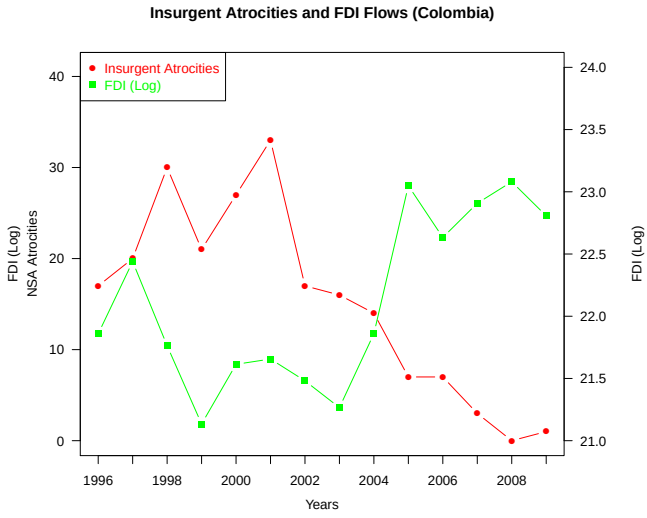
India



Algeria



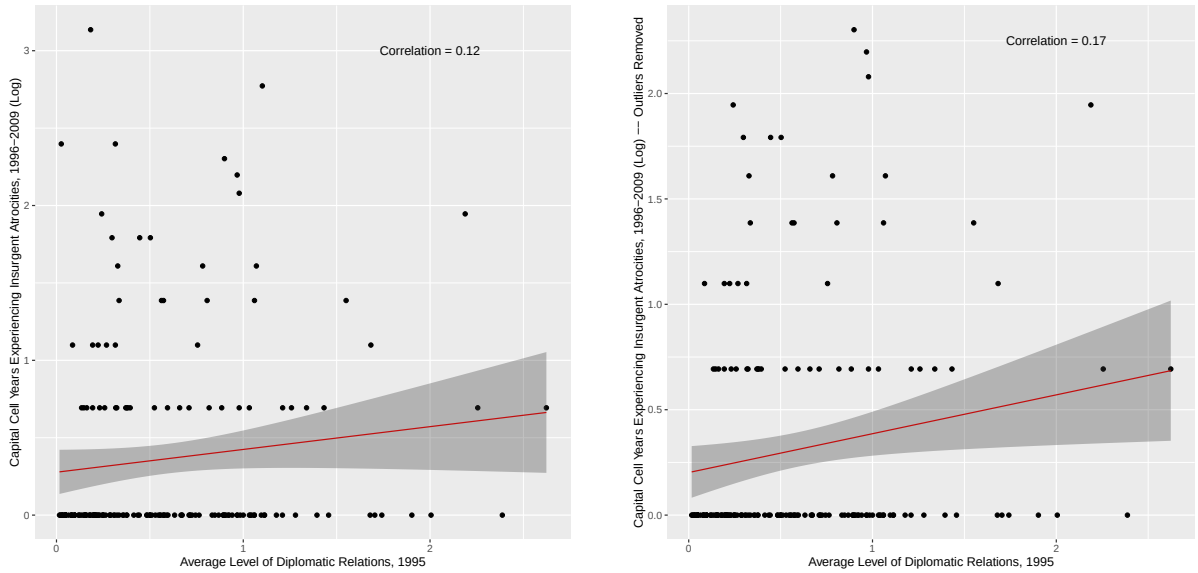
Israel



Colombia

Figure 7: FDI flows and insurgent atrocities

the number of atrocity incidents increases with higher levels of both international presence measures by ≈1.2 incidents, and ≈1.7 incidents when only countries that experienced on average 10 or fewer atrocities in the capital during the 1996-2009 period.



(a) All insurgent atrocities (b) Outliers removed

Figure 8: International diplomatic activity by country (1995) and the average number of insurgent atrocities in the capital[1]

[1] Natural log

These three mechanisms illustrate how the political value of capitals gives armed insurgents offensive capabilities by asymmetrically increasing their ability to inflict costs upon the (typically stronger) government. By pursuing more diffuse styles of combat and employing a higher tactical variety, modern-day insurgents are thus likely to benefit from exploiting the special political value of capitals to their advantage. For groups that target civilians to impose higher costs on the regime (Hultman, 2007) or compensate for their relative military weakness (Wood, 2010), and especially in cases where the regime cannot retaliate against the group and target its power stronghold, this political value of capitals makes perpetrating atrocities in these localities a uniformly attractive strategy, all else equal.[7] Successful

[7]To provide a more rigid exposition of this argument, I illustrate this process formally using the Colonel

attacks on civilians in the capital thus undermine the regime's legitimacy and expose its failure to provide adequate protection, both domestically and internationally. This argument accordingly suggests the following hypothesis:

- H1: Around the globe, the frequency of atrocities against civilians perpetrated by insurgents increases in capital cities.

