

THE ORIGINS OF GENOCIDE IN CIVIL WAR

Angela D. Nichols

Florida Atlantic University

Abstract. We know very little about the origins of and ways to prevent genocide from occurring. Despite it being a rare event, 36 cases of genocide or politicide occurred between 1955 and 2000, 80% of which took place during a civil war. The relationship between these two phenomena has been overlooked by both of the respective literatures. I hypothesize that the duration of the civil war, as well as the intensity of the conflict have some bearing on whether or not genocide or politicide occur. Using a selection model, which allows for the isolation of mechanisms in both stages: entry into civil war and the subsequent escalation to genocide or politicide, I test this argument. Interestingly, once selection into a civil war is accounted for ethnic heterogeneity has a greater statistical and substantive impact on genocide/politicide onset than was previously believed.

Keywords: conflict, civil war, genocide, politicide, civilian victimization, ethnic fractionalization

DOI: <https://doi.org/10.3176/tr.2018.1.05>

1. Introduction

During the early 1990s, the former Yugoslavia was in turmoil. Tito failed to name a successor before his death and the six nations that comprised the land of the Slavs was growing increasingly tumultuous as the respective leaders competed for power and even tually engaged in multiple civil wars. When Slobodan Milosevic realized that the Krajina (translates to border in English) region of Croatia was something the Serbian population would not be able to secure, he decided to fight back by claiming a different piece of land for *Greater Serbia*. A few days later the portion of the population that was not Serbian, but residing in Srebrenica, Bosnia and Herzegovina (despite the fact that it was declared a UN safe zone) was rounded up and either displaced or killed.

Regime type, prior conflict, level of development, ethnic, religious, and ideological differences are the factors generally associated with the risk of genocide or politicide (Fein 1979, Harff 1987, 2003, Fein 1993, Krain 1997). These factors

have also been attributed with explaining the onset of other episodes of violence, especially the onset of civil war (Fearon and Laitin 2003, Sambanis 2001, Horowitz 1985) despite the fact that only a handful of the civil wars since 1955 have resulted in genocide or politicide. Something aside from the factors that lead to civil war are driving the inhumane acts of genocide/ politicide; otherwise such behavior would have been much more widespread in the recent past than it has been. I address this discrepancy by considering the following question: *Why does the violence in some civil wars escalate to genocide/politicide, but not others?*

In the following paragraphs, I discuss the scarce, but extant literature that in light of current research and statistical advancements make this study possible. Next, I develop a theoretical argument for why some civil wars escalate to genocide/politicide. Then, using a Heckman selection (Heckman 1979) model I test the argument that the duration and intensity of a civil war have an impact on the onset of genocide/politicide. I conclude with suggestions for future research and a discussion of the potential policy implications of this and similar work.

2. The current literature

The literature can be divided into two approaches; these approaches are based on the level of analysis examined. Some scholars (Melson 1990, 1996, Midlarsky 2005, Mitchell 2004) have examined the mechanisms by which individuals (leaders and their followers) are able to implement genocide or politicide. While others (Downes 2006, Valentino 2004, Harff and Gurr 2004, Harff 2003, 1987) have examined the environmental factors that make genocide or politicide more likely.

I focus on the environmental factors that make such events possible for three reasons. First, it allows me to engage a large portion of the existing quantitative analyses, as much of the literature that has been conducted at this level of analysis (Downes 2006, Valentino 2004, Harff and Gurr 2004, Harff 2003, 1987). Second, 80% of the cases identified as genocide or politicide (Harff 2003) occurred during a civil war. Finally, I focus on the factors that allow such atrocities to occur because even the vein of literature that focuses on leaders argues that in order to understand when and how leaders implement or allow these policies to be carried out, we must first understand the circumstances that either fail to prevent it, endorse it, or outright demand it (Mitchell 2004).

