When Leaders Repress: A Study of African States

2014

Ashley (Timmerman) Wilkes

University of Central Florida, ashley.wilkes175@gmail.com

Find similar works at: https://stars.library.ucf.edu/etd

University of Central Florida Libraries http://library.ucf.edu

Part of the International Relations Commons

STARS Citation


This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
WHEN LEADERS REPRESS: A STUDY OF AFRICAN STATES

by

ASHLEY M. TIMMERMANN
B.A. University of Central Florida, 2012
B.A. University of Central Florida, 2012

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Political Science in the College of Sciences at the University of Central Florida Orlando, Florida

Summer Term 2014
ABSTRACT

When do leaders choose state-sponsored repression as a response to certain threats to the state? Conventional wisdom states that authoritarian regimes will be more likely to use these repressive acts in order to maintain law and order, as well as to suppress the opposition. However, previous literature on the subject fails to recognize the effect of irregular civil wars on this decision, as well as the types of repression that will – or will not – be used against citizens. I analyze cross-sectional time series data in 46 African states between 1990 and 2010 on human rights violations and their causes. The key independent variable is irregular civil war, but I also look at the effects of protest movements and domestic terror attacks to find the levels of human rights violations and the specific type of human rights violations used. Irregular civil war is the most important indicator for human rights violations, specifically, the use of killing and disappearances to silence the opposition and end the warfare.
This thesis is dedicated to Danette Chobanian. She has been there for me my whole life, from teaching me to read at an early age to my journey through graduate school. She has been instrumental in instilling the value of an education, as well as a great role model for other aspects of life. I only hope to become the person she is some day, and to repay her for everything she has ever done for me.
ACKNOWLEDGMENTS

I would like to acknowledge and thank all of the professors and fellow students with whom I have had the pleasure of working these last two years, particularly, my thesis committee: Dr. Thomas Dolan, Dr. Barbara Kinsey, and Dr. Nikola Mirilovic. They pushed me and had faith in me, even when I didn’t. I would also like to thank Dr. Bruce Wilson, my mentor throughout my graduate career, who has always been both encouraging and supportive.
TABLE OF CONTENTS

LIST OF TABLES ....................................................................................................................... viii

INTRODUCTION .......................................................................................................................... 1

WHY AFRICA? .............................................................................................................................. 3

LITERATURE REVIEW ............................................................................................................... 5
  Structural Factors .................................................................................................................. 5
  Repression as Reaction ....................................................................................................... 9

THEORETICAL INTUITION ...................................................................................................... 12

HYPOTHESES ............................................................................................................................. 17

RESEARCH APPROACH ........................................................................................................... 19
  Dependent Variables .......................................................................................................... 19
  Independent Variables ........................................................................................................ 21
  Control Variables ................................................................................................................ 23
  Methodology ....................................................................................................................... 25

FINDINGS .................................................................................................................................... 28
  Reaction Variables ............................................................................................................ 28
  Structural Variables .......................................................................................................... 32
  Dependent Variables .......................................................................................................... 33

DISCUSSION ............................................................................................................................... 36

CONCLUSION ............................................................................................................................. 41

APPENDIX A. CIRI VARIABLES ............................................................................................. 44

APPENDIX B. CONTROL VARIABLES ................................................................................... 60
LIST OF TABLES

Table 1 Regression Table .............................................................................................................. 29
INTRODUCTION

Throughout the latter half of the twentieth century, instances of state-sponsored repression have been numerous. Government killing, torture, imprisonment, and disappearances have been exceptionally devastating due to highly efficient weaponry. However, governments do not always resort to repression. Domestic institutions and international human rights treaties have provided the contemporary world with more barriers to repression than ever in history. When do state leaders choose to engage in state-sponsored repression?

While Valentino et. al (2004) suggest that guerrilla warfare accounts for mass killings during war, my research shows that irregular civil war itself is a major cause of a range of human rights violations. Not only do I suggest that irregular civil wars provide for a higher likelihood of repression, but that they provide a higher likelihood for some types of repression, like killing and disappearances, but not for others, like political imprisonment. Additionally, I argue that domestic terrorism will result in discriminate forms of repression, but only in the extreme forms like extrajudicial killings and disappearances. In the existing literature, state-sponsored repression has a number of possible causes. Various studies (Dreher et. al, 2012; Escribá-Folch, 2012; Humphreys and Weinstein, 2006) have attempted to determine when leaders will use repression, from authoritarian regimes to a lack of globalization, upon which my study expands. Other factors explored are types of protest, trade agreements, ethnic fractionalization, and state wealth.