Global Analysis

In this section, I conduct two stages of global analysis: (i) coarsened exact score matching exercise used to identify the *causal* impact of capital cities on atrocities by insurgents, and (ii) zero-inflated negative binomial (ZINB) regressions estimated on a global sample of all cells. Due to space to space constraints, the complete Data and Methods section is reported in the Supplemental Appendix, while a brief discussion of the dependent and main explanatory variables is provided here.

The dependent variable, *insurgent atrocities*, is operationalized as the yearly (t) count of intentional atrocities – or deliberate attacks done for political purposes – committed against civilians within a given cell by insurgent organizations unsanctioned by the regime. Atrocities are defined as attacks with at least five civilian deaths occurring within a 24 hour period (PITF, 2009). For *insurgent atrocities*, there were 2,708 atrocities by insurgents against civilians that affected 901 cells within my sample, with an average, standard deviation, and range of 0.003, 0.142, and 0⇔60, respectively. To account for the excess of structural zeros (more than 99%) within the *insurgent atrocities* variable as well as this variable's count nature, I use a zero-inflated negative binomial (ZINB) model in all global analysis regressions. Data availability limits my sample to the 1996-2009 period. Hence, while these analyses are useful for scholars and policymakers aiming to understand and forestall attacks by modern-day insurgents and their tactical variety, they are perhaps less valid for scholars studying political violence in the Cold War years. This variable also draws primarily on

Blotto model in the Supplemental Appendix.

English news sources, which might affect coverage in some world regions. Nevertheless, the threshold of five or more civilian deaths helps to ensure that an atrocity incident will be recorded by English news services such as the BBC, while the methodology employed below and in the Supplemental Appendix accounts for these issues empirically.

The main explanatory variable, *capital*, is measured at the same 0.5 x 0.5 decimal degree cell resolution as the dependent variable. This variable is specifically operationalized to include cells located within a distance that is less than 55 kilometers of the exact coordinates of the nation's capital, which corresponds to the size of an edge of a cell at the equator. For my 1996-2009 cell year sample, a total of 620 cells were located in capital cities, with a mean and standard deviation of 0.009 and 0.097, respectively, for the variable *capital*. To verify that the effect of *capital* is not driven by other factors, in the different stages, several lagged cell year level controls are added to the count and inflation stages of my ZINB model specifications. These cell levels controls account for a large number of benchmark explanations for conflict, including: atrocity lags; ongoing civil war Tollefsen et al. (2012); gross cell product (GCP) and population densities (Nordhaus, 2006); travel time to the nearest city, distance to border, and grid cell area (Tollefsen et al., 2012); and urbanization levels (Bontemps, Defourny and Van Bogaert, 2009). Additional country level controls include: political openness (Marshall, Jaggers and Gurr, 2013); and oil production (Ross, 2011).

Matched Sample Analysis

To generate empirical evidence of a causal relationship between capital cities and insurgent atrocities, I use coarsened exact score matching (CEM). Similarly to other approaches such as propensity score matching, CEM uses different factors to divide a given sample into highly similar "treatment" and "control" groups (Iacus, King and Porro, 2012). A key aspect of observational data is that the treatment and assignment mechanisms are ambiguous and, unlike in experiments, are not controlled by the researcher. Matching controls for confounding influences prior to treatment assignment. As a result, the use of different matching approaches became prevalent in political science (Iacus, King and Porro, 2012). However, by

attempting to approximate a completely randomized experiment, some matching methods fix the variance *ex ante*, which means that these methods frequently increase rather than decrease the imbalances in the data. CEM, in contrast, allows the investigator to relax most assumptions about the data generation process, which can reduce model dependence and bias and improve efficiency (Iacus, King and Porro, 2012).

Considering the challenges involved with accounting for reporting biases in news-wire and NGO sourced event data (Weidmann, 2016), to verify that the effect of *capital* is not the result of such biases, this analysis is carried out in three phases. First, to account for the access of zeros in the sample, only cells located in countries that experienced at least one insurgent atrocity during the 1996-2009 period are kept to limit to number of cells that might not experience atrocities due to factors such as a harmony of interest in the matched samples. Next, building on studies that emphasize the rural-urban discrepancy in respect to atrocity reporting (Weidmann, 2016), I subset the cells most likely to experience some form of reporting bias based on two distinct criteria. One subset consists solely of cells denoted as having any level of urbanization (Bontemps, Defourny and Van Bogaert, 2009). Building on studies that highlight linkages between nighttime light levels and development at the highly localized level (Koren and Sarbahi, Forthcoming), the second subset includes only cells with some nighttime light emissions.[8] The specific focus on urbanized or developed areas additionally accounts for the fact that these cells might are likely to experience atrocities due to higher target density, as more than 50% of the world's population resides in cities (Worldwatch-Institute, 2007). Finally, I use CEM to create two matched samples within these respective subsets consisting of cells that are equally likely to exhibit reporting bias.