Harff (2003:58) defines *Genocide/Politicide* as the promotion, execution, and/or implied consent of sustained policies by governing elites or their agents-or, in the case of civil war, either of the contending authorities-that are intended to destroy, in whole or part, a communal, political, or politicized ethnic group.¹

Using this definition, she argues that six preconditions account for 74% of such events between 1955 and 2000. The six factors that jointly attribute to the

¹ See Table 1 for a list of genocides/politicides adopted from Harff (2003).

probability of a genocide/politicide occurring are political upheaval, prior genocide, ideological orientation of the ruling elite, regime type, ethnic character of the ruling elite, and trade openness (Harff 2003). All of these except *prior genocide* have also been associated with civil war onset (Mason 2004, Mason and Fett 1996, Fearon 1995) and as such fail to explain the circumstances that differentiate those conflicts that escalate to genocide/ politicide from those that do not. Specifically, poverty, a low level of economic development, a prior history of civil war, political instability, regime type, and natural resources are attributed with increasing a country's risk of civil war (Fearon and Laitin 2003, Walter 2009).

Downes (2006) provides an explanation of the mass murder of civilians that is dependent upon two key factors regardless of regime type or how the opposing sides perceive one another: desperation caused by long, costly wars and a desire for territorial expansion. The international nature and dyadic focus of his work, however, results in the omission of a significant portion of the genocide/politicides in the post-WWII era (as determined by comparing his cases to those in the state failure project (Harff and Gurr 2004)). Downes' (2006, 156) definition of such aggressive action classified within security studies as *civilian victimization* otherwise falls in-line with Harff's (2003) definition of genocide/politicide. Intent is a key factor in determining each authors' respective population of cases.

Civilian victimization is a wartime strategy that targets and kills (or attempts to kill) noncombatants. It violates the principles of noncombatant immunity and discrimination as enshrined in the Geneva Conventions and just war theory, which require that belligerents must (1) distinguish between combatants and non-combatants, and (2) refrain from targeting the latter. Common forms of civilian victimization include aerial, naval, and artillery bombardment of civilians; sieges, naval blockades, and economic sanctions that deprive noncombatants of food; massacres; and forced movements or concentrations of population.

As with Valentino's (2000) definition of mass killing, civilian victimization is not limited to direct methods of killing, such as execution, gassing, and bombing. It includes deaths caused by starvation, exposure, or disease resulting from the intentional confiscation, destruction, or blockade of the necessities of life. It also includes deaths caused by starvation, exhaustion, exposure, or disease during forced relocation or forced labor. In both instances mass murder is the fundamental concept, but potentially artificial boundaries created by interstate and intrastate distinctions prevent these similar cases from being evaluated by the same analysis. Valentino's (2004) finding that mass killing is significantly more likely to occur during guerrilla warfare (since we observe these tactics frequently in civil wars) compared to other kinds of war emphasizes the number of cases potentially unexplored due to this classification. Is it likely that what we know about the targeting of civilians during international conflict can inform our understanding of similar behavior during civil war?

3. Theory

Two key assumptions are necessary for building my theoretical argument. Rational actor theory has been used by other scholars (Melson 1996, Mitchell 2004, Midlarsky 2005) to describe the behavior of actors that commit genocide. While a few outliers have been identified (Melson 1996, Mitchell 2004), the rational approach is generally accepted. Melson (1996) compares the Armenian genocide and Jewish Holocaust. He demonstrates the similar nature of the prior to the most recent incidences of mass murder. The Holocaust he argues represents the most severe, complex, well-organized, and most rare form of genocide/politicide. More often, absent the infrastructure necessary to carry out a full-fledged and costly campaign, genocide/politicide is carried out at the other end of the policy spectrum (i.e. in desperation as a final push to win the war). Following this logic is the first assumption that actors involved in civil wars are strategic, self-interested, and prefer outright victory to any other outcome.