I test my hypotheses using panel data regression on data from 46 African states. Previous studies have primarily used logit analyses and not case years, while mine used fixed-effects,
random-effects GLS regression, and logistic regressions to determine the indicators for repression. These models allow tests for heteroskedasticity and correction for autocorrelation within panel data. This study improves upon the previous literature in that it accounts for the factors causing repression and the types of repression to expect. It also provides a broader explanation for the causes of repression on a continent that has seen some of the worst human rights abuses in history.
WHY AFRICA?

After the so-called “scramble for Africa” in latter part of the nineteenth century, imperialism became the norm on the continent, with arbitrary lines drawn according to the convenience of the European states. Since then, independence has been fought for, gained, and awarded. While some were able to achieve democratic rule, many have gone through periods of upheaval, changing governments due to military coups and insurgencies. The continent has a wide range of variation; there are many cases of domestic terrorism, protest movements, and irregular civil wars. There is also variation among regime type, ethnic fractionalization, GDP per capita, levels of globalization, and strength of state.

Some previous studies (Cleary, 2000; Pereira, 2001) use Latin America as cases, while others (Humphreys and Weinstein, 2006; Balcells, 2010) focus solely on civil wars. However, my study focuses on the continent of Africa as a whole, which has not previously been researched. Studying a continent limits selection bias, and produces generalizable results.

Africa is an important area to study because it has seen various forms of repression over many years. There have been a number of wars throughout the continent, within both authoritarian and democratic regimes. While Africa hosts countries that have suffered from many instances of human rights violations, there are also states that strive toward democratic ideals.

Botswana is one example of a democratic state. It has shown low levels of human rights violations over the years, a lack of civil war, and lack of domestic terrorism. The government respect for physical integrity rights has been strong. Botswana also reports very low levels of
human rights violations throughout the years studied, with most violations occurring in the form of torture.

However, there are also states with opposite situations. For example, the Democratic Republic of the Congo has seen various instances of domestic terrorism, protests, and civil wars. It is an authoritarian state with low GDP per capita and a relatively low level of globalization, according to the KOF Index. Additionally, it has a high level of ethnic fractionalization. The Democratic Republic of the Congo has seen high levels of human rights violations during the years studied, including many instances of extrajudicial killings.

Africa has states ranging from high levels of development to very low levels. No two states are a like and for this reason, it is possible to study the effects of these differences effectively.
The previous literature on repressive regimes suggests many factors that could increase a leader’s decision to use repression against his or her own people. Regime type is the most commonly used. Some studies (Bueno de Mesquita et. al, 2005; Davenport, 2007; Colaresi and Carey, 2008) show that democracy reduces personal integrity rights violations, due to electoral participation and accountability. Davenport (2007, 10) states that democracies make “the political system more accountable to constituents and decrease the likelihood that repressive behavior (especially the lethal forms) will be used.” This accountability is combined with the inherent institutions associated with democracies according to Colaresi and Carey (2008), who study genocides. They assert that the “institutional checks and popular participation that are characteristic of democracies reduce the risk of an unstable political situation escalating into genocide: and compare this with authoritarian governments, where genocide is “three-and-a-half times more likely” to occur (Colaresi and Carey 2008, 42).

Some studies (Davenport and Inman, 2012) present evidence that contradicts this, saying that while regime type is important, it is “not universally applicable across all concepts.” Davenport and Armstrong (2004) argue that the previous studies showing negative linear relationships between democracy and levels of repression are flawed. According to them, there is a negative linear relationship, but only above a particular threshold, that varies due to the measure in question. In their study, the measures include international war, civil war, and military control, among others. However, below this threshold, democracy does not affect the levels of repression. Beer and Mitchell (2006) also present evidence that suggest democracy is
not the deciding factor in whether or not a state will repress. Using the case of India as an example, Beer and Mitchell (2006) suggest ethnic and religious factors for the high levels of repression within a democratic state. The study accurately accounts for the election of specific political parties and the electoral participation as factors for repression, within this democratic state. This contradicts most of the previous research that suggests democracies will not repress.\footnote{While most research focuses on authoritarian and democratic regimes and the affects on human rights violations, Hegre et. al (2001) look at a third option: intermediate regimes. Hegre et. al (2001) provide a study which shows that intermediate regimes are more likely to have civil wars and violence against civilians, while Colaresi and Carey (2008) show that unconstrained leaders within authoritarian regimes which are involved in civil wars are more likely to implement genocidal policies to maintain control. Hegre et. al (2001) address a hole in the existing literature, as previous research focuses on the division between authoritarian and democratic regimes, and fails to explain intermediate regimes.}