A binary measure of *insurgent atrocities*, denoting whether *any* atrocities by insurgents occurred in a given cell – *insurgent atrocities (bin.)* – was then logistically regressed on *capital* in Tables 3 and 4. The effect of *capital* on *insurgent atrocities (bin.)* was evaluated first only on the matched sample, and then extrapolated to the entire sample. This analysis

[8]I discuss this measure as a proxy for reporting bias locally in detail in the Supplemental Appendix.

was repeated twice; first on all cell years in the 1996-2009 sample, and again on cells for which all indicator values were collapsed for this entire temporal period. The criteria for matching were gross cell product, population density, travel time to the nearest city with more than 50,000 inhabitants, and distance to the nearest border (matching plots are reported in the Supplemental Appendix). Importantly, the variables used for matching are all measured at the *cell* and not country level; the matched sample is thus *practically identical* in respect to socioeconomic factors and geographic variations and – consequentially – to reporting bias. If there is no additional value to capitals over other (urban or developed) regions, then the treatment variable *capital* should have no observable effect. If, alternatively, the relationship is significant, then this confirms the argument that within the matched samples, *capital* is *intrinsically and independently* associated with a higher likelihood of atrocities; and that this effect is robust to potential biases, which will affect all cells within the matched samples equally.

Table 3: Coarsened Exact Matching Sample Analysis – Urban Cells (Treatment=*Capital*)

	Cell Years		Averaged Cell Values	
	Matched Sample Only	**Entire Sample**	**Matched Sample Only**	**Entire Sample**
Capital	1.060***	0.662***	1.078***	0.851***
	(0.187)	(0.112)	(0.240)	(0.168)
Constant	-4.625***	–	-2.386***	–
	(0.110)		(0.123)	
N	140,469		10,080	
Matched (m_t/m_c)	1,635/8,571		141/864	
Unmatched (u_t/u_c)	1,109/129,154		61/9,014	

Note: *p<0.1; **p<0.05; ***p<0.01. m_t – matched treatment group; m_c – matched control group; u_t – unmatched treatment group; u_c – unmatched control group. Matching and explanatory variables are lagged by one year.

As Tables 3 and 4 show, the effect of *capital* is positive, significant (to a $p < 0.01$) and consistent across all matched samples. These findings suggest that insurgents systematically

Table 4: Coarsened Exact Matching Sample Analysis – Nighttime Light Cells (Treatment=*Capital*)

	Cell Years		Averaged Cell Values	
	Matched Sample Only	**Entire Sample**	**Matched Sample Only**	**Entire Sample**
Capital	0.885***	0.662***	0.741***	0.642***
	(0.146)	(0.106)	(0.197)	(0.155)
Constant	-4.643***	–	-2.339***	–
	(0.065)		(0.073)	
N	297,742		25,542	
Matched (m_t/m_c)	2,633/25,234		214/2,314	
Unmatched (u_t/u_c)	990/268,885		59/22,955	

Note: *p<0.1; **p<0.05; ***p<0.01. m_t – matched treatment group; m_c – matched control group; u_t – unmatched treatment group; u_c – unmatched control group. Matching and explanatory variables are lagged by one year.

choose to target capital cities; and – importantly – that this relationship is unlikely to be driven by sampling biases and reporting issues, which should influence all observations within the matched samples equally. In other words, compared with more urbanized or developed regions that are practically identical based on socioeconomic and geospatial characteristics, capital cities are significantly more likely to experience victimization solely by virtue of being capitals.

ZINB Regression Analysis

Table 5 reports four ZINB models used to test the hypothesis derived above on a full sample consisting of all global terrestrial cells for the years 1996-2009. As Table 5 illustrates, the results strongly suggest that insurgents perpetrate more atrocities in capital cities, conditional on a cell being able to experience atrocities in year t. Model 1 reports ZINB model estimates for the effects of *capital* on *insurgent atrocities*, controlling for several lagged cell year level variables – *civil conflict*, *atrocities*, *GCP*, *border distance*, *Polity2*, *population*, and *cell area* – while accounting for a modest number of inflation factors: *civil conflict*, *population*, *travel time*, and *cell area*. The results from this limited control model suggest that, once conditioned to be a potential atrocity site in year t, capital cities are positively and significantly ($p < 0.01$) more likely to experience insurgent atrocities. The sign and significance of the coefficient for *capital* remains consistent as more cell and country year level controls are

added to both the count and inflation stages, to arrive at a fully specified model (Model 4).

Additionally, higher values on *civil conflict*, *atrocities*, *population* and *urban* as well as lower values on *GCP*, *cell area* and *border distance* predispose a given cell to experience atrocities by insurgents in the inflation stage. This stage is performing as expected, which suggests that the decision to account for inflation was correct. Vuong tests (see Supplemental Appendix) support this claim in indicating that each ZINB model reported in Table 5 is preferable to its negative binomial counterpart ($p < 0.01$). Turning to the count stages of Models 1-4, the cell level lags of conflict and atrocities are positive and significant indicators of proximate *insurgent atrocities*, as well as *travel time*, *GCP*, and *population*. The remaining coefficients were not robust in direction and/or significance across Models 1-4 and hence are not discussed here. Given the importance of forecasting to the study of atrocities (Koren, Forthcoming), I show that *capital* is a statistically significant ($p < 0.01$) *predictive* indicator of *insurgent atrocities* in the Supplemental Appendix.