The second assumption is that processes of war follow similar patterns once in motion regardless of the nature of the conflict. In other words, the violent bargaining that goes on between two groups during war – be they ethnic groups, religious groups, states, or some other combination of actors – matter less for determining the escalation of violence once ensued than they do for understanding the onset of the violence in the first place. Five of Harff's (2003) preconditions are such factors: political upheaval, ideological orientation of the ruling elite, regime type, ethnic character of the ruling elite, and trade openness. This study takes the research further than the previous literature by isolating the effects of these factors on the escalation of an already ongoing civil war to genocide or politicide.

Recall the anecdote that this paper begins with. Did Greater Serbia set out to murder 8,000 unarmed Bosniak civilians or did they resort to doing so out of desperation when facing defeat? I argue that the latter is more likely. When pulling from a depleting resource base and facing further territorial loss, the Bosnian-Serbs responded by attempting to wipe out the enemy entirely.

I suggest an examination of genocide or politicide during civil war similar to Valentino's (2004) and Downes's (2006) examinations of civilian victimization during interstate war. It seems unlikely that events as similar and as rare would be perpetuated out of completely different causal mechanisms. Instead, an application of what we know about civilian victimization in interstate war (Valentino 2004, Downes 2006) is used to inform our understanding of how genocide or politicide occurs during civil war. Desperation resulting from a lack of resources or exhaustion from fighting and territorial conquest are the catalysts associated with civilian victimization in interstate war (Downes 2006). The warring sides of most conflicts compete for resources from one finite supply. The longer the fighting goes on, the more likely desperation is to influence decision-making.

Human and material supplies require replenishing. Even if tensions over these issues were not the driving force behind the war, they are often key to sustaining the war. If resources cannot be secured, warring parties may be forced to use non-

traditional methods to deter the enemy. These factors make losing seem more imminent, thereby diminishing the shadow of the future and shifting the actors' cost/benefit analyses (Axelrod 1994).

Both sides compete for support from the same population. If one side is unable to secure support and reinforcements from the civilian population, it may resort to killing them so that the enemy cannot attempt to do the same or out of fear that they already have.

Valentino (2004) calls this draining the sea, but refers to it in the context of interstate war, where each side has their own civilian population, rather than competing for support from the same civilian population. War weariness may exacerbate this dilemma. As a war drags on, the costs of fighting and dealing with or attempting to appease the enemy and its relevant civilian population increase. At some point, it becomes cheaper to annihilate the enemy and its base of support than it is to do anything else. The longer a war wanes on the more likely this harsh reality is to be realized. Following this logic, I suggest the following hypothesis:

H1: The risk of genocide occurring increases as a conflict's duration increases.

Up to this point, I have only addressed the desperation aspect of Downes' (2006) argument. I now turn to a discussion of territorial conquest in civil war and genocide or politicide. Downes (2006) finds that goals of territorial expansion or annexation increase the likelihood that civilians will be targeted during interstate war. According to Fearon and Laitin (2003), 35% of civil wars were motivated by the rebels desire for exit or autonomy from the existing state. Juxtaposed it seems logical that there may be a relationship between these two phenomena. A desire to succeed or attain some level of autonomy may lead to the most tumultuous of conflicts for two reasons. First, governments are unlikely to meet one group's demands for fear that it will encourage subsequent groups to make similar demands (Walter 2004). Second, success on the rebel's part requires that the existing state be realigned to make way for a new regime. As such I hypothesize that:

H2: Civil wars marked by goals of autonomy or secession are more likely than other civil wars to escalate to genocide or politicide.

4. Research design

4.1. Dependent variables

I use Harff's (2003:58) definition of **Geno-/politicide**:

the promotion, execution, and/or implied consent of sustained policies by governing elites or their agents-or, in the case of civil war, either of the contending authorities-that are intended to destroy, in whole or part, a communal, political, or politicized ethnic group.