Globalization (Hafner-Burton, 2005; Blanton and Blanton, 2009; Abouharb and Cingranelli, 2006; and Dreher et. al, 2012) is suggested to be an influencing factor on a leader’s decision to use repression. Globalization is the interconnectivity of states in banking, trade, and cultural institutions. Dreher et. al (2012, 526) use the KOF Index of Globalization, which is “based on twenty-four variables that relate to different dimensions of globalization.” The study finds that globalization increases government respect for physical integrity rights, as it exposes those governments to the world.

Economic globalization in the form of structural adjustment agreement and preferential trade agreements has also been studied. Structural adjustment agreements require a rapid liberalization of state economies in exchange for a loan from either the World Bank or International Monetary Fund (Abouharb and Cingranelli 2006, 233), while preferential trade agreements reduce tariffs on certain products between member states (Hafner-Burton 2005, 594). Abouharb and Cingranelli (2006) examine structural adjustment agreements (SAAs) actually
worsen government respect for human rights, agreeing with previous studies on SAA with the International Monetary Fund. Preferential trade agreements (PTAs) are found to be more effective at preventing repression than human rights agreements (HRAs) by Hafner-Burton (2005). Unlike SAAs and PTAs, HRAs are specifically meant to protect human rights. This finding is in agreement with the findings of other studies on the effectiveness of human rights treaties (Powell and Staton, 2009; Hill, 2010; Neumayer, 2005; Vreeland, 2008). States involved with the IMF and World Bank are increasingly globalized, and with the SAAs, PTAs, and HRAs, the level of interconnectivity increases. With this interconnectivity comes worldwide attention, making it more difficult for states to repress. As a result, states that have higher levels of globalization will be less likely to repress.

However, there are other possibilities for intervening factors. Mason and Krane (1989, 177) state “escalating repression is perpetrated not because it has a high probability of success but because the weakness of the state precludes its resort to less violent alternatives.” Stronger states may have the infrastructure necessary to find alternative forms of maintaining power. Fearon and Laitin (2003) use mountainous terrain and GDP, among others, in their definition of state strength. The strength of the state is important in determining when human rights violations will occur, but there does not seem to be a consensus on how to measure the strength of a state.

The final factor that has been discussed is state wealth. Conrad and DeMeritt (2013, 105) use natural resources as an explanation for state wealth, specifically revenue from oil, to explain increases in repression. The lack of research on the influence of state strength and wealth on state-sponsored repression leaves a large hole in the literature, which this study will hope to help fill.
The ratification of the Convention Against Torture (CAT) does not prevent states from repressing (Vreeland, 2008; Powell and Staton, 2009; and Hill, 2010). These studies show that the ratification actually makes repressive governments more likely to torture. Hill’s (2010, 1171) results show that “ratification of CAT significantly raises the probability of falling in to the worst category (torture occurs frequently).” This is because single-party authoritarian governments rely on torture to control and induce fear, while the lack of accountability allows the ratification of CAT to simply be for appearances within the international community. Neumayer (2005, 925) finds that the Universal Declaration of Human Rights (UDHR) is similar to CAT in that it also does not affect a regime’s likelihood to resort to torture.

Studies show that international outcry against human rights violations succeed in decreasing them (Lutz and Sikkink, 2000; Kim and Sikkink, 2010; Franklin, 2008). Lutz and Sikkink (2000) find that the governments of Latin America have widely outlawed torture in their constitutions. Unlike the ratification of CAT, which has no effect on human rights violations, governments will not be likely to commit human rights violations if the outlaw of torture is specific in the constitution. While a national ratification of this UN treaty affects intrastate relations, it also affects the state’s position in the global community. Kim and Sikkink (2010) and Franklin’s (2008) studies show that the prosecution and criticism of those who have committed human rights violations leads to a decrease in repression. DeMerritt (2012, 597) proposes that “naming and shaming” by international organizations decreases the likelihood of the use of human rights violations. Franklin’s (2008) study specifies that the decrease in human rights is temporary and only lasts about six months. Keck and Sikkink (1998, 104) found that
the main influence rested upon “international human rights pressures” rather than the public imprisonment or execution of the subversives.