To gain a better sense of the effect of *capital* on *insurgent atrocities*, Table 6 calculates the first difference change in probability for *capital* in percents with 95% confidence intervals. These quantities were calculated from the outcome stage of Model 4's estimates using 1,000 Monte Carlo simulations, and correspond to the effects of *capital* on an atrocities-prone observation. Changing a given cell to "capital" has a strong effect on this cell's probability of experiencing insurgent atrocities over a given one-year period. As Table 6 shows, all values of capital's confidence interval are positive, suggesting that this indicator produces a consistent effect on the rate of insurgent atrocities. Crucially, within my 1996-2009 sample, changing a cell's designation to "capital" makes it *more than twice as likely*, all else equal, to experience insurgent atrocities.[9]

[9]While the change of raw expected insurgent atrocities counts remains small (approximately 0.06), this is the result of the absolute rarity of atrocities across my cells as a whole. For an average country in my sample – which includes ≈347 cells – this effect is sizable.

Table 5: Zero-Inflated Negative Binomial Estimates of Insurgent Atrocities, 1996-2009

	Model 1	**Model 2**	**Model 3**	**Model 4**
Count Stage				
Capital	1.142***	0.833***	0.716***	0.721***
	(0.134)	(0.131)	(0.133)	(0.135)
Civil conflict	0.781***	0.671***	0.629***	0.626***
	(0.152)	(0.116)	(0.117)	(0.117)
Atrocities	1.810***	0.433***	0.419***	0.417***
	(0.088)	(0.041)	(0.040)	(0.040)
Urban	–	–	−0.007	−0.008
			(0.011)	(0.011)
Oil[1]	–	–	–	0.006
				(0.010)
GCP[1]	−0.229***	0.023	0.064	0.049
	(0.048)	(0.079)	(0.084)	(0.087)
Border distance[1]	−0.247***	−0.069	−0.060	−0.074
	(0.023)	(0.048)	(0.048)	(0.053)
Polity2	0.019***	0.007	0.002	−0.001
	(0.006)	(0.011)	(0.011)	(0.012)
Population[1]	0.363***	0.070	0.076	0.081
	(0.042)	(0.053)	(0.053)	(0.053)
Travel time[1]	−0.142*	0.076	0.059	0.052
	(0.075)	(0.083)	(0.084)	(0.085)
Cell area[1]	−0.246**	0.086	0.110	0.097
	(0.119)	(0.122)	(0.123)	(0.124)
Constant	−5.503***	−4.315***	−4.433***	−4.362***
	(1.067)	(1.070)	(1.060)	(1.065)
Inflation Stage				
Civil conflict	−5.051***	−1.417***	−1.514***	−1.517***
	(1.010)	(0.130)	(0.131)	(0.131)
Atrocities	–	−4.611***	−4.407***	−4.382***
		(0.535)	(0.463)	(0.455)
Urban	–	–	−0.115***	−0.115***
			(0.017)	(0.017)
Oil[1]	–	–	–	0.008
				(0.011)
GCP[1]	–	0.302***	0.515***	0.494***
		(0.090)	(0.099)	(0.103)
Border distance[1]	–	0.214***	0.218***	0.202***
		(0.052)	(0.052)	(0.055)
Polity2	–	0.005	−0.007	−0.009
		(0.012)	(0.012)	(0.012)
Population[1]	−0.652***	−0.640***	−0.645***	−0.637***
	(0.071)	(0.058)	(0.059)	(0.060)
Travel time[1]	−0.590***	−0.001	−0.078	−0.085
	(0.144)	(0.099)	(0.099)	(0.100)
Cell area[1]	−0.351*	0.192	0.222	0.211
	(0.199)	(0.143)	(0.145)	(0.145)
Constant	14.656***	8.704***	8.929***	8.954***
	(1.634)	(1.233)	(1.229)	(1.237)
N		803,795		
AIC	14,626.23	14,077.02	14,008.12	14,011.51

Note: *p<0.1; **p<0.05; ***p<0.01; year fixed effects included in each regression, though not reported here. All independent variables are lagged by one year.

[1] Natural log

Table 6: First Difference Change in Percents in Expected Insurgent Atrocities Count per Cell in Year t, Model 4 Estimates

	Expected change
Capital_{t-1}	+106.98% (+64.84% ⇔ +153.17%)
Ln GCP_{t-1}	+10.17% (−14.04 ⇔ +37.61)
$\text{Civil conflict}_{t-1}$	+88.60% (53.20% ⇔ 126.12%)
Urban_{t-1}	−0.17% (−0.56% ⇔ +0.18%)
Ln Ross oil_{t-1}	+10.36% (−15.57% ⇔ +40.20%)

Note: Percentage changes based on increasing each variable for 0 to 1 (for binary variables) or from the 10th to 90th percentile (for continuous variables), holding all other variables at their modes or means, respectively. Values in parentheses are 95% confidence intervals.