Even Harff (2003) acknowledges that a large portion of genocides or politicides occur during a civil war. She fails, however, to account for the selection effects of civil war in her analyses. I find her definition of such atrocities reason-

able and follow her precedent. In addition, I account for the context of the civil war in my statistical analyses.

Civil war is defined as (1) involved fighting between agents of (or claimants to) a state and organized, nonstate groups who sought either to take control of a government, to take power in a region, or to use violence to change government policies. (2) The conflict killed at least 1,000 over its course, with a yearly average of at least 100. (3) At least 100 were killed on both sides (including civilians attacked by rebels). The last condition is intended to rule out massacres where there is no organized or effective opposition (Fearon and Laitin 2003:76).

There are 110 instances of civil war onset, 32 of which escalated to genocide or politicide. Table 1 provides a list of genocides and politicides that have occurred since 1955 and whether or not they occurred during a civil war.

Table 1. Genocide and Civil War

Cases of Geno/Politicide*	Years	Civil War [†]
Sudan	1956-1972	yes
South Vietnam	1965-1975	yes
China	1959-1959	yes
Iraq	1963-1975	yes
Algeria	1962-1962	yes
Rwanda	1963-1964	no
Congo-K	1964-1965	yes
Burundi	1965-1973	yes
Indonesia	1965-1966	yes
China	1966-1975	no
Guatemala	1978-1996	yes
Pakistan	1971-1971	yes
Uganda	1972-1979	no
Philippines	1972-1976	yes
Pakistan	1973-1977	yes
Chile	1973-1976	no
Angola	1975-2001	yes
Cambodia	1975-1979	yes
Indonesia	1975-1992	yes
Argentina	1976-1980	no
Ethiopia	1976-1979	yes
Congo-K	1977-1979	yes
Afghanistan	1978-4/92	yes
Burma	1978-1978	yes
El. Salvador	1980-1989	yes
Uganda	1980-1986	yes
Syria	1981-1982	yes
Iran	1981-1992	no
Sudan	1983-	yes
Iraq	1988-1991	yes
Somalia	1988-1991	yes
Burundi	1988	no
Sri Lanka	1989-1990	yes
Bosnia	1992-1995	yes
Burundi	1993-1994	yes
Rwanda	1994-1994	yes
Serbia	1998-1999	yes

4.2. Independent variables

War duration is the amount of time in years that a civil war endures (Fearon and Laitin 2003). The 110 civil wars in the sample range in duration from 1 to 36 years with a mean of about 5 1/2. **Territory** is a dichotomous variable that accounts for whether or not the rebels in a civil war have placed territorial claims on the government. Territorial claims are observed if rebels declare autonomy or secession as goals.

5. Controls

Ethnic fractionalization is used in both stages of the model. Instead of using Harff (2003)'s measures of elite's ethnic characteristics, I use a general measure of ethnic cleavages within society or ethnic fractionalization: the share of population belonging to the largest ethnic group (Fearon and Laitin 2003:78).

Economic development can be controlled for in a multitude of ways; here I choose the most oft used measure, gross domestic product per capita. I also control for prior genocidal experience, as prior violence is a strong indicator of future violence. I account for a country's regime type using the **Polity 2** measure from the Polity IV data. These data range from -10 to 10, with -10 being the lowest score or least democratic and 10 being the highest score or most democratic. I also include a measure of **political upheaval** defined as "an abrupt change in the political community caused by the formation of a state or regime through violent conflict, redrawing of state boundaries, or defeat in international war" (Harff 2003:62).

In the selection stage of the model, I account for the factors that Fearon and Laitin (2003) determine are predictors of civil war onset: regime (polity 2 score) Marshall and Jagers (N.d.), economic development (GDPpc), (WDI N.d.), and political instability (indicated by a > 2 point change in polity2 score (Fearon and Laitin 2003). Finally, I include a measure of ethnic fractionalization in both the selection (civil war) and outcome (genocide) stages of the model. Table 2 provides the descriptive statistics and source information for each of the variables discussed.

