

White supremacist groups and hate crime

Sean E. Mulholland

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Abstract Hate group activity may incite criminal behavior or serve as protection from bias-based violence. I find that the presence of one or more active white supremacist chapters is associated with higher hate crime rates. I reject the hypothesis that chapter presence and hate crimes are symptomatic of the overall level of bias-based violence. Moreover, I reject the hypothesis that white supremacist groups form in response to an increase in antiwhite hate crimes, particularly those perpetrated by nonwhites.

Keywords Hate groups · White supremacist · Hate crime · Collective action · Protection

JEL Classification K14 · J15 · D71

1 Introduction

The relationship between hate group activity and hate crime is theoretically ambiguous. Hate groups may incite criminal or violent behavior in support of their beliefs. On the other hand, meetings and protests may serve as a way for members to orally vent their frustrations, thereby reducing the likelihood of criminal or violent acts. Hate groups may also protect their members from future bias-based violence.

The Southern Poverty Law Center (SPLC), an authority on hate group activity, declared that the number of active white supremacist hate group chapters in the United States increased by 33 %, from 350 to 488, between 1997 and 2007.¹ Yet, over the same period, the number of hate crimes recorded in the United States fell by 6.1 %, from 8,443 to 7,945. Figure 1 depicts the slow and steady increase in the total number of active white supremacist chapters and the decline in hate crimes reported across the United States.

¹The SPLC tracks many types of hate groups. This analysis includes only white supremacist hate groups: the Ku Klux Klan, neo-Nazis, racist skinheads, and Christian Identity churches from 1997 to 2007.

S.E. Mulholland (✉)
Stonehill College, 320 Washington Street, Easton, MA 02357, USA
e-mail: smulholland@stonehill.edu

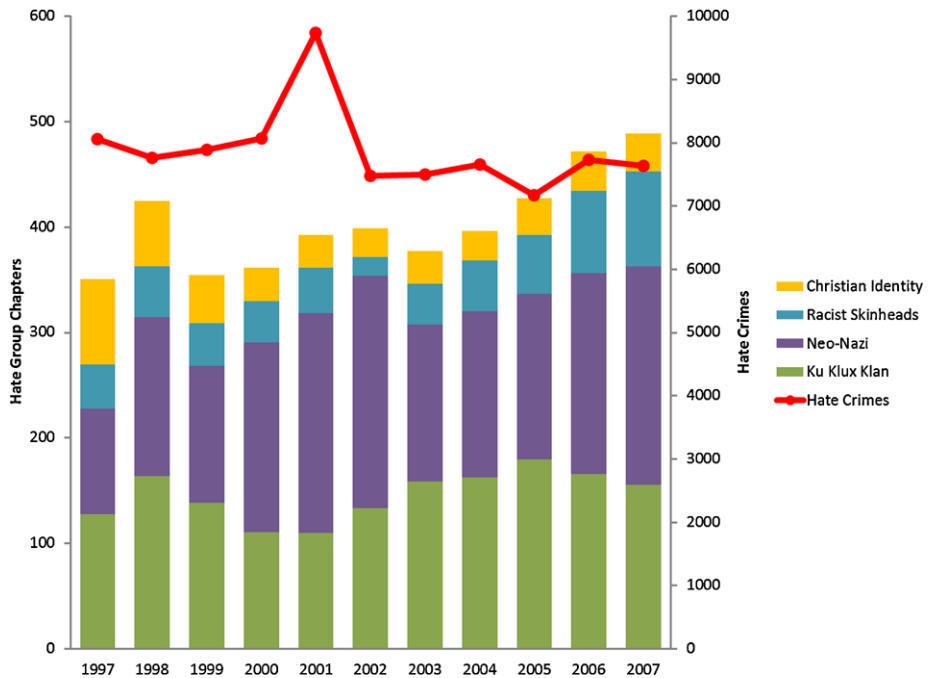


Fig. 1 Number of hate crimes and number of Ku Klux Klan, Neo-Nazi, Skinhead, and Christian Identity Chapters in the US: 1997–2007 (Sources: Southern Poverty Law Center 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and Federal Bureau of Investigation various years)

A small number of empirical studies have investigated potential sources of hate crimes. Yet all but one fail to include a measure of hate group activity. McDevitt and Levin (1993) use Boston data to discover that many hate crimes involve violence directed at dissimilar others moving into a previously segregated area. Medoff (1999), in a cross-sectional state estimation, finds that market wages, mean age, and law enforcement are correlated with hate crime activity, but urbanization, occupational status, and social mobility are not. Gale et al. (2002) use a panel of 37 states from 1992 through 1995 and find that hate crime rates are negatively correlated with law enforcement expenditures and positively associated with unemployment rates, abuse rates, and the parity of income between blacks and whites. Ryan and Leeson (2011) use state-level panel data from 2002 through 2008 to find that unemployment and poverty are strongly associated with more hate crime, whereas demographics and, most notably, the number of hate groups are not. If hate groups do not actually influence hate crime, then resources devoted to tracking and eradicating hate groups may not be a productive way for law enforcement to address bias-based crime.

However, this counterintuitive result that hate groups are not related to hate crimes may be due to Ryan and Leeson's methodology and not the underlying relationship. First, Ryan and Leeson estimate the hate group-hate crime relationship using the number of chapters at the state level even though hate group chapters are often local phenomena that occur on a small scale. Second, even if hate group members are not committing crimes, their presence may signal to local community members that a particular bias is acceptable. Third, Ryan and Leeson include unclassified hate groups. This "Other" category includes organizations whose members hold biased views but do not advocate violent acts against the targets of their bias.

Addressing these three weaknesses by using US county-level panel data from 1997 through 2007 and controlling for county fixed effects, I find that hate crimes are 19.1 % more likely to occur in counties with active white supremacist group chapters. Excluding hate crimes listed as antiwhite, the presence of one or more white supremacist chapters is associated with a 19.7 % to 24 % higher rate of hate crimes and a 22 % to 25 % higher rate of hate crimes committed by white perpetrators. I am also able to reject three alternative hypotheses that are consistent with these positive correlations: (1) that white supremacist groups are symptomatic of the overall bias-based antagonism in a county; (2) that the presence of one or more active white supremacist group chapters is correlated with some idiosyncratic factor that influences hate crime rates for that county-year; and (3) that white supremacist groups form as protection against recent increases in hate crimes perpetrated by nonwhites or listed as antiwhite.

Section 2 presents a historical look at the evolution of hate crime legislation in the United States. Section 3 discusses hate groups. Section 4 lays out the estimation methodology. Sections 5 and 6 discuss the data and the estimated relationship between white supremacist chapters and hate crimes. Section 7 investigates alternative hypotheses. Section 8 offers concluding remarks.

2 Hate crime

Biased violence, motivated by racism, xenophobia, anti-Semitism, and other prejudices, has been documented throughout history from the Old Testament description of the genocides of Amalekites and Midianites to more recent ethnic and religious-based violence in Bosnia and Sudan. The United States practice of categorizing certain violent activity directed at individuals based on their ethnic or social characteristics as “hate crimes,” however, is a recent phenomenon. Jenness and Grattet (2001) suggest that support for the idea of treating bias-motivated violence as a unique type of crime was born out of the combination of the modern civil rights movement and the crime victims’ rights movement.

In the 1960s and 1970s, civil rights groups sought ways to reduce violence based on race, ethnicity, religion or other differences. Some civil rights organizations, such as the Anti-Defamation League of B’nai B’rith (ADL) and the SPLC, began gathering information on the characteristics and locations of bias-motivated violence. During the same period, the victims’ rights movement developed in response to the Warren Court’s expansion of defendants’ rights (Weed 1995; Maroney 1998). The victims’ rights movement brought attention to the direct trauma resulting from the violence and the psychological “abuse suffered at the hands of police, prosecutors, social medical service providers and judges” (Jenness and Grattet 2001: 27). Led by Wisconsin in 1981, states began passing victims’ rights legislation. By 1989, 42 states had passed victims’ rights bills (Weed 1995).

Following the victims’ rights movement, civil rights groups began seeking specific legal redress. Beginning with Washington and Oregon in 1981, states began enacting hate crime legislation that criminalized violence directed at groups based on their racial, ethnic, religious, and other characteristics. The federal response culminated in the 1990 passage of the Federal Hate Crime Statistics Act. The law defines hate crimes as criminal incidents that are at least partially directed against the victims’ race, religion, sexual orientation, or ethnicity/nationality. The law also instructs the FBI to collect and report hate crime data from agencies actively documenting and willing to report hate crime statistics voluntarily.²

²The concept of a hate crime, especially early on, was nebulous and had yet to be tested constitutionally. Between 1984 and 1999, the US appellate court considered the constitutionality of hate crime statutes 38

Differences in how agencies define and report crime, and particularly hate crime, are problematic in any empirical study. Although hate crime documentation has improved, there are still serious problems associated with crime statistics (Gale et al. 2002). DiIulio (1996) identifies two potentially severe measurement errors in crime data: underreporting by victims and misreporting by law enforcement agencies. By comparing the Uniform Crime Report to other sources of crime data, Besci (1999) shows that wide variation exists between crime data sources. Furthermore, Grove et al. (1985) find that reported crime rates are closer to the actual crime rates for less ambiguous crimes, such as homicide, than for more ambiguous crimes, such as aggravated assault.