Robustness Analyses

To assess the robustness of the CEM and ZINB models' findings to a variety of confounders and modeling choices, I conduct four stages of sensitivity analyses in the Supplemental Appendix. In the first stage, additional CEM exercises are estimated on a sample of all grid cells in atrocity affected countries, and not only on the urban developed cells as analyzed in Table 3-4. In the second stage, I estimate 12 alternative ZINB models in Tables A4-A5 corresponding to Model 4 in Table 5. These regressions account for alternative modeling choices such as random and fixed effects, clustered standard errors, and the inclusion of alternative confounders such as military expenditures, freedom of the press, distance to the capital, and mountainous areas. In the third stage, I estimate six ZINB analyses accounting for the effect of large cities using a global sample consisting solely of urban cells (measured by Bontemps, Defourny and Van Bogaert, 2009), and again, for African urban cells only in Table A6. Finally, in the last stage I estimate four robustness models that include nighttime light

in both count and inflation stages to account for reporting biases in Table A7. These models are first estimated on a sample consisting of all global grid cells, and then again on a sample consisting solely of cells with some urbanization. These last two stages illustrate that the observed relationships persist in cells that are likely to experience roughly the same potential for reporting bias, and which might also have higher population densities (Weidmann, 2016; Raleigh and Hegre, 2009). Critically, the impact of capital on insurgent atrocities remains consistent across these different phases.

The Role of Conflict Type

Having identified and validated mechanisms linking capital cities to higher political costs, and after testing the impact of capitals on global insurgent atrocity patterns, the last section of this article evaluates how insurgent strategies vary according to the *nature* of the conflict. Here, I focus on two specific conflict types – ethnic and separatist – that, as previous research stipulated (e.g., Raleigh, 2014; McDoom, 2014; Denny and Walter, 2014), are more likely to involve attacks against civilians in capitals. Analyzing how conflict type impacts patterns of violence should thus provide a general sense of the conditions under which insurgent atrocities in the capital are most likely.

Research into the causes and consequences of ethnic conflict highlights the role such divisions play in engendering violence. Frequently, ethnicity directly translates to political hierarchies within the state, thus impacting a given group's socio-political inclusion, or lack thereof (Raleigh, 2014). Once constructed, ethnic identify becomes firmly established, meaning that individuals are construed as friends or foes along ethnic lines (Fjelde and Hultman, 2014). This also complicates the ability of different groups to make credible commitments as part of the political bargaining process (Denny and Walter, 2014). Groups fighting ethnic wars thus have more reasons, opportunities, and incentives to mobilize and use violence compared with groups in non-ethnic conflicts. Correspondingly, groups fighting ethnic conflicts are also more likely to targets civilians from other groups indiscriminately. Fjelde and

Hultman, for instance, argue that, "ethnicity allows for collective sanctioning of suspected enemy collaborators – through association – even when individual sympathies remain private information" (2014, 1231).

In ethnically divided countries, capitals have an additional important feature: they encapsulate the institutional power of the ruling ethnic group. Stronger regimes that hail almost exclusively from one particular ethnic group can also initiate violence more easily through their control of the state apparatus (McDoom, 2014). These factors give insurgents fighting an ethnic war an even greater incentive to attack the capital to penalize the regime. They also have fewer incentives to use violence selectively against regime supporters, because members of the ruling ethnicity are unlikely to view the insurgents' cause as just. As a result, indiscriminate violence in the capital becomes even more likely during ethnic wars; both the elite coercion and popular intimidation mechanisms come to play a greater role in these contexts. From this perspective, we should expect the frequency of insurgent atrocities in the capital to specifically increase in ethnic conflict, which suggests the following *interactive* hypothesis:

- H2: Capital cities will be associated with a significantly higher likelihood of insurgent atrocities during ethnic wars

A second context where insurgent atrocities in the capital might become more likely is during secessionist wars. Secessionist campaigns frequently arise over true or perceived economic injustice (Deiwiks, Cederman and Gleditsch, 2012), especially if the region offers valuable natural resources such as oil (Basedau and Pierskalla, 2014). Moreover, secessionist conflicts are particularly likely if seceding regions have a distinct ethnic identity and perceived ethnic discrimination (Deiwiks, Cederman and Gleditsch, 2012; Denny and Walter, 2014, 202). In many situations, however, even if they wish to take control over the state apparatus, the insurgent group is relatively weak. The only realistic option for such weaker dissidents is thus to seek autonomy for a specific region within the country (Buhaug, 2006, 694).