Table 2. Variable Descriptions and Summary Statistics

Variable	Coding/Range	Source	Mean	Std Dev
DVs				
Genocide/Politicide	0 (no), 1 (yes)	Harff (2003)	0.78	0.27
Civil War	0 (no), 1 (yes)	Fearon and Laitin (2003)	0.55	0.49
IVs				
War Duration	1 to 36 years	Fearon and Laitin (2003)	5.44	5.92
Territory	0 (no), 1 (yes)	Fearon and Laitin (2003)	0.29	0.45
Ethnic Fractionalization	0 to 1	Fearon and Laitin (2003)	0.46	0.27
Autocracy	0 (no), 1 (yes)	Marshall and Jagers (2008)	0.58	0.49

Variable	Coding/Range	Source	Mean	Std Dev
Regime	-10 to 10	Marshall and Jaggers (2008)	-0.44	7.52
Political Upheaval	0 to 60	Harff (2003)	4.87	10.87
Instability	0 to 1	Fearon and Laitin (2003)	0.15	0.35
Prior Genocide	0 (no), 1 (yes)	Harff (2003)	0.08	0.279
Elite's Ethnic Char	0 to 2	Harff (2003)	0.63	0.74
Elite's Ideological Orien	0 to 1	Harff (2003)	0.26	0.44
Trade Openness	0 to 1	Harff (2003)	68.50	44.52
GDPpc	0.048 to 66.74	WDI	3.69	4.48

Table 3. Cross-Correlation of Independent Variables

Variables	Duration	Territory	EF	Trade	Prior GP	Upheaval	Polity2	GDPpc	Instability	Elite EC	Elite IC	Autocracy
Duration	1.000											
Territory	0.218	1.000										
EF	0.146	0.376	1.000									
Trade	0.029	0.035	0.025	1.000								
Prior GP	0.032	-0.005	0.035	-0.255	1.000							
(1: yes, 0: no)												
Upheaval	0.553	0.151	0.166	-0.139	0.498	1.000						
Polity2	0.041	-0.005	-0.216	0.016	-0.185	-0.096	1.000					
GDPpc	-0.016	0.024	-0.208	0.182	-0.156	-0.204	0.379	1.000				
Instability	0.018	-0.059	0.044	-0.106	0.105	0.188	-0.013	-0.159	1.000			
Elite EC	-0.130	0.011	0.353	0.005	0.234	0.134	-0.220	-0.258	0.040	1.000		
Elite IC	-0.126	0.037	-0.091	-0.161	0.297	0.157	-0.333	-0.116	-0.066	0.111	1.000	
Autocracy	-0.070	-0.042	0.201	-0.006	0.179	0.128	-0.926	-0.315	0.025	0.197	0.293	1.000

6. Methodology

Approximately 80% of the genocides and politicides that have occurred since 1955 have happened after civil war broke out. Failing to account for this selection effect risks introducing bias and producing inefficient estimators. Civil war is rare, but genocide and politicide are even more rare. I test my hypotheses using a Heckman selection model with a probit in the second stage, as both the selection and outcome dependent variables are binary (Heckman 1979, Dubin and Rivers 1989). The first stage takes into account those risk factors that make a country vulnerable to civil war: economic development, regime, instability, and ethnic fractionalization Fearon and Laitin (2003), allowing the second stage to isolate those factors that I argue have an impact on the likelihood of genocide/politicide once civil war has ensued. This is a more statistically appropriate and rigorous manner by which to conduct these analyses than has been done previously and should represent a superior statistical and substantive explanation for why some

conflicts result in the intentional mass murder of a particular group of society, but most do not.

Before I conduct this analysis, I demonstrate that doing so is necessary by testing the impact of Harff (2003)'s variables on genocide or politicide occurring after those same variables that impact civil war onset are accounted for. I do so using a selection model designed specifically for addressing issues like these or when the dependent variables in each stage of the equation are identical (Sartori 2003).