The core concept of a hate crime is fuzzy and therefore can make classification difficult (Jacobs and Potter 1998). However, Martin (1995, 1996) and Boyd et al. (1996) find that the process is less error-prone than is suggested by Jacob and Potter. “[F]ar from finding it problematic to interpret and classify specific incidents, police detectives engage in certain routine practices in order to determine the hate-related status of an incident” (Boyd et al. 1996: 821). Unfortunately, Boyd et al. (1996) also show that reporting methods differ across jurisdictions, causing comparisons across divisions to be suspect. This article looks only at changes in the hate crime rate within each county, which does not eliminate any ambiguity and subjectivity that may occur over time within a given agency or across agencies at the sub-county level. Thus, any empirical results must be interpreted through a critical lens.

3 Hate groups

The Southern Poverty Law Center (2010) defines a hate group as an organization having “beliefs or practices that attack or malign an entire class of people, typically for their immutable characteristics” (<http://www.splcenter.org/get-informed/hate-map>). White supremacists believe that race is a central characteristic that encompasses behavioral and cultural components and that whites are responsible for all of the advances realized in western civilization. White supremacists view recent changes in western culture, with its greater emphasis on multicultural ideas, as threatening the future of western society (Ezekiel 1995). Therefore, white supremacist organizations battle to reclaim the traditional lifestyle of earlier white generations (Ezekiel 1995; Bushart et al. 2000; Ferber 2000). For example, racist skinhead recruiters look for areas where the status quo is threatened and then seek out individuals suffering psychological stress or those experiencing cultural anomie (Messner and Rosenfeld 1994; Wooden and Blazak 2000). The skinheads will then attack the person least like them who is perceived to be threatening the status quo as a way to build rapport with potential future members (Blazak 2001). If this is correct, hate crime rates should be higher in counties where white supremacist groups are present.

Ezekiel (1995) classifies hate group members into four categories based on their degrees of involvement and self-control. Those most deeply involved with high levels of self-control are leaders and lieutenants. These core members keep the group alive and are rarely involved in violence directly. The lieutenants reinforce these ideas with codes of secrecy and dress. They will sacrifice a great deal to avoid seeming disloyal.

Ordinary members make up the largest subset of the group. These members have little desire to harm nonmembers. Ordinary members often drop out when police begin investigating group activities.

times, suggesting to Phillips and Grattet (2000) that the questions of constitutionality and rules had become settled by the late 1990s.

The third type of member is deeply involved but lacks self-control: the loose cannons. Highly unpredictable, these individual always are the first to act. Although leaders often disavow the behavior of loose cannons, their actions nevertheless may make ordinary members feel as though they are part of a highly important cause.

The last type of member is the potential terrorist. The potential terrorist exhibits Munger's (2006: 132) 'culture of loyalty' and truly believes in the group's ideology, literally because he wants grounds for radical action. He needs the comradeship of like-minded people to organize and carry out his terrorist plot (Ezekiel 1995). These individuals are often urged to participate in a series of individual or small cell acts of violence against the state to trigger a larger race war (Berlet and Vysotsky 2006).

Like all types of voluntary organizations, white supremacist groups must overcome the collective action problem (Blazak 1998). They do so by requiring certain costly signals, such as tattoos, body piercings, and acts of violence. These actions reveal commitment to the organization and grant an active member certain privileges and benefits.³ Joining reveals that the benefits of membership are greater than the costs associated with signaling commitment to the group.⁴

Much of the benefit comes from mutual assistance and understanding (Cohen 1955). Ezekiel's (1995) interviews find that most members of white supremacist groups have lost a parent; becoming a member provides a support network. He also finds that most members are either physically small or suffer from poor health. Thus, the group provides a form of physical protection.

This protection is, in a sense, somewhat like that provided by organized crime groups, such as the Sicilian Mafia, the Japanese Yakuza, and prison and youth gangs. In his work on gangs, Klein (1995) summarizes the psychological factors of membership: "the gang is seen as an aggregate of individuals held together more by their own shared incapacities than by mutual goals. Primarily, group identification is important as it serves individual needs; it leads to delinquent group activity only secondarily and only in the absence of prosocial alternatives" (Klein 1995: 201). Thus, Klein's argument suggests that hate groups may not affect the hate crime rate if they serve more of a prosocial role.

Furthermore, recent empirical work by Sobel and Osoba (2009) on youth gangs suggests that gangs form in response to government's failure to protect youth against violence.⁵ Without gangs, the level of violence may actually be higher. If white supremacist chapters form to protect their members' physical well-being, white supremacist chapters may be associated with less crime, including less hate crime.

Though white supremacist groups may protect members from future bias-based violence, these groups face different potential threats than those faced by organized crime, prison gangs, and youth gangs. Organized crime groups protect physical well-being, both in and out of prison, protect land, enforce contracts, and resolve contract disputes, whether or not these agreements would be recognized by the government (Gambetta 1993; Hill 2006). Prison

³Mancur Olson (1965) developed the idea that individual members of a group attempting collective action will often have the incentive to free-ride on benefits provided by other members. Often used as a call for government action (Hobbes 1955), small groups as diverse as sheep herders in the Alps (Ostrom 1990) and pirates in the Caribbean (Leeson 2007, 2009) have designed incentive structures to overcome the collective action problem.

⁴Iannaccone (1992) and Berman (2000, 2003) demonstrate why rational, utility-maximizing individuals voluntarily sacrifice to join religious organizations, fraternities and sororities, communes, and hate groups.

⁵Theoretical models of government formation out of anarchy are developed by Nozick (1974) and Buchanan (1975).

gangs, such as the Mexican Mafia, also provide these services even though most of their contracts would not be recognized by central governments (Skarbek 2011). Youth gangs provide physical protection where government does not or will not (Sobel and Osoba 2009). To be successful, these alternative governance organizations must have long time horizons (McGuire and Olson 1996).⁶

The violence committed by white supremacist groups, however, is not used to enforce contracts. It is a way to project power and attract new members (Ezekiel 1995; Blazak 2001). Thus, the protection offered is somewhat different from that of, say, the Sicilian Mafia, in which violence is usually to protect a member from potential violence or to resolve a contract dispute. Violence by white supremacists is more likely to demonstrate that they can control their surroundings and are prepared for the coming race war (Ezekiel 1995; Bushart et al. 2000; Shanks-Meile 2001). Thus, white supremacist group formation may be less about protection from recent hate crimes and more about mobilizing for future racial conflicts (Ezekiel 1995).

There are other differences as well. Outside the inner circle of leaders and ideologists, white supremacist group membership is fluid (Ezekiel 1995). This differs from gangs and organized crime, where exit is punished, sometimes fatally. In this sense, white supremacist groups may be less like alternative governance organizations and more like confrontational political organizations where ideology holds the groups together (Kriesi et al. 1995; Berlet and Vysotsky 2006). If most white supremacists join based on ideology and not for protection from threats, recent hate crimes against whites, or crimes perpetrated by nonwhites, may not incite white supremacist activity.

White supremacist groups are by no means identical. Each organization has different levels of ideologies, prohibitions, and goals, and thus each solves the problem of collective action in a variety of ways. Racist skinheads and neo-Nazi members, unlike Ku Klux Klan and Christian Identity members, often display tattoos or wear distinctive clothing to signal membership.⁷ Furthermore, each group type and chapter expresses its biased views differently; some are often physically violent while others are not.

4 Estimation method

This article examines four hypotheses:

1. White supremacist activity is associated with higher hate crime rates.
2. White supremacist activity is symptomatic of the overall level of bias-based violence.
3. White supremacist activity is correlated with some idiosyncratic factor that influences hate crime rates.
4. White supremacist groups form for protection from recent increases in antiwhite hate crimes or hate crimes by nonwhites.

To determine whether the hate crime rate is associated with white supremacist activity, one would ideally measure white supremacist activity in terms of the number of active

⁶There are a number of spontaneous, private enforcement mechanisms that can develop in the absence of formal government (Benson 1989; D'Amico 2010; Leeson 2007; Powell and Stringham 2009; and Schaeffer 2008).

⁷Christian Identity members are religious adherents. They believe that whites are the decedents of the lost tribes of Israel, that non-whites are soulless, and that Jews are the decedents of the Serpent from the Book of Genesis.

members. Unfortunately, the SPLC does not report membership information. Without membership data, I am unable to distinguish between a chapter with 40 members and a chapter with 20 members. Moreover, the formation of new white supremacist chapters may be the result of the splintering of one large group, and a reduction in the number of chapters may be the result of a merger.⁸ Therefore, I follow Jefferson and Pryor (1999) and Mulholland (2010) and focus on whether hate crime rates are different when a county is home to one or more active white supremacist chapters.