**Repression as Reaction**

Chenoweth and Stephan (2011, 68) find that while nonviolent resistance is more successful than violent resistance, “violent regime repression reduces the likelihood of campaign success by 35 percent.” They examine both peaceful and violent forms to understand when a state might be moved to repress, and how that potential repression will affect the success rate of the campaign in meeting its endgame.

When it comes to other causes of repression, protests (Cleary, 2000) and terrorist attacks (Piazza and Walsh, 2009) have been studied. Using examples of México and Nicaragua, Cleary (2000) provides evidence that protests result in repressive activity from the state. The problem with this study is that Ecuador is a “negative” example, in that the protests that occurred resulted in state concessions to the indigenous population and not in repressive activity against the indigenous as predicted. Colaresi and Carey (2008) study rebel movements, hunger strikes, and riots as possible indicators for state-sponsored repression, but they find that these situations do not result in state-sponsored repression. In the case of terrorist attacks, Piazza and Walsh (2009) find that there are increases in extrajudicial killings and disappearances, while the levels of torture and imprisonment remain steady after terrorist attacks. Their findings are consistent with those of my study, providing evidence toward a strategic approach to repression.

Valentino et. al (2004) suggest that guerrilla warfare is more likely than conventional war to cause mass killings. One factor that would have been interesting to examine in the study is the likelihood for mass killings in guerrilla warfare associated with civil wars. Perhaps there is a
higher chance using guerrilla tactics in civil wars than interstate wars because there are higher
stakes in civil wars, that is who will ultimately gain control of the state. Carey (2010, 167)
provides evidence on widespread violence, stating that “only guerilla warfare increases the
probability of repression onset.”

My research differs from that of Valentino et. al (2004) in that his focuses only on war as
a cause of mass killings. This means that his finding that guerrilla war is related to repression is
more limited because he only compares it to the effects of conventional war. In contrast, I
expect that violent irregular challenges to the state, rebel groups, insurgents, militias, and
domestic terrorism are the most important causes of repression relative to both war and peace.
My definition of irregular war includes not only guerrilla war, but also rebel groups, insurgents,
and militias fighting against the government to either attain secession or control of the state.
Guerrilla fighters will not be easily identifiable by the government and will use supportive
citizens to help with food, shelter, and information. They will use tactics that include, but are not
limited to raids, ambushes, and sabotage. Unlike guerrilla fighters, it is likely that militias are
not supported by citizens in secret; one either is a member of the militia or is not. Additionally,
militia members and insurgents will have clear uniform distinction and will be easily identifiable.
Valentino et. al (2004), on the other hand, has a very limited scope, which addresses mass
killings within guerrilla warfare. It also accounts for why political imprisonment may not be a
viable option in those situations. Additionally, my study looks at protests movements and
domestic terrorism as causes of human rights violations, and the strategy behind the choice in
repressive acts used to silence this opposition and maintain power.
Humphreys and Weinstein (2006) provide a study on the repression of civilians in civil war, which shows that high levels of ethnic fractionalization within warring factions is a cause for using repression against the civilian population. This is supported by a general study that suggests “governments in highly diverse societies are more likely to use political repression against their citizens” (Walker 2007, 23). Manekin (2013), on the other hand, examines the length of deployment as a factor that leads to military use of repression against civilians. Within weak command structures, soldiers deployed over long periods of time in the Second Intifada were found to be more opportunistic than those with strong command structures, in that they are more likely to use violence as a means for monetary gain. It is not clear if this study could be expanded and applied to different types of conflicts.
THEORETICAL INTUITION

Repression can be usefully studied as a strategy of power maintenance within a state. Political coalitions form the basis of the incumbent’s power, and the maintenance of such coalitions is the priority of the leadership in charge. As a politician’s main goal aims to retain power, either by election or otherwise, the stability of the coalition is key. It is pertinent for the leader to bring control, either via repression or other means, while maintaining his or her winning coalition. To lose the foundation of the coalition by legislative or policy measures would ultimately destroy the coalition and therefore, destroy the leadership itself.