The observations for this study include the country-year data available for those countries that experienced a civil war between 1955 and 2000. Table 4 provides the results of the statistical analysis, which demonstrates why it is necessary to account for the conditions that lead to civil war before being able to effectively observe the factors that account for genocide or politicide. The results of this analysis suggest that civil wars of an arguably ethnic nature (Horowitz 1985) are more likely to end in genocide or politicide.

Harff (2003:70) states that active discrimination against ethnic minorities is a significant causal factor leading to ethnic war, but that once civil war has ensued, discrimination does not help explain the onset of genocide/politicide. The results of this selection analysis suggest the opposite; while ethnic cleavages seem not to have an impact on civil war onset, the escalation of such conflicts to genocide or politicide appears to be encouraged by the existence of ethnic cleavages. While this is beyond the scope of this paper, it warrants further investigation and as such is controlled for in the analyses below.

Table 4. Sartori Selection Model: Genocide and Civil War

Variable	β	Harff's β	(SE)	p value
<i>Selection Stage: Civil War</i>				
Autocracy Dummy	-0.588		(0.065)	0.000
Trade Openness	0.004		(0.001)	0.000
Elite's Ethnic Char	0.140		(0.043)	0.001
Elite's Ideology	0.009		(0.078)	0.909
Political Upheaval	0.036		(0.004)	0.000
Prior Genocide	0.643		(0.103)	0.000
constant	-0.296		(0.069)	0.000
<i>Outcome: Genocide</i>				
Autocracy Dummy	-0.019	1.223		(0.145)
Trade Openness	-0.010	-1.242 (0.003)		(0.003)
Elite's Ethnic Char	-0.055	0.939		(0.092)
Elite's Ideology	0.174	0.937		(0.135)
Political Upheaval	0.037	0.048		(0.005)
Prior Genocide	2.113	1.220		(0.157)
constant	-2.308			(0.219)
<i>n</i>	1901			
Wald χ^2 (6 df)	232.18			0.000

7. Results

Table 5 reports the results of the Heckman model used to test the suggested hypotheses. Robust standard errors are reported and observations are clustered by country. The Wald test of ρ and χ^2 demonstrate that there is a statistically significant relationship between the selection and outcome equations, further justifying the use of a selection model. The measures that account for selection into civil war (Fearon and Laitin 2003) behave as expected.

Table 5. Heckman Selection Model: Genocide and Civil War

Variable	β	(r.s.e.)
Equation 1: Genocide or Politicide		
War Duration	-0.072 [†]	(0.042)
Territory	0.120	(0.334)
Ethnic Frac	2.240*	(1.077)
Trade	-0.011	(0.011)
Prior GP	2.087**	(0.696)
Upheaval	0.039	(0.029)
Polity 2	-0.077*	(0.037)
Intercept	-1.155	(1.299)
Equation 2: Civil War		
Polity 2	0.038**	(0.010)
GDPpc	-0.115**	(0.032)
Instability	0.339*	(0.143)
Ethnic Frac	-0.178	(0.257)
Intercept	-1.393**	(0.181)

n 3764

Log-likelihood -565.276

χ^2 12.491

** $p \leq .01$; * $p \leq .05$; [†] $\leq .10$, two-tailed tests.

Robust standard errors (clustered by country) in parentheses.

The results for the second stage of the equation: genocide or politicide indicate that war duration has a significant, but negative relationship with the occurrence of genocide or politicide. For each year that a conflict continues, the likelihood of genocide or politicide *decreases* by 7%. This suggests that when genocides or politicides occur, they do so quickly. This finding does not support the theoretical argument I put forth.

Territorial claims did not behave as anticipated and also failed to reach statistical significance. One explanation for this may be that by default, warring parties in a civil war are competing for the same territory. Unlike interstate war, where each side has their own home territory, obtaining a piece of territory may be, at a minimum, an implicit goal of almost all civil wars.