I first construct a dichotomous variable, $active_{it}$:

$$active_{it} = \begin{cases} 1 & \text{if number of active white supremacist chapters is } > 0 \\ 0 & \text{if no active white supremacist chapters are present} \end{cases} \quad (1)$$

I then estimate the effect of one or more active white supremacist chapters on the overall rate of hate crime:

$$hate\ crime_{it} = \alpha + \beta \cdot active_{it} + \delta \cdot x_{it} + \rho_i + \eta_t + \varepsilon_{it}, \quad (2)$$

where $hate\ crime_{it}$ is the hate crime rate in county i in year t , $active_{it}$ indicates presence of an active white supremacist group chapter, x_{it} is a vector of explanatory variables for county i in time period t , and δ is a vector of county parameters to be estimated. The control variables in x_{it} include real median household income; the unemployment rate; the real unemployment benefit per unemployed citizen; the poverty rate; the percentages of the population that are black, Hispanic, and white; the population density; the percentage of males aged 15 through 44; and the overall crime rate.⁹ I include time-invariant, county-specific effects represented by ρ_i to control for omitted variables that differ between counties but are constant over time.¹⁰ This fixed effects estimation methodology relies on within-county variation. The year dummies, η_t , control for omitted changes over time that affect all counties similarly. The error term, ε_{it} , is clustered by county in order to account for nonrandom errors within each panel (Rogers 1993; Williams 2000; Wooldridge 2002).

There are flaws associated with the collection of hate crime data that may bias the estimates. First, many states and local governments do not have formal guidelines on how to complete a hate crime report.¹¹ Second, only a fraction of all hate crimes are reported. If

⁸A county may be home to a hate group even though none is reported as present for that calendar year; it is possible that the hate group chapters simply did not draw attention to themselves that calendar year. In order to determine the effects of this possibility, I constructed alternative measures assuming that a county was hate group free only if that county witnessed no hate group activity over multiple years. If an active hate group was present during any one of these years, I assumed that the hate group was simply silent during the others and continued to be present over the entire time period. Using this methodology, I constructed three alternative measures of white supremacist activity: one in which I considered a hate group to have been disbanded only if it had been silent for two years, one for three years, and one for four years. Repeating the estimation in Table 2 using these three alternative measures reveals qualitatively and quantitatively similar results. Results are available from the author upon request.

⁹I do not include real expenditures on police protection because data are available only for 1997 and 2002 at the county level from the Census Bureau's Census of Governments. When including real police expenditures, the presence of an active white supremacist chapter is associated with a larger increase in all types of hate crimes than shown by the estimates presented in Table 2.

¹⁰The Hausman test value of 73.65 with 20 degrees of freedom results in a p -value of 0.00, thus rejecting the null that the more efficient random effects estimator returns the same estimates as the fixed effects estimator.

¹¹Hate crime data reported by the FBI are "from all law enforcement agencies that submitted either of the following: (1) at least one National Incident-Based Reporting System Group A Incident Report, a Group B Arrest Report, or a Zero Report for at least 1 month of the calendar year; or (2) at least one Hate Crime Incident Report and/or a Quarterly Hate Crime Report" (http://www2.fbi.gov/ucr/hc2008/data/table_12_dd.html, Viewed 7/11/10).

counties with active chapters are more likely to report hate crimes, this biases the estimates upward. If counties with active white supremacist chapters are less likely to report hate crimes, this biases the estimates downward. Third, in some counties hate crime reporting is conducted only by a fraction of state and local agencies. If localities with active chapters are less likely to be covered by hate crime reporting, this biases the estimates downward. If agencies are less likely to file a report when chapters are present, the estimates will be biased downward. Finally, if agencies fail to submit hate crime information when there are no white supremacist chapters, the estimates will be biased upward.

5 Hate crime and hate group data

Hate crime data come from the FBI's annual report, *Hate Crime Statistics* (FBI various years). First published in 1992, *Hate Crime Statistics* compiles hate crime reports voluntarily submitted by various law enforcement agencies. In 1992, *Hate Crime Statistics* covered only 51 % of the US population from 42 states. By 1997, 83 % of the population from 48 states and DC were covered. Between 1997 and 2007 the percentage of the population covered ranged from a high of 86.6 % in 2004 to a low of 80.0 % in 1998.

Figure 2 maps the highest hate crime rate for each county between 1997 and 2007.¹² In 1997, approximately 21 % of counties reported at least one hate crime. In 2007, 27 % of counties reported at least one hate crime. Between 1997 and 2007, 60.6 % of counties reported at least one hate crime.¹³

Collecting information on hate groups is difficult at best (Himmelstein 1998; Dobratz and Shanks-Meile 2000). Moreover, the reporting by mainstream media and watchdog groups, such as the Anti-Defamation League and the SPLC, is often questioned for its accuracy because of the organizations' incentives to portray hate groups as large threats to society (Kaplan 1997).¹⁴ In the absence of other sources, social scientists such as Ferber and Kimmel (2004), Berlet (2004), and Ryan and Leeson (2011) have followed Freilich (2003), who states that "the prudent course of action is to utilize the data, while recognizing the potential problems associated with it" (Freilich 2003: 93).

The SPLC considers a group active if its members engage in any of the following: marches, rallies, speeches, meetings, leafleting, publishing literature, or committing criminal acts. The SPLC tracks hate groups "using hate group publications and websites, citizen and law enforcement reports, field sources and news reports" (SPLC, <http://www.splcenter.org/get-informed/hate-map>).¹⁵ In 1997, the SPLC began gathering data for all known active hate

¹²Agencies whose jurisdictions cover multiple counties do not identify the county in which the reported hate crime took place. Only 5.5 % of hate crime incidents are reported by agencies covering multiple counties. For agencies that cover more than one county jurisdiction, I assign the crimes to the first county listed for that agency in the Law Enforcement Agency Identifiers Crosswalk (US Dept. of Justice, Bureau of Justice Statistics 2000).

¹³Even though states such as Georgia, Alabama, and Mississippi have no state data collection statutes, some agencies voluntarily submit hate crime reports to the FBI.

¹⁴Most of this criticism is based on the incentives watchdog organizations have to exaggerate the number of hate group members and organizations. However, if the number of active white supremacist chapters is biased upward, the resulting estimated coefficients will be biased downward. Therefore, the potential bias of the SPLC works against finding a positive relationship between white supremacist activity and hate crime.

¹⁵Ideally, another source could verify the SPLC's measures of white supremacist activity. Unfortunately, most organizations interested in hate crimes, such as the Stephen Roth Institute, are concerned only with certain types of hate crimes. Moreover, none of these organizations measure hate group activity at the local level on a nationwide basis.