This suggests that, in contrast to centrist conflicts, secessionists wars should involve more violence in the capital, for several reasons. First, as mentioned above, weaker groups often turn to violence against civilians to compensate for their weakness on the battlefield (Hultman, 2007; Wood, 2010). This is especially likely in the case of roving rather than stationary insurgents (Beardsley, Gleditsch and Lo, 2015). Groups waging secessionist wars are likely to be weaker, and will thus prefer to use violence against noncombatants more frequently. Second, in contrasts to groups that fight a centrist war, insurgents fighting secessionist wars do not seek to take control of the capital. Therefore, they have fewer incentives to consider how violence in the capital will impact their legitimacy as future rulers of the state, and while they might behave less violently in regions where they hope to achieve autonomy, the capital becomes "free game." Third, the vast majority of secessionist conflicts are ethnic in nature (Denny and Walter, 2014, 202). As discussed above, insurgents fighting ethnic wars have greater incentives to kill civilians in the capital.

Such groups also use violence for economic gain. In regions with profitable natural resources, insurgents are able to directly trade with foreign companies seeking to extract these resources (Deiwiks, Cederman and Gleditsch, 2012, 294-295). By attacking civilians in the capital, insurgents can "persuade" international investors via the third mechanism discussed above to withdraw their investment from the regime, and seek alternative routes to obtain these valuable resources. This suggests a second interactive hypothesis:

- H3: Capital cities will be associated with a significantly higher likelihood of insurgent atrocities during secessionist wars

Conflict Type Analysis

I evaluate these two hypotheses on a sample consisting of all cells within countries that experienced a civil war – defined as conflicts with 1,000 or more casualties (Gleditsch et al., 2002; Denny and Walter, 2014) – for the 1996-2005 temporal period.[10] Accordingly, I add two indicators to the variables used in Model 4. Recall that H2 is an interactive hypothesis

[10]The temporal period for which data from both PITF (2009) and Denny and Walter (2014) were available.

expecting that ethnic wars will involve a higher number of insurgent atrocities in capitals compared with other civil wars. I thus add a variable coding whether a given civil war was primarily fought along ethnic lines (coded one) or not (coded zero) and interact it with *capital*. H3 is another interactive hypothesis, with the expectation that insurgent atrocities in the capital will significantly increase during secessionist conflicts. To evaluate this hypothesis, I include a variable coding whether a given civil war was defined as secessionist (coded one) or not (coded zero), and interact it with *capital*. Both variables, *ethnic war* and *sec. war*, were measured at the country level and coded by Denny and Walter (2014).[11]

This analysis is conducted in two phases. First, I re-estimate Model 4 from Table 5 on this new civil war sample. I then re-estimate Model 4 again, adding *ethnic war* and the interaction term *capital*×*ethnic war* to the model; then repeat the same analysis, this time adding *sec. war* and the interaction term *capital*×*sec. war*. The results of these ZINB analyses are reported in Models 5-7 in Table 7. In the second phase, I evaluate the effect of the same covariates on the insurgents' decision to commit *any* atrocities against civilians during civil war. This should help evaluating whether conflict nature impacts the insurgents' strategic incentives to use violence against civilians more broadly. Accordingly, as in the CEM exercises, the dependent variable, *insurgent atrocities (bin.)*, is operationalized according to whether a given cell experienced at least one insurgent atrocity during a given year (coded one) or not (coded zero). Because the resulting dependent variable is binary, I employ logistic regression (logit) in this analysis phase.

As Models 5-7 show, in line with theoretical expectations, insurgents perpetrate significantly more atrocities in capitals during ethnic wars. For comparison, grid cells located outside the capital did not exhibit any significant relationship with insurgent atrocities compared with capital cells during ethnic wars. Additionally, non-ethnic wars involved signifi-

[11] Because, from a theoretical perspective, I expect a contemporaneous effect, these two variables were not lagged.