The most interesting finding of this analysis is that ethnic fractionalization matters significantly more for the onset of genocide or politicide than it does for the onset of civil war. Perhaps once civil war has broken out, existing cleavages harden. Those of an ethnic nature may be the most likely to facilitate genocide or politicide. The current literature claims that in states where active discrimination against ethnic minorities is the status quo, civil war is more likely to occur. Once war has ensued, however, the literature claims that discrimination does not help explain the onset of genocide/politicide (Harff 2003). This relationship is actually the opposite. According to Fearon and Laitin (2003) ethnic differences do not contribute to the onset of civil war once instability and economics are accounted for. Mixed results and an inconsistency within the civil war literature on this matter, however, may be the result of something else. Perhaps ethnic differences explain not the onset of violence generally speaking, but rather the escalation of violence once it has already broken out. Ethnic fractionalization performs as anticipated once selection is accounted for. It is the only variable that fails to reach significance in the selection equation, but does so in the outcome stage, which predicts the likelihood that genocide/politicide once civil war occurs. When all other variables are held at their mean values and ethnic fractionalization is set at its maximum value of 1 genocide or politicide is 220% more likely to occur than when no ethnic fractionalization is present.

8. Conclusion

This paper argued first, that selection matters for predicting genocide/politicide in countries that are fighting civil wars and subsequently, that war duration and territorial claims matter. While I found evidence to support the first of these propositions, I failed to reject the null hypothesis for either of the suggested relationships. These counterintuitive findings warrant further examination.

Turning now to my control variables, regime type has little explanatory power for cases of genocide/politicide that occur during civil wars. While this is most likely a symptom of a lack of variation in this variable (civil wars occur in failing states), there may be some explanatory value (perhaps even to greater degrees than previously believed) when we separate cases based on the selection stage. Perhaps this is the difference between what drives genocide to occur in civil war and what facilitates genocide in the most repressive of regimes.

Ethnic heterogeneity (fractionalization) increases the likelihood that a particular country will experience a genocide or politicide once it is engaged in civil war. This is arguably the most interesting finding, especially because of the mixed findings within the civil war literature regarding ethnicity. These mixed results and lack of consensus may be a result of the fact that ethnic composition of a society matters less for the outbreak of violence, but facilitates the escalation of violence once it has begun. In situations like Rwanda and Bosnia, the international community may move with more urgency if they recognize that the factors leading

to the onset of violence may be somewhat different from those that escalate violence. While we can observe based on prior research that prior violence, economic conditions, and upheaval or instability are precursors to the onset of civil conflict, we have yet to differentiate the degree to which these factors impact the escalation of violence once onset is taken into account.

Further, I demonstrate that contrary to even my own theory, the mechanisms that drive civilian victimization during interstate war appear to be different from those that result in genocide or politicide during civil war. I mention in the beginning of this paper that there are three approaches to studying genocide and politicide: environmental, institutional, and individual. This study has focused on the first of these. The findings, however, suggest that perhaps more attention be paid to the other two approaches. Comparative work that focuses on leaders and the principle/agent problem exist (Midlarsky 2005, Mitchell 2004, Melson 1996), but to date no statistical analysis has been conducted. Future research should make accomplishing such analysis a key objective.

Acknowledgments

I thank Jacqueline H. R. DeMeritt and Will H. Moore for comments on earlier drafts. Mistakes remain my own.