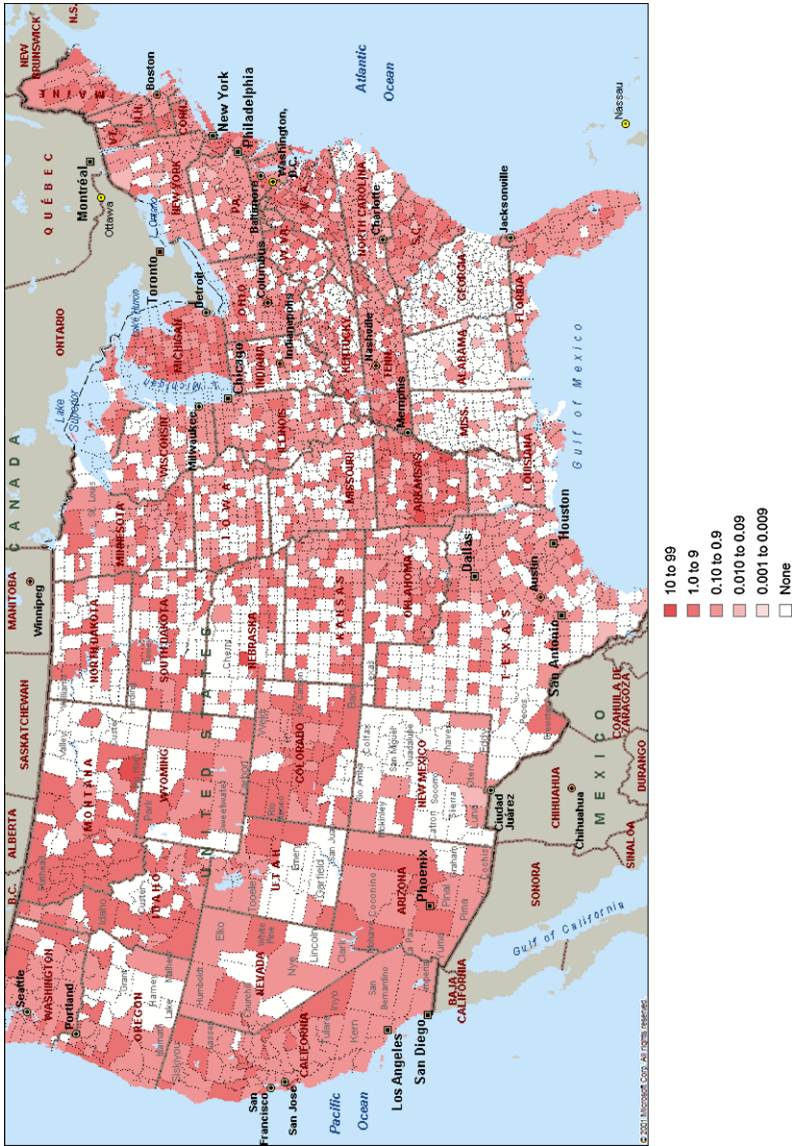


Fig. 2 Maximum hate crime rate in a given year: 1997–2007

group chapters by city.¹⁶ Although the SPLC now tracks many types of organizations, data for the Ku Klux Klan, neo-Nazi, racist skinhead, and Christian Identity groups only are available for every year from 1997 to 2007.¹⁷ Approximately 25 %, or 793, counties were home to at least one active white supremacist group chapter.¹⁸

Figure 3 depicts the change in the overall presence of active Ku Klux Klan, neo-Nazi, racist skinheads, and Christian Identity chapters between 1997 and 2007. The 32 counties shaded in red were always home to at least one active white supremacist chapter. Counties shaded blue witnessed at least one year with one or more active white supremacist chapters and one year without an active chapter. Because the empirical analysis includes fixed effects, these 761 counties, representing 49 states, provide the empirical variation in white supremacist chapters. All remaining counties, shown in white, were never home to an active white supremacist chapter.

Table 1 displays the county-level summary statistics for hate crime rates by various types of victims and perpetrators, the presence of white supremacist activity, and the independent control variables used in the estimations. The average hate crime rate for the entire sample is 0.16 per 10,000 residents. Excluding hate crimes listed as antiwhite, the hate crime rate falls to 0.13 per 10,000. Looking only at hate crimes committed by whites, excluding crimes listed as antiwhite, results in a rate of 0.07 per 10,000. In about 9 % of county-year observations, at least one active white supremacist chapter is reported.

6 The relationship between white supremacist groups and hate crime

The results of the fixed effects estimation of Eq. (2) are reported in column one of Table 2.¹⁹

Using the full sample, the presence of an active white supremacist chapter is associated with 285 more hate crimes per 10,000 residents.²⁰ With an average number of hate crimes

¹⁶Although the SPLC reports hate group location by city or town, the analysis is performed at the county level for theoretical and empirical reasons. First, many hate groups chapters hold rallies and recruitment meetings outside their hometowns in nearby locations and thus include members from the surrounding towns and townships. Second, because many of these towns are not in MSAs, county-level data represent the least aggregated measures of crime, unemployment, poverty, and the like that are available.

¹⁷In 2000, the Southern Poverty Law Center began monitoring neo-Confederate organizations. This study does not include those organizations because of their initial omission by the Southern Poverty Law Center; nor does it include black separatists or the “Other” category.

¹⁸Not all active hate groups can be assigned to a single county. For instance, the SPLC reports an active North Carolina chapter of the Knights of the White Kamelia (Ku Klux Klan), but does not list a city; when no city is reported, the hate group is not included in the analysis. The percentage of omitted active groups ranges from 1.2 % in 1998 to 12.8 % in 2007.

¹⁹Appendices A, B, C, and D report alternative specifications. Appendix A repeats Tables 2, 3, 4 and 6 but replaces the indicator variable, $active_{it}$, with the number of active white supremacist chapters, $number_{it}$. Appendix B excludes observations from 2001 to determine whether September 11th, 2001, affects the estimates. Appendix C estimates the effects of white supremacist chapters and hate crimes in neighboring counties. Appendix D reports whether spatial-autoregressive dependence is present in the hate crime rate or the error term when looking at the cross-sectional spatial estimations. All additional results are available at http://www.seanemulholland.com/newpage12/papers/hate_crime_appendices.pdf.

²⁰Table A1 in the online Appendix A (see footnote 19) reports similar estimation results if the indicator variable is replaced by the number of white supremacist chapters. Table B1 repeats the estimation in Table 2 but excludes 2001 to find that there is no significant September 11 effect.

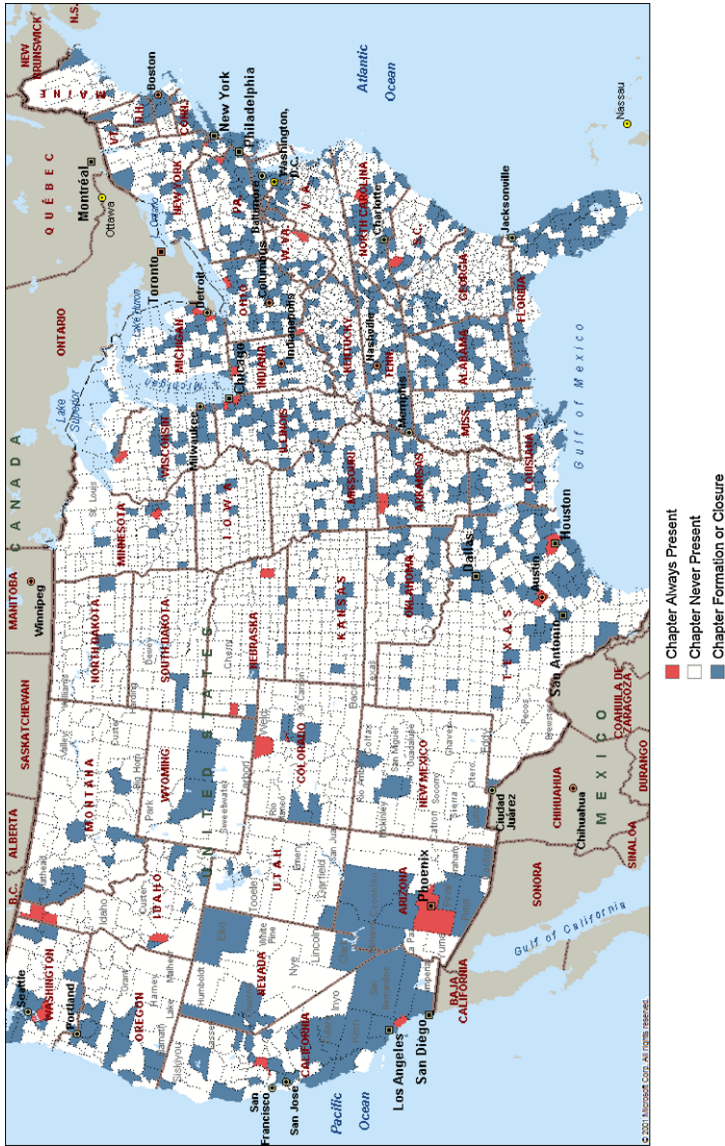


Fig. 3 Change in hate group presence from 1997 through 2007

Table 1 Summary statistics

	Mean	Standard deviation	Maximum	Minimum
Number of Hate Crimes	2.877	18.261	925.000	0.000
Hate Crime Rate (10000)	0.160	0.580	37.443	0.000
Hate Crime Rate Excluding Anti-White (10000)	0.132	0.434	19.231	0.000
Hate Crime Rate Comitted by Whites Excluding Anti-White (10000)	0.066	0.241	8.251	0.000
Hate Crime Rate Comitted by Non-Whites (10000)	0.085	0.390	19.231	0.000
Anti-White Hate Crime Rate by Non-Whites	0.018	0.173	11.872	0.000
Hate Group Present (Yes = 1)	0.091	0.288	1.000	0.000
Real Median Household Income (\$2006)	41379.68	10442.02	106782.4	17808.63
Unemployment Rate	5.226	2.145	33.200	0.700
Benefits per Unemployed	4.360	2.174	32.402	0.000
Percent in Poverty	14.188	5.752	55.900	1.700
Percent Black	9.497	14.808	86.709	0.000
Percent Hispanic	6.893	12.617	97.930	0.000
Percent White	86.793	15.805	100.000	4.786
Population Density	268.643	1792.164	70786.195	0.043
Percentage Male Age 15–44	20.765	3.359	55.507	10.660
Crime Rate (10000)	272.326	171.970	3888.889	0.405
<i>N</i>	30621			

per 10,000 residents of 1,494, the presence of an active white supremacist chapter is associated with a 19.1 % higher hate crime rate.²¹

Given the panel nature of these data and the presence of first-order autocorrelation, I use the Arellano-Bover (1995) and Blundell-Bond (1998) General Method of Moments (GMM) dynamic panel estimator and include a lagged dependent variable as an explanatory variable.²²

$$hate\ crime_{it} = \alpha + \lambda \cdot hate\ crime_{i,t-1} + \beta \cdot active_{it} + \delta \cdot x_{it} + \rho_i + \eta_t + \varepsilon_{it} \quad (3)$$

In this specification, both the lagged hate crime rate and the overall crime rate are endogenous variables. All others variables are treated as exogenous. I address the endogeneity of the one-year lag of hate crimes and the overall crime rates by using internal instruments, namely lagged levels and lagged differences in the hate crime rate and the overall crime

²¹Agencies covering multiple counties do not report the county in which a hate crime took place. Therefore, I also estimate Eq. (2) excluding the 5.5 % of hate crimes reported by agencies covering multiple counties. The estimated coefficient on active white supremacist chapters is 0.029 and significant at the 5 % level. This corresponds to a 20.0 % higher hate crime rate. It may also be the case that counties that report at least one hate crime differ systematically from those counties that never report a hate crime. Restricting the sample to only those counties that report hate crimes between 1997 and 2007 reveals that the presence of a chapter is associated with 331 more hate crimes per 10,000 residents, an increase of 13.8 %.