Table 7: Model Estimates of Insurgent Atrocities during Civil Wars, 1996-2005

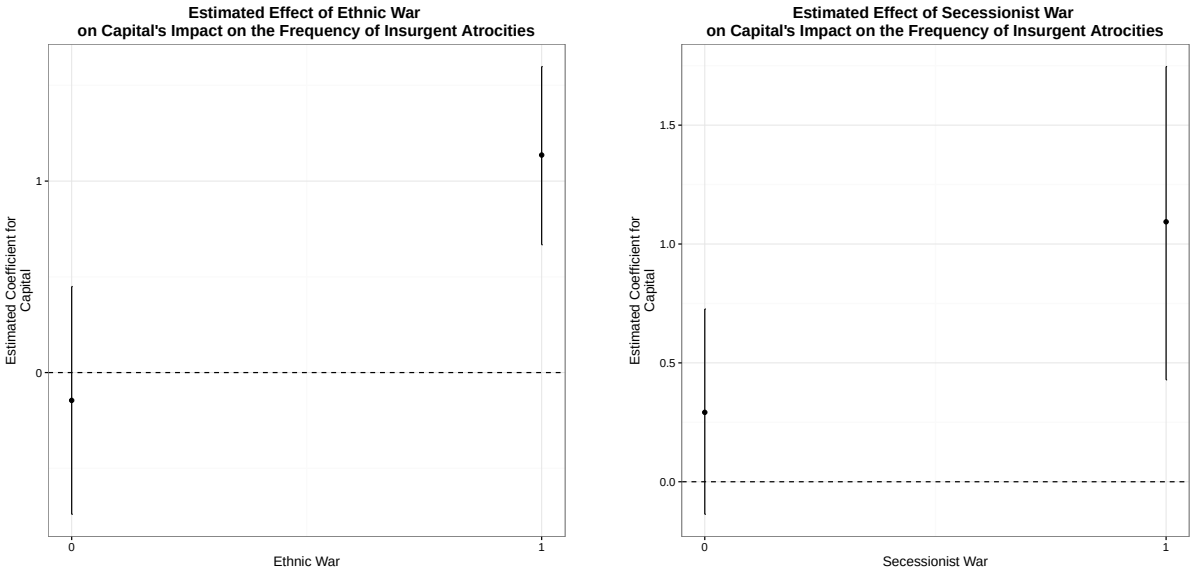
	ZINB			Logit		
	Model 5	**Model 6**	**Model 7**	**Model 5L**	**Model 6L**	**Model 7L**
Count Stage						
Capital	0.627***	−0.155	0.440**	0.673***	−0.153	0.289
	(0.184)	(0.320)	(0.205)	(0.195)	(0.302)	(0.219)
Ethnic war	–	−0.960***	–	–	−1.183***	–
		(0.127)			(0.099)	
Sec. war	–	–	−0.888***	–	–	−1.177***
			(0.108)			(0.101)
Capital×ethnic war	–	0.904**	–	–	1.286***	–
		(0.363)			(0.362)	
Capital×sec. war	–	–	0.439	–	–	0.793**
			(0.368)			(0.372)
Civil conflict	0.703***	0.685***	0.598***	1.571***	1.385***	1.489***
	(0.183)	(0.188)	(0.187)	(0.106)	(0.106)	(0.105)
Atrocities(lag)	0.314***	0.360***	0.336***	1.299***	1.278***	1.238***
	(0.038)	(0.043)	(0.040)	(0.058)	(0.057)	(0.057)
Urban	0.003	0.029**	0.011	0.053***	0.055***	0.056***
	(0.014)	(0.015)	(0.015)	(0.012)	(0.013)	(0.013)
Oil[1]	−0.033**	−0.038***	−0.007	−0.027***	−0.016**	−0.006
	(0.013)	(0.014)	(0.014)	(0.008)	(0.008)	(0.008)
GCP[1]	0.016	−0.224*	−0.113	0.065	−0.165**	−0.097
	(0.111)	(0.117)	(0.116)	(0.075)	(0.080)	(0.076)
Border distance[1]	0.119*	−0.007	0.039	−0.280***	−0.245***	−0.234***
	(0.071)	(0.083)	(0.074)	(0.028)	(0.029)	(0.030)
Polity2	0.034**	0.036**	0.053***	−0.009	0.009	0.021**
	(0.015)	(0.017)	(0.016)	(0.008)	(0.008)	(0.009)
Population[1]	0.064	0.218***	0.168**	0.451***	0.531***	0.538***
	(0.065)	(0.069)	(0.068)	(0.040)	(0.041)	(0.042)
Travel time[1]	0.012	0.123	0.074	0.110	0.042	0.087
	(0.101)	(0.106)	(0.105)	(0.076)	(0.074)	(0.075)
Cell area[1]	0.193	−0.123	−0.056	−0.184**	−0.190**	−0.278***
	(0.161)	(0.182)	(0.188)	(0.087)	(0.086)	(0.078)
Constant	−4.889***	−3.496**	−3.996***	−8.958***	−8.613***	−8.783***
	(1.384)	(1.448)	(1.460)	(0.854)	(0.866)	(0.842)
Inflation Stage						
Civil conflict	−1.018***	−0.883***	−1.043***	–	–	–
	(0.198)	(0.208)	(0.203)			
Atrocities(lag)	−3.437***	−3.551***	−3.423***	–	–	–
	(0.331)	(0.441)	(0.372)			
Urban	−0.080***	−0.069***	−0.080***	–	–	–
	(0.022)	(0.026)	(0.024)			
Oil[1]	−0.001	−0.011	0.006	–	–	–
	(0.015)	(0.015)	(0.015)			
GCP[1]	−0.091	−0.160	−0.077	–	–	–
	(0.135)	(0.144)	(0.139)			
Border distance[1]	0.433***	0.296***	0.328***	–	–	–
	(0.078)	(0.089)	(0.082)			
Polity2	0.044***	0.037**	0.047***	–	–	–
	(0.016)	(0.019)	(0.018)			
Population[1]	−0.457***	−0.376***	−0.426***	–	–	–
	(0.075)	(0.077)	(0.078)			
Travel time[1]	−0.126	0.010	−0.058	–	–	–
	(0.126)	(0.128)	(0.130)			
Cell area[1]	0.441**	0.141	0.258	–	–	–
	(0.199)	(0.183)	(0.195)			
Constant	4.426***	5.523***	5.284***	–	–	–
	(1.631)	(1.587)	(1.614)			
N		205,213			205,213	
AIC	7,740.90	7,684.69	7,676.05	6,519.34	6,390.71	6,385.22