Political coalitions are necessary within both authoritarian and democratic forms of government, with the former often requiring much smaller numbers within the coalition itself. The coalitions within democratic governments are often required to adhere to institutions, per constitutional law, which prevent extreme human rights violations such as extrajudicial killing and torture. Constitutions are not always respected unless the judicial systems of the state enforce these laws, a key aspect of the democratic system, which ultimately prevents repressive acts. However, in both types of governments, repression could be utilized if the coalition in power deemed it useful and necessary. While Bueno de Mesquita et. al (2003) set the stage for winning coalitions, they do not fully address the manner in which such coalitions maintain themselves. Coalitions need to use coercion in order to implement repression, but also to maintain those involved in the coalition. Within democracies, strong ideological ties would be necessary for the coalition to agree to utilize such acts. Authoritarian states, on the other hand, have access to private goods that could used to push through extreme repression. Using these private goods, the coalition is able to prevent members from leaving, by using bribery to retain
them. Additionally, it would be difficult to leave the coalition in power, as that would put one at risk of being a target of repression. It is also a power maintenance strategy employed by the coalition, and is implemented using the military, police groups, and others loyal to the coalition, either due to ideological agreement or a simply drive to advance in the coalition.

Within the regimes, the question of whom and how to repress is significant. Authoritarian regimes would aim to repress those undermining their power, by protests or other forms of discontent, and could utilize extreme types of repression. The institutions within democratic states would allow for repression as a reaction to violent protests, terrorist acts, and irregular civil war, but only in non-lethal forms. Peaceful protests would not be likely to result in repression within democratic states.

Torture, imprisonment, killings, and missing persons clearly occur during war. However, this research is simply looking at state-sponsored repression, and the indicators present that may predict repression. This study looks at Africa as a whole, and the findings suggest that the involvement in an irregular civil war is a strong indicator of repression; states are less likely to use repression as much when they are not involved in irregular civil wars. The nature of irregular civil wars almost requires the decision to repress so as to maintain power against the challenging insurgents. While this is the case, the question of what types of repression will and will not be used is important. Within authoritarian states, it is almost certain that irregular civil wars would result in discriminate extrajudicial killing and disappearances, in agreement with Kalyvas’ (2006) study. In his research, Kalyvas (2006, 209) discusses the use of discriminate violence as a means to collect information and foster a “joint process” between civilians and military actors. This allows for a wider strategy to combat challenging insurgents, but stops
short of indiscriminate violence like massacres. Torture may be necessary, as the nature of guerrilla warfare implies an insurgent group hiding among public supporters. It would be strategic to torture citizens and members of the insurgency to have them expose others involved that are against the government in power. However, political imprisonment may be less likely due to infrastructure weakness. Such regimes would not place much importance on keeping those challengers alive, as they may incite a civil war again once freed. Additionally, the infrastructure may prevent the option of political imprisonment, as the food, housing, and security would potentially be too high a cost for the coalition. Instead, killings and disappearances may be more financially viable.

The winning coalition would, in times of protest and domestic terrorism, attempt to quiet the unrest so as to prevent further disruption. In both types of governments, domestic terrorism would be relatively easy to convince the coalition in power to use repression on, as not repressing them would leave the terrorists unanswered. However, because domestic terrorism directly challenges the state for power, the primary goal of the coalition would be to remove all possibility of future terrorist attacks. Therefore, extrajudicial killing and disappearances may be the only option, as this would ensure that the terrorists would not be able to restructure and plan future attacks. Authoritarian regimes are less inclined than democratic regimes to spend scarce resources to contain the terrorists in prisons.

Protests can be either peaceful or violent, with the latter form providing a need and excuse to use repression. Peaceful forms, however, will not cause the coalition to repress in democratic states. It can potentially pressure an authoritarian coalition to use extreme forms of repression, if the coalition views peaceful protest as a severe threat.
Strong states will have the institutional structure to prevent the winning coalition from using repression against its citizens. There is a correlation between regime type and strength of state, meaning that democratic regimes will be both strong and have institutions to prevent repression. Additionally, weak states will be more likely to repress indiscriminately. They will lack the institutions to prevent repression and therefore have the ability to commit such human rights violations in high numbers.