²²I perform three tests for autocorrelation. The Wooldridge test for first-level autocorrelation returns an $F(1, 3101) = 3.981$ with a prob > $F = 0.05$, just barely failing to reject the null of no autocorrelation. However, the modified Bhargava et al. (1982) Durbin-Watson statistic of 1.78 and the Baltagi-Wu (1999) LBI statistic of 1.93 both suggest the presence of first-order autocorrelation.

Table 2 Hate Crime Rate 1997–2007

	All counties	
	Fixed effects	Dynamic panel system GMM
Hate Group Present _{<i>t</i>} (Yes = 1)	0.02846** [0.01291]	0.02752* [0.01443]
Hate Crime Rate (10000) Lagged One Year		0.43475*** [0.12395]
Real Median Household Income (\$2006)	0.00000 [0.00000]	0.00000*** [0.00000]
Unemployment Rate	0.00126 [0.00252]	−0.00234 [0.00184]
Unemployment Benefits per Unemployed (\$2006)	−0.00110 [0.00448]	0.00378 [0.00261]
Percent in Poverty	−0.00195 [0.00236]	0.00141 [0.00160]
Percent Black	0.00687 [0.00656]	−0.00008 [0.00056]
Percent Hispanic	0.00440** [0.00204]	−0.00026 [0.00055]
Percent White	0.00379 [0.00525]	−0.00038 [0.00044]
Population Density	−0.00018 [0.00017]	0.00001*** [0.00000]
Percent Male Age 15–44	0.00800 [0.00562]	0.00343*** [0.00114]
Crime Rate (10000)	0.00028*** [0.00005]	−0.00005 [0.00014]
Adj. R-squared	0.003	
R-squared Within	0.004	
Correlation between u_i and X_b	−0.766	
Rho	0.449	
Hansen J statistic		13.642
Hansen p -value		0.625
AR(2) test statistic		1.626
AR(2) p -value		0.104
Difference-in-Hansen GMM		0.729
No. of instruments		38
No. of groups	3116	3115
No. of observations	33948	30872

Significant at * 10 %, ** 5 %, *** 1 %. Standard errors in brackets. All estimations include year dummies
 Column 1 standard errors are clustered by county. Column 2 is a two-step system GMM with Windmeijer (2005) corrected standard errors

The collapsed instruments used in the difference equation of the GMM estimation are Hate Crime_{*t-r*} and Crime Rate_{*t-r*} for t from 1997 to 2007 and r from 3 to 8

The collapsed instruments used in the levels equation of the CMM estimation are Δ Hate Crime_{*t-2*} and Δ Crime Rate_{*t-2*} for t from 1997 to 2007

rate.²³ Column 2 in Table 2 reports the estimated results using the two-stage GMM estimation method.²⁴ For the overall sample, the GMM estimator returns a similarly significant relationship between white supremacist activity and hate crime rates: an increase of 18.4 %.²⁵

However, this measure of hate crimes includes hate crimes that white supremacist groups are unlikely to perpetrate: antiwhite hate crimes. In addition, the measure includes hate crimes committed by nonwhites. Therefore, I repeat the estimations in Eqs. (2) and (3) but replace the dependent variable with hate crimes excluding those listed as antiwhite.²⁶ As reported in columns 1 and 2 of Table 3, I find that the presence of a white supremacist chapter is associated with 243 to 299 more non-antiwhite hate crimes per 10,000 residents, an increase of between 19.5 % and 24 %.²⁷ I then exclude hate crimes committed by nonwhites and focus on hate crimes committed by whites with nonwhite victims.²⁸ The estimates are reported in columns 3 and 4 of Table 3.²⁹ The presence of a white supremacist chapter is associated with between 135 and 155 more white-on-nonwhite hate crimes, an increase of between 21.8 % and 25.1 %. In both cases, I continue to find that the presence of an active white supremacist group is associated with higher hate crime rates. This suggests that white supremacist chapters play a direct role in hate crime.

7 Alternative hypotheses

The results above support the theory that white supremacist members commit hate crimes. However, the results are also consistent with three competing hypotheses: (1) the presence of one or more white supremacist chapters is a symptom of the overall level of distrust and violent antagonism among various citizens in a county; (2) the presence of one or more active white supremacist chapters is correlated with some idiosyncratic factor that influences hate crime rates for that county-year; and (3) recent increases in hate crime lead to chapter formation for self-defense. The following subsections seek to determine the validity of these alternative hypotheses.

²³The collapsed instruments used in the difference equation of the GMM estimation are hate crime_{t-r} and crime rate_{t-r} for t from 1997 to 2007 and r from 3 to 8. The collapsed instruments used in the levels equation of the GMM estimation are $\Delta \text{hate crime}_{t-2}$ and $\Delta \text{crime rate}_{t-2}$ for t from 1997 to 2007. Given the number of instruments, I conduct a Hansen's J-statistic overidentification test based on the weighted matrix. The resulting Hansen J value for the 38 instrumental variables used is 13.642. With a resulting p -value of 0.625, I fail to reject the null that these instruments are valid. Another overidentification test, the Sargan test, is more reliable but not appropriate if errors are heteroscedastic.

²⁴The Arellano and Bond two-stage procedure generates estimates of the standard deviation that can be biased. For this reason, the estimated standard errors are reported using the Windmeijer (2005) correction.

²⁵For only those counties that report one or more hate crimes, the relationship between hate crimes and white supremacist hate groups is imprecisely estimated when using the GMM estimator.

²⁶The variable $\text{hate crime}(\text{excluding antiwhite})_{i,t}$ is constructed using the entire county population in the denominator.

²⁷The Wooldridge Test ($F(1,3101) = 4.467$) fails to reject the null of no autocorrelation. The modified Bhargava et al. Durbin-Watson statistic of 1.74 and the Baltagi-Wu LBI statistic of 1.96 both suggest the presence of first-order autocorrelation.

²⁸The variable $\text{hate crime}(\text{white-on-other})_{i,t}$ uses the total population as its denominator because biased motivation can include racial as well as nonracial characteristics, such as gender, religion, and sexual identity

²⁹The presence of autocorrelation in the restricted sample in column 3 of Table 3 is rejected by the Wooldridge Test ($F(1,3101) = 0.729$) and the Baltagi-Wu LBI statistic of 2.07. I report the GMM estimator in column 4 in Table 3, however, because the modified Bhargava et al. Durbin-Watson statistic of 1.83 rejects the null of no autocorrelation.

Table 3 Hate Crime Rate Excluding Anti-White and Hate Crime Rate with White Perpetrator and Non-White Victim

	Hate Crime Excluding Anti-White		White Perpetrator and Non-White Victim	
	Fixed effects	Dynamic panel system GMM	Fixed effects	Dynamic panel system GMM
Hate Group Present _{<i>t</i>} (Yes = 1)	0.02430** [0.01055]	0.02985*** [0.01030]	0.01554* [0.00917]	0.01349* [0.00760]
Hate Crime with Non-White Victim Rate (10000) Lagged One Year		0.19656 [0.13961]		
Hate Crime White Perpetrator with Non-White Victim Rate (10000) Lagged One Year				-0.17730 [0.23262]
Adj. R-squared	0.005		0.003	
R-squared within	0.005		0.003	
No. of instruments		38		38
No. of groups	3116	3115	3116	3115
No. of observations	33948	30872	33948	30872

All estimations include income_{*t*}, unemployment rate_{*t*}, unemployment rate benefits_{*t*}, poverty rate_{*t*}, percentage black_{*t*}, percentage Hispanic_{*t*}, percentage white_{*t*}, population density_{*t*}, percentage male 15–44_{*t*}, crime rate_{*t*}, and year dummies

Significant at * 10 %, ** 5 %, *** 1 %. Standard errors in brackets. All estimations include year dummies

Columns 1 and 3 standard errors clustered by county. Columns 2 and 4 are two-step system GMM with Windmeijer (2005) corrected standard errors

The collapsed instruments used in differenced equations of the GMM estimation are: Hate Crime Rate_{*t*-4}, Hate Crime Rate_{*t*-5}, ..., Hate Crime Rate₁₉₉₇ and Crime Rate_{*t*-1}, Crime Rate_{*t*-2}, ..., Crime Rate₁₉₉₇

The collapsed instruments used in level equations of the GMM estimation are: Δ Hate Crime Rate_{*t*} and Δ Crime Rate_{*t*-4}

7.1 Distrust and antagonism

To examine whether white supremacist activity is associated with the overall level of antagonism, I estimate whether the hate crimes listed as antiwhite or the hate crimes committed by nonwhites are correlated with white supremacist activity. If the relationship is positive, white supremacist activity may capture the overall bias-motivated antagonism in a county and not just white supremacist activity. A negative or insignificant relationship would further support the hypothesis that white supremacists commit hate crimes.