Note: *p<0.1; **p<0.05; ***p<0.01; year fixed effects included in each regression, though not reported here. All independent variables are lagged by one year, excluding *ethnic war* and *sec. war*.

[1] Natural log

cantly fewer atrocities compared with ethnic wars. The results remain practically unchanged when one moves to the logit models (Models 5L-7L). This suggests that during ethnic wars, capital cities are an important part of the insurgents' strategic decision to perpetrate *any* atrocities against civilians.

The same does not appear true for secessionist wars, at least in the ZINB models. Secessionist insurgents do not significantly increase the frequency of atrocities they perpetrate in the capital compared with other locations, although secessionist wars still experience significantly more insurgent atrocities compared with other conflicts. However, as Model 7L shows, the capital has a significant effect on secessionist insurgents' decision whether to kill civilians or not. Figure 9 additionally illustrates that the size of *capital*'s coefficient increases by ∼120% during ethnic wars, and ∼75% during secessionist wars. These analysis' results thus strongly suggests that insurgents will concentrate their attacks against civilians in the capital during ethnic wars; and at least partly suggests that this is the case for secessionist conflicts as well.



Ethnic wars Secessionist wars

Figure 9: Predicted change in probability of insurgent atrocities by conflict nature

Conclusion

The argument developed here asserts that insurgents are increasingly likely to target civilians in capitals due to the unique political value of these cities, which gives violent groups more "bang for their buck." Where insurgents can take advantage of these power asymmetries, they engage in the systematic targeting of civilians to inflict higher costs upon the (typically stronger) government. This paper laid out and empirically validated some mechanisms linking the political value of the capital to higher costs. By accounting for potential inflation and bias effects, the results from the matching and global sample analyses provide the first systematic global evidence to confirm this argument. Finally, evaluation of insurgent atrocities during civil wars showed that in ethnic and – potentially – secessionist wars, insurgents will prefer to target civilians in the capital compared with other civil wars.

The mechanisms and trends evaluated and validated here outline some fruitful directions for future research. One such direction is to theorize and analyze how the geospatial distribution of violence reflects the insurgents' strategic decisions to maximize their political impact, both domestically and globally. This is especially so for violence perpetrated in urban areas or other locations where the state is stronger, which – despite increasing prevalence – received relatively little attention compared with victimization in rural areas. This focus is in line with recent research, which finds that within countries, war onset is associated with *higher* levels of state power (Koren and Sarbahi, Forthcoming). Thinking how geography and political value are related to one another through particular patterns of violence will likely yield important insights. Empirically, more refined measures will allow researchers to better evaluate these mechanisms and assess how state capacity and strategic factors interact to produce violence.

A second fruitful directions is to analyze how violence varies based on the insurgents' intended audience. From operating armored vehicles to using suicide bombers and targeting combatants and noncombatants alike, modern militant insurgents such as IS, GIA, and El-Shabaab exhibit a remarkable tactical variety. As previous research suggests, insurgent

groups' choice of tactics reflects their different motivations to employ violence within conflict settings (e.g., Kalyvas, 2006; Wood, 2010; Fjelde and Hultman, 2014). Yet, these choices also likely reflect *who* the insurgents seek to influence – domestic governments, foreign envoys, civilians, investors, etc. The focus on spatial patterns of violence helps to account for this variety, and can thus have relevancy to policymakers and social scientists concerned with the prediction of political violence. Moreover, this tactical variety also highlight the advantages gained by moving beyond the government vs. rebel logic of conflict, to also incorporate the large number of cases where some insurgents attack foreign governments with which they have no direct contact, or groups operating to instigate "new world orders." Understanding these groups and where their motivations for victimization – as reflected in spatial patterns of violence – converge on or diverge from those of organizations more traditionally analyzed will likely add to the field's understanding.

Lastly, this study has important policy implications. The results suggest that efforts to thwart brutal non-state actors should take into consideration that it is *highly likely* that these groups will seek to attack capital cities, especially during ethnic wars. Indeed, between mid-2015 and mid-2017, numerous large-scale attacks against civilians occurred in the capitals of Tunisia, France, the UK, Indonesia, Turkey, and Belgium, to name only a few. These article's findings thus highlight the need for state governments, international organizations, and nongovernmental organizations involved in peacekeeping missions and other foreign interventions to devise strategies to better protect civilians against this particular choice of attack location by violent insurgents.

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