Address:

Angela D. Nichols
 Department of Political Science
 Florida Atlantic University
 777 Glades Road, SO 384D
 Boca Raton, FL 33431

E-mail: angiedevon@gmail.com, nicholsa@fau.edu

References

- Axelrod, Robert (1994) *The evolution of cooperation*. New York: Basic Books.
- Downes, Alexander B. (2006) "Desparate times, desparate measures: the causes of civilian victimization in war". *International Security* 30, 4, 152–195.
- Dubin, Jeff A. and Douglas Rivers (1989) "Selection bias in linear regression, logit and probit models". *Sociological Methods and Research* 18, 2, 360–390.
- Fearon, James D. (1995) "Rationalist explanations for war". *International Organization* 49:379–414.
- Fearon, James D. and David D. Laitin (2003) "Ethnicity, insurgency, and civil war". *The American Political Science Review* 97, 1, 75–90.
- Fein, Helen (1979) *Accounting for genocide: national responses and Jewish victimization during the Holocaust*. New York: Free Press.
- Fein, Helen (1993) "Accounting for genocide after 1945: theories and some findings". *International Journal on Group Rights* 1, 79–106.
- Harff, Barbara (1987) "The etiology of genocide". In Michael N. Dobkowski and Isador Wallimann, ed. *The age of Genocide*, 41–59. Westport, CT: Greenwood Press.

- Harff, Barbara (2003) "No lessons learned from the Holocaust? Assessing risks of genocide and political mass murder since 1955". *American Political Science Review* 97, 1, 57–53.
- Harff, Barbara and Ted Robert Gurr (2004) *Ethnic conflict in world politics*. Boulder, CO: Westview Press.
- Heckman, J. J. (1979) "Sample selection bias as a specification error". *Econometrica* 47, 1, 153–162.
- Horowitz, Donald L. (1985) *Ethnic groups in conflict*. Berkeley, CA: University of California Press.
- Krain, Matthew (1997) "State-sponsored mass murder: the onset and severity of genocides and politicides". *Journal of Conflict Resolution* 41, 3, 331–360.
- Marshall, Monty G. and Keith Jaggers (n.d.) "Polity IV data set user's manual". Available online at <<http://www.cidcm.umd.edu/inscr/polity/>>. Accessed on February 2, 2018.
- Mason, T. David (2004) *Caught in the crossfire: revolution, repression and the rational peasant*. Lanham, MD: Rowman Littlefield.
- Mason, T. David and Patrick J. Fett (1996) "How civil wars end: a rational choice approach". *Journal of Conflict Resolution* 40, 546–568.
- Melson, R. (1996) "Paradigms of genocide: the Holocaust, the Armenian genocide, and contemporary mass destructions". *Annals of the American Academy of Political and Social Science* 548, 156–168.
- Melson, Robert (1990) *The history and sociology of Genocide*, 266–289. New Haven: Yale University Press.
- Midlarsky, Manus I. (2005) *The killing trap: genocide in the twentieth century*. Cambridge: Cambridge University Press.
- Mitchell, Neil J. (2004) *Agents of atrocity: leaders, followers, and the violation of human rights in civil war*. New York: Palgrave Macmillan.
- Sambanis, Nicholas (2001) "Do ethnic and nonethnic civil wars have the same causes? A theoretical and empirical inquiry (Part 1)". *The Journal of Conflict Resolution* 45, 259–282.
- Sartori, A. E. (2003) "An Estimator for Some Binary-Outcome Selection Models Without Exclusion Restrictions". *Political Analysis* 11, 2, 111.
- Valentino, Benjamin (2000) "Final solutions: the causes of mass killing and genocide". *Security Studies* 9, 3, 1–59.
- Valentino, Benjamin (2004) *Final solutions: mass killing and genocide in the twentieth century*. Ithaca, New York: Cornell University Press.
- Walter, Barbara F. (2004) "Does conflict beget conflict? Explaining recurring civil war". *Journal of Peace Research* 41, 371–388.
- Walter, B. F. (2009) "Bargaining failures and civil war". *Annual Review of Political Science* 12, 243–261.
- WDI (n.d.) "World development indicators online". Washington, DC: World Bank Group. Available online at <<http://www.worldbank.org>>. Accessed on February 2, 2018.