I first estimate the relationship between white supremacist chapters and hate crimes committed by nonwhites by replacing the dependent variable in Eq. (2) with the rate of hate crimes committed by nonwhites. The fixed effect estimation results in column 1 of Table 4 shows no statistical relationship between white supremacist groups and hate crimes with nonwhite perpetrators. However, the GMM estimator in column 2 reports a positive relationship, suggesting that presence of a hate group may be symptomatic of overall antagonism. This result may come about if white supremacists inflame biases against one or more groups.

I then replace the dependent variable with antiwhite hate crimes committed by nonwhites. The estimated relationship is reported in columns 3 and 4 in Table 4. Both the fixed effects

Table 4 Hate Crimes Committed by Non-Whites and Hate Crimes Committed by Non-Whites Listed as Anti-White

	Hate Crimes with Non-White Perpetrators		Anti-White Hate Crimes with Non-White Perpetrators	
	Fixed effects	Dynamic panel system GMM	Fixed effects	Dynamic panel system GMM
Hate Group Present _t (Yes = 1)	0.01055 [0.00733]	0.01647* [0.00850]	0.00179 [0.00419]	0.00006 [0.00403]
Hate Crime Rate with Non-White Perpetrator _{t-1}		0.18373 [0.21774]		
Anti-White Hate Crime Rate with Non-White Perpetrator _{t-1}				0.23715 [0.33325]
Adj. R-squared	0.002		0.000	
R-squared within	0.003		0.001	
No. of instruments		39		39
No. of groups	3116	3115	3116	3115
No. of observations	33948	30872	33948	30872

All estimations include income_t, unemployment rate_t, unemployment rate benefits_t, poverty rate_t, percentage black_t, percentage Hispanic_t, percentage white_t, population density_t, percentage male 15–44_t, crime rate_t, and year dummies

Significant at * 10 %, ** 5 %, *** 1 %. Standard errors in brackets. All estimations include year dummies

Columns 1 and 3 standard errors clustered by county. Columns 2 and 4 are two-step system GMM with Windmeijer (2005) corrected standard errors

The collapsed instruments used in differenced equations of the GMM estimation are: Hate Crime Rate_{t-3}, Hate Crime Rate_{t-4}, . . . , Hate Crime Rate₁₉₉₇ and Crime Rate_{t-1}, Crime Rate_{t-2}, . . . , Crime Rate₁₉₉₇

The collapsed instruments used in level equations of the GMM estimation are: Δ Hate Crime Rate_t and Δ Crime Rate_{t-4}

and the GMM estimation reject the hypothesis that white supremacist groups are simply a proxy for violent antagonism.

7.2 Correlation with an idiosyncratic factor that influences hate crime rates

Although Tables 2 and 3 and much of Table 4 suggest a positive relationship between white supremacist activity and hate crimes, an increase in hate crimes could be due to some other idiosyncratic reason correlated with hate group formation. That is, the estimated coefficient on *active_{it}* in Eqs. (2) and (3) may be biased if the measure of hate group activity, *active_{it}*, is correlated with the error term, ε_{it} . One way to reduce the potential bias is to replace *active_{it}* with its one year lagged values, *active_{it-1}*, and reestimate Eqs. (2) and (3) using the same independent variables as before.³⁰

Table 5 reports the estimated coefficients on *active_{it-1}*.³¹ Panel A replicates the regressions from Table 2, Panel B replicates Table 3, and Panel C replicates Table 4. Panel A in Table 5, reports the estimated coefficient on *active_{it-1}* using the overall hate crime rate,

³⁰I thank an anonymous referee for suggesting this estimation strategy.

³¹All other independent variables from the earlier estimations are included. I do not report the estimated coefficients on the other independent variables for the sake of brevity.

Table 5 Replacing Hate Group Presence_{*t*} with Hate Group Presence_{*t*-1}

Panel A. Overall Hate Crime Rate 1997–2007

	All counties	
	Fixed effects	Dynamic panel system GMM
Hate Group Present _{<i>t</i>-1} (Yes = 1)	0.03638 [0.02469]	0.03893** [0.01777]

Panel B. Crime Rate Excluding Anti-White and Hate Crime Rate with White Perpetrator and Non-White Victim

	Hate Crime Excluding Anti-White		White Perpetrator and Non-White Victim	
	Fixed effects	Dynamic panel system GMM	Fixed effects	Dynamic panel system GMM
Hate Group Present _{<i>t</i>-1} (Yes = 1)	0.02578** [0.01147]	0.03364*** [0.01292]	0.02015** [0.00844]	0.03256*** [0.00964]

Panel C. Hate Crimes Committed by Non-Whites and Hate Crimes Committed by Non-Whites Listed as Anti-White

	Hate Crimes with Non-White Perpetrators		Anti-White Hate Crimes with Non-White Perpetrators	
	Fixed effects	Dynamic panel system GMM	Fixed effects	Dynamic panel system GMM
Hate Group Present _{<i>t</i>-1} (Yes = 1)	0.01017 [0.01415]	0.01192 [0.01033]	0.00453 [0.00877]	0.00035 [0.00297]

All estimations include income_{*t*}, unemployment rate_{*t*}, unemployment rate benefits_{*t*}, poverty rate_{*t*}, percentage black_{*t*}, percentage Hispanic_{*t*}, percentage white_{*t*}, population density_{*t*}, percentage male 15–44_{*t*}, crime rate_{*t*}, and year dummies

Significant at * 10 %, ** 5 %, *** 1 %. Standard errors in brackets

Fixed effects standard errors are clustered by county

System GMM are two-step with Windmeijer (2005) corrected standard errors

hate crime_{it}, as a dependent variable. Although both the fixed effect and GMM estimates are positive, only the GMM estimator is statistically significant. This mixed result suggests that the presence of a chapter may be correlated with idiosyncratic factors that influence the annual county hate crime rate.

The first two columns of Panel B in Table 5 report the estimated relationship between the presence of a white supremacist chapter in the previous year and all current non-antiwhite hate crimes. Unlike the results shown in Panel A, this relationship continues to be both positive and significant: The presence of one or more white supremacist chapters in the previous year results in a 20.4 % to 26.6 % increase in the probability of current non-antiwhite hate crime. Furthermore, in columns 3 and 4 of Panel B, I find that the presence of one or more white supremacist chapters is associated with at least a 32.4 % increase in hate crimes perpetrated by whites against nonwhite victims the following year.

Panel C in Table 5 reestimates the regressions in Table 4 with $active_{it-1}$ in place of $active_{it}$; none of the estimated coefficients are significant. These are stronger results than those in Table 4. Thus, this alternative estimation shows no significant relationship between white supremacist activity and hate crimes by nonwhites whether antiwhite or not.

7.3 Protection from hate crimes

The results in Table 3, Table 4 (save for column 2), and Panel B of Table 5 suggest that white supremacists are the source of higher hate crime rates. However, these positive correlations are also consistent with the formation of chapters in anticipation of future increases in hate crime by nonwhites or hate crimes with an antiwhite bias.

To determine whether current changes in hate crimes perpetrated by nonwhites are related to past changes in white supremacist activity or lagged changes in hate crimes by nonwhites, I estimate Eq. (4).

$$\begin{aligned} \Delta hate\ crime(by\ non\ white)_{it} = & \alpha + \sum_{r=1}^2 \gamma_r \cdot \Delta hate\ crime(by\ non\ white)_{i,t-r} \\ & + \sum_{r=1}^2 \beta_r \cdot \Delta active_{i,t-r} \\ & + \delta \cdot x_{it} + \rho_i + \eta_t + \varepsilon_{it} \end{aligned} \tag{4}$$

Column 1 of Table 6 shows that the coefficient estimates on lagged chapter activity are not significant. This reinforces the notion that nonwhites do not commit more hate crimes when a county witnesses a change in the activity of white supremacist chapters. In other words, past formation of white supremacist chapters does not stimulate nonwhites to commit hate crimes.