Globalization further prevents the coalition in power from using repression against its citizens. Because they would not like to incur costs like economic sanctions, they would attempt to find other solutions to problems, which would otherwise motivate them to use repression. This is the case in both democratic and authoritarian governments, since economic sanctions would hinder the reputation along with causing damage to the economic strength of the state.

Democratic states with high levels of ethnic fractionalization will not result to repression on the basis of ethnic unrest alone. Authoritarian states can use this as a cause for using repression if the coalition in power deems the fractionalization as a threat. In the case of civil war, ethnic fractionalization could cause worse tensions and therefore, allow the winning coalition the motive necessary for implementing repression. The factor that would push democratic states to repress would be the combination of civil war and irregular warfare by the insurgent group. Authoritarian states with a strong ideological coalition in power would likely have the necessary support for using repression during irregular warfare, both within civil wars and interstate wars.

In states with high levels of income inequality, repression could be utilized against those who would rise against the government. This would likely be the lower class citizens who are
not likely to be members of the coalition in power. Those who reside in the upper class are likely to be members of the coalition in power, and would not benefit from acts that would damage their status. As they are members of the winning coalition, they share in the benefits of power and wealth, and they would support the coalition’s use of repression against other citizens.

One of the most important aspects to consider is the downside to repression. The implications, both nationally and internationally, are often enough to persuade a leader against using repression to crush opposition. Repression against those using peaceful forms of protest is often too extreme a response, depending on the form of government and strength of coalition involved. This can lead to more violent protests, if not a full-fledged rebellion. The involvement of the international community can, many times, result in the leadership choosing not to repress. Economic sanctions, among others, can be so detrimental to the repression and the coalition in power that the leader will not repress. There are, however, leaders that will continue the repressive acts in defiance to international opposition.
HYPOTHESES

H1: In years when domestic terrorist attacks have occurred, states will be more likely to use more extreme forms of repression, like killing and disappearances. As a response to a domestic terrorist threat, state leaders will repress in order to prevent future terrorist attacks. This repression will be violent, with the intent to kill those involved in such terrorist attacks.

H2a: In years when peaceful forms of protest have occurred, states will be likely to use less extreme forms of repression, such as political imprisonment and torture.

H2b: In years when violent forms of protest have occurred, states will be likely to use more extreme forms of repression, such as killing and disappearances.

State leaders will not likely repress with such extreme measures as a response to peaceful protest as they will to violent forms. Such violence, if left unanswered, may undermine the authority of the regime, so the leadership may move to repress to maintain control.

H3a: In years when civil wars have occurred, states will be likely to repress with political imprisonment and torture.

H3b: In years when irregular wars have occurred states will be likely to repress torture, killing, and disappearances.

H3c: In years when irregular civil wars have occurred, states will be likely to repress in higher quantities, with more extreme repression such as torture, killing and disappearances.

In order to maintain control of the state, the leadership may use repression to prevent the insurgents from reaching their goals. This may be to achieve secession or total government takeover. Because of the nature of irregular warfare, the ability to clearly search for and destroy
insurgent forces is limited. As a result, state leadership may use repression to silence the insurgency or to induce fear to extent that the insurgency loses its civilian allies.

Other studies have demonstrated that ethnic fractionalization, globalization, state wealth, strength of state, and regime type may influence the decision to repress. These factors will be included in the analysis as control variables. States with high levels of ethnic fractionalization will be more likely to repress if the state leadership is of one ethnic group and has tensions with other ethnic groups within the state. This could also be a result of prejudices. Globalization will affect repression because globalized states are subject to international law. Using repression may subject them to economic sanctions or other forms of punishment by the international community, which would ultimately sway the state leadership away from such action. Regime type plays a role in repression, with democratic leaders less likely to repress. State wealth will be a factor, and it is important to note that there is a high correlation between wealth and regime type. Rich states will have the institutions and political strength necessary to avoid repression, instead using less violent alternative forms to control the situation. Strength of state will be important, as those with a strong infrastructure will not be likely to repress with extreme forms.
RESEARCH APPROACH

This research utilizes a large-n analysis of repression in 46 African states. Initially, all African states were intended to be studied, but I excluded those that had a majority of missing data like Somalia, as well as smaller island states.\(^3\) Using the majority of the continent prevents selection bias and allows for findings that can be generalized over the region. Panel data regression allows cross-sectional time-series data to produce accurate results and can account for problems like heteroskedasticity. Colaresi and Carey (