To test whether chapters form in response to recent changes in hate crimes by nonwhites, I construct the trichotomous variable $\Delta active_{it}$ where:

$$\Delta active_{it} = \begin{cases} -1 & \text{if a county is no longer home to an active white supremacist chapter} \\ 0 & \text{if a county realizes no change in the presence or lack of presence} \\ & \text{of a chapter} \\ 1 & \text{if a county is no longer free of white supremacist activity} \end{cases} \tag{5}$$

I then replace the dependent variable in Eq. (4) with $\Delta active_{it}$ and use an ordered logistic estimator:

$$\begin{aligned} \Delta active_{it} = & \alpha + \sum_{r=1}^2 \gamma_r \cdot \Delta hate\ crime(by\ non\ white)_{i,t-r} \\ & + \sum_{r=1}^2 \beta_r \cdot \Delta active_{i,t-r} + \delta \cdot x_{it} + \rho_i + \eta_t + \varepsilon_{it} \end{aligned} \tag{6}$$

Column 2 in Table 6 shows the results. The coefficient on hate crimes by nonwhites is again not significant, suggesting that current white supremacist activity is not related to past hate crimes committed by nonwhites.³²

³²Potential white supremacist members may be more concerned over hate crimes by nonwhites that are listed as antiwhite. Replacing the change in hate crimes by nonwhites with the change in antiwhite hate crimes committed by nonwhites and reestimating Eqs. (4) and (6) results in no significant relationship.

Table 6 Expected Future Hate Crimes Committed by Non-Whites and Hate Group Activity

	Δ Hate Crime Rate by Non-White Perpetrator _{<i>t</i>}	Δ Hate Group Presence _{<i>t</i>}
Δ Hate Crime Rate by Non-White Perpetrator _{<i>t-1</i>}	-0.57623*** [0.07052]	0.00351 [0.05173]
Δ Hate Crime Rate by Non-White Perpetrator _{<i>t-2</i>}	-0.31728*** [0.06671]	0.03871 [0.04981]
Δ Hate Group Presence _{<i>t-1</i>}	0.01853 [0.01435]	-3.46035*** [0.07519]
Δ Hate Group Presence _{<i>t-2</i>}	-0.00306 [0.01009]	-2.45643*** [0.10904]
Adj. R-squared	0.284	
Pseudo R-squared		0.1564
No. of observations	24662	24662

All estimations include Δ income_{*t*}, Δ unemployment rate_{*t*}, Δ unemployment rate benefits_{*t*}, Δ poverty rate_{*t*}, Δ percentage black_{*t*}, Δ percentage Hispanic_{*t*}, Δ percentage white_{*t*}, Δ population density_{*t*}, Δ percentage male 15–44_{*t*}, Δ crime rate_{*t*}, and year dummies

Column 1 is ordinary least squares. Column 2 is an ordered logit

Robust standard errors in brackets

Significant at * 10 %, ** 5 %, *** 1 %

8 Conclusion

The presence of one or more active white supremacist chapters in a county raises the overall hate crime rate by 19.1 %. Excluding hate crimes listed as antiwhite reveals that chapter activity is associated with a 19.5 % to 24 % higher hate crime rate. Hate crimes committed by white perpetrators against nonwhites is also 21.8 % to 25.1 % higher when at least one white supremacist chapter is active. Antiwhite hate crimes perpetrated by nonwhites are not associated with white supremacist chapters, rejecting the possibility that chapter activity is symptomatic of the overall level of bias-motivated antagonism.

White supremacist chapters do not appear to form in response to hate crimes perpetrated by nonwhites or antiwhite hate crimes by nonwhites. In this respect, white supremacist groups appear to operate more as a social movement and less like gangs (Sobel and Osoba 2009). Nor do they appear to enforce contracts or resolve contractual disputes like Hispanic gangs (Skarbek 2011) or organized crime such as the Sicilian Mafia (Gambetta 1993). This difference may be due to the role of ideology and the source of the perceived threats. Gangs and organized crime emerge as a way of providing effective governance, most notably physical protection and the ability to enforce contracts and resolve disputes. Though membership in a white supremacist group may provide some form of protection, the group does not enforce contracts or resolve contract disputes. Members organize to stop the perceived degradation of western culture. This difference between alternative governance organizations and white supremacist groups may also be a function of how law enforcement agencies address hate crimes versus crimes committed by gangs or organized crime.

There are several possible reasons why the results presented here differ from Ryan and Leeson (2011), who find no relationship between hate groups and hate crimes. First, Ryan and Leeson estimate the hate group-hate crime relationship using the number of chapters at the state level, whereas my analysis uses an indicator variable for chapter presence at the

county level. If hate groups are local phenomena, then white supremacist groups are much more likely to direct their frustration at local residents. Because of local differences, aggregation may result in lost variation and reduce the estimated effect. Moreover, because the Southern Poverty Law Center (SPLC) does not report chapter size, the number of chapters may be a noisy measure of the magnitude of hate group activity.

Second, even if a hate group is not actively seeking to commit crimes, its presence may signal to local community members that a particular bias is acceptable. Nonmembers may act out against those viewed as inferior by the white supremacists because such views are present in the community. Spillover effects, if they exist at all, are much more likely to be local in nature and thus lost when aggregating to the state level.

Third, the estimations presented here include only the Ku Klux Klan, neo-Nazi, racist skinhead chapters, and Christian Identity churches that are listed with a city or county location. This differs from Ryan and Leeson's measure in two respects. First, Ryan and Leeson count all chapters or churches by state whether or not a city or county location is known. Second, Ryan and Leeson include all types of hate groups counted by the SPLC. Therefore, their list includes three additional hate groups: neo-Confederates, black separatists and others. This "Other" category includes scientific research institutes, recording studios, religious organizations, rights organizations, and retail outlets.³³ Although these organizations may hold biased views that "malign an entire class of people," the majority do not advocate violence (SPLC, <http://www.splcenter.org/get-informed/hate-map>).

The estimated relationship between white supremacist activity and hate crime suggests that monitoring these groups would reduce hate crime rates. Furthermore, in communities without such laws, representatives and law enforcement officials may want to consider enacting hate crime laws and white supremacist monitoring laws. Further work is needed to determine which types of white supremacist groups are more likely to commit hate crimes. In addition, further research is required to determine whether the presence of black separatist organizations, such as the New Black Panther Party, and Patriot organizations are associated with the commission of hate crimes in the United States.

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References

- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error component models. *Journal of Econometrics*, 68(1), 29–51.
- Baltagi, B. H., & Wu, P. X. (1999). Unequally spaced panel data regressions with AR(1) disturbances. *Econometric Theory*, 15(6), 814–823.
- Benson, B. (1989). The spontaneous evolution of commercial law. *Southern Economic Journal*, 55(3), 644–661.

³³Included in the "Other" category are the Charles Darwin Research Institute (CDRI 2010), "a scientific and educational foundation established to honor and extend the scientific revolution inaugurated by one of the greatest figures in the history of human thought" (CDRI, <http://www.charlesdarwinresearch.org>), and the Family Research Institute (2010), whose goal is "to generate empirical research on issues that threaten the traditional family, particularly homosexuality, AIDS, sexual social policy, and drug abuse" (Family Research Institute, <http://www.familyresearchinst.org>).

- Berman, E. (2000). Sect, subsidy, and sacrifice: an economist's view of ultra-orthodox Jews. *Quarterly Journal of Economics*, 115(3), 905–953.
- Berman, E. (2003). Hamas, Taliban, and the Jewish Underground: an economist's view of radical religious militias (Working Paper. No. 10004). National Bureau of Economic Research.
- Berlet, C. (2004). Militias in the frame. *Contemporary Sociology*, 33(5), 514–521.
- Berlet, C., & Vysotsky, S. (2006). Overview of U.S. white supremacist groups. *Journal of Political & Military Sociology*, 34(1), 11–48.
- Besci, Z. (1999). Economics and crime in the state. *Federal Reserve Bank of Atlanta Economic Review*, 84(1), 38–56.
- Bhargava, A., Franzini, L., & Narendranathan, W. (1982). Serial correlation and the fixed effects model. *Review of Economic Studies*, 49(4), 533–549.
- Blazak, R. (1998). Hate in the suburbs: the rise of the skinhead counterculture. In *The practical skeptic: readings in sociology* (pp. 36–44). Mountain View: Mayfield.
- Blazak, R. (2001). White boys to terrorist men: target recruitment of Nazi skinheads. *American Behavioral Scientist*, 44(6), 982–1000.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115–143.
- Boyd, E., Berk, R., & Hamner, K. (1996). Motivated by hatred or prejudice: categorization of hate-motivated crimes in two police divisions. *Law & Society Review*, 30(4), 819–850.
- Buchanan, J. M. (1975). *The limits of liberty: between anarchy and leviathan*. Chicago: University of Chicago Press.
- Bushart, H. L., Craig, J. R., & Barnes, M. (2000). *Soldiers of God: white supremacists and their holy war for America*. New York: Kensington Books.
- Cohen, A. K. (1955). *Delinquent boys: the culture of the gang*. Glencoe: The Free Press.
- Charles Darwin Research Institute (2010). <http://www.charlesdarwinresearch.org>. Viewed 11/10/10.
- D'Amico, D. J. (2010). The prison in economics: private and public incarceration in ancient Greece. *Public Choice*, 145(3/4), 461–482.
- Dobratz, B. A., & Shanks-Meile, S. (2000). *The white separatist movement in the United States: "white power, white pride!"*. Baltimore: Johns Hopkins University Press.
- DiIulio, J. J. Jr. (1996). Help wanted: economists, crime and public policy. *Journal of Economic Perspectives*, 10(1), 3–24.
- Ezekiel, R. S. (1995). *The racist mind: portraits of American neo-Nazis and Klansmen*. New York: Viking.
- Family Research Institute (2010). <http://www.familyresearchinst.org>. Viewed 11/10/10.
- Federal Bureau of Investigation (various years). *Hate crime statistics*. Washington, DC. <http://www.fbi.gov/about-us/cjis/ucr/ucr>.
- Ferber, A. L. (2000). *White man falling: race, gender, and white supremacy*. Lanham: Rowman & Littlefield Publishers.
- Ferber, A. L., & Kimmel, M. S. (2004). "White men are this nation": right-wing militias and the restoration of rural American masculinity. In *Home-grown hate: gender and organized racism* (pp. 137–153). New York: Routledge.
- Freilich, J. D. (2003). *American militias: state level variations in militia activities*. New York: LFB Scholarly Publishing.
- Gale, L. R., Heath, W. C., & Ressler, R. W. (2002). An economic analysis of hate crime. *Eastern Economic Journal*, 28(2), 203–215.
- Gambetta, D. (1993). *The Sicilian Mafia: the business of private protection*. Cambridge: Harvard University Press.
- Grove, W. R., Hughes, M., & Geerken, M. (1985). Are uniform crime reports a valid indicator of index crimes? An affirmative answer with minor qualifications. *Criminology*, 23, 451–501.
- Hill, P. B. (2006). *The Japanese Mafia: Yakuza, law and the state*. New York: Oxford University Press.
- Himmelstein, J. L. (1998). *All but sleeping with the enemy: studying the radical right up close*. Presented at the annual meeting of the American Sociological Association, August 21–24, San Francisco, CA.
- Hobbes, T. (1955). *Leviathan*. Oxford: Blackwell Press.
- Iannaccone, L. R. (1992). Sacrifice and stigma: reducing free-riding in cults, communes, and other collectives. *Journal of Political Economy*, 100(2), 271–291.
- Jacobs, J., & Potter, K. (1998). *Hate crimes: criminal law and identity politics*. New York: Oxford University Press.
- Jefferson, P. N., & Pryor, F. L. (1999). On the geography of hate. *Economics Letters*, 65(3), 389–395.
- Jenness, V., & Grattet, R. (2001). *Making hate a crime: from social movement to law enforcement*. New York: Russell Sage Foundation.
- Kaplan, J. (1997). *Radical religion in America: millenarian movements from the far right to the children of Noah*. Syracuse: Syracuse University Press.

- Klein, M. W. (1995). *The American street gang: its nature, prevalence and control*. New York: Oxford University Press.
- Kriesi, H., Koopmans, R., Duyvendak, J. W., & Guigni, M. G. (1995). *New social movements in Western Europe: a comparative analysis*. Minneapolis: University of Minnesota Press.
- Leeson, P. T. (2007). An-arrgh-chy: the law and economics of pirate organization. *Journal of Political Economy*, 115(6), 1049–1094.
- Leeson, P. T. (2009). *The invisible hook: the hidden economics of pirates*. Princeton: Princeton University Press.
- Maroney, T. A. (1998). The struggle against hate crime: movement at a crossroads. *New York University Law Review*, 73(2), 564–620.
- Martin, S. (1995). A cross-burning is not just an arson: police social construct of hate in Baltimore County. *Criminology*, 33(3), 303–326.
- Martin, S. (1996). Investigating hate crimes: case characteristics and law enforcement responses. *Justice Quarterly*, 13(3), 455–480.
- McDevitt, J., & Levin, J. (1993). *Hate crimes: the rising tide of bigotry and bloodshed*. New York: Plenum.
- McGuire, M. C., & Olson, M. (1996). The economics of autocracy and majority rule: the invisible hand and the use of force. *Journal of Economic Literature*, 34(1), 72–96.
- Medoff, M. (1999). Allocation of time and hateful behavior: a theoretical and positive analysis of hate and hate crimes. *American Journal of Economics and Sociology*, 58(4), 959–973.
- Messner, S. F., & Rosenfeld, R. (1994). *Crime and the American Dream*. Belmont: Wadsworth.
- Mulholland, S. E. (2010). Hate fuel: on the relationship between local government policy and hate group activity. *Eastern Economic Journal*, 36(4), 480–499.
- Munger, M. (2006). Preference modification vs. incentive manipulation as tools of terrorist recruitment: the role of culture. *Public Choice*, 128(1/2), 131–146.
- Nozick, R. (1974). *Anarchy, state, and utopia*. New York: Basic Books.
- Olson, M. (1965). *The logic of collective action: public goods and the theory of groups*. Cambridge: Harvard University Press.
- Ostrom, E. (1990). *Governing the commons: the evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Phillips, S., & Grattet, R. (2000). Judicial rhetoric, meaning-making, and the institutionalization of hate crime laws. *Law & Society Review*, 34(3), 567–602.
- Powell, B., & Stringham, E. (2009). Public choice and the economic analysis of anarchy: a survey. *Public Choice*, 140(3/4), 503–538.
- Rogers, W. H. (1993). Regression standard errors in clustered samples. *Stata Technical Bulletin*, 13, 19–23. Reprinted in *Stata Technical Bulletin Reprints*, 3, 88–94.
- Ryan, M. E., & Leeson, P. T. (2011). Hate groups and hate crimes. *International Review of Law and Economics*, 31(4), 256–262.
- Schaeffer, E. C. (2008). Remittances and reputation in Hawala money transfer systems: self-enforcing exchange on an international scale. *The Journal of Private Enterprise*, 24(1), 95–117.
- Shanks-Meile, S. (2001). The changing faces of the white power movement and the antiracist resistance. In *The Politics of Social Inequality* (Vol. 9, pp. 191–195).
- Skarbek, D. (2011). Governance and prison gangs. *The American Political Science Review*, 105(4), 702–716.
- Sobel, R. S., & Osoba, B. J. (2009). Youth gangs as pseudo-governments: implications for violent crime. *Southern Economic Journal*, 75(4), 996–1018.
- Southern Poverty Law Center (1998). *474 hate groups blanket America* (Intelligence Report. Issue 89).
- Southern Poverty Law Center (1999). *Hate groups top 500* (Intelligence Report. Issue 93).
- Southern Poverty Law Center (2000). *The decade in review* (Intelligence Report. Issue 97).
- Southern Poverty Law Center (2001). *Blood on the border* (Intelligence Report. Issue 101).
- Southern Poverty Law Center (2002). *The year in hate* (Intelligence Report. Issue 105).
- Southern Poverty Law Center (2003). *Hate takes a hit* (Intelligence Report. Issue 109).
- Southern Poverty Law Center (2004). *Age of rage* (Intelligence Report. Issue 114).
- Southern Poverty Law Center (2005). *Holy war* (Intelligence Report. Issue 117).
- Southern Poverty Law Center (2006). *The year in hate* (Intelligence Report. Issue 121).
- Southern Poverty Law Center (2007). *The year in hate* (Intelligence Report. Issue 125).
- Southern Poverty Law Center (2008). *The year in hate* (Intelligence Report. Issue 129).
- Southern Poverty Law Center (2010). <http://www.splcenter.org/get-informed/hate-map>. Accessed 07/18/10.
- US Dept. of Justice, Bureau of Justice Statistics (2000). *Law enforcement agency identifiers crosswalk, 1996*. ICPSR ed. Ann Arbor: Inter-university Consortium for Political and Social Research. doi:10.3886/ICPSR02876.
- Weed, F. (1995). *Certainty of justice: reform in the crime victim movement*. New York: de Gruyter.

- Williams, R. L. (2000). A note on robust variance estimation for cluster-correlated data. *Biometrics*, *56*(2), 645–646.
- Windmeijer, F. (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of Econometrics*, *126*(1), 25–51.
- Wooden, W., & Blazak, R. (2000). *Renegade kids, suburban outlaws*. Belmont: Wadsworth.
- Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. Cambridge: MIT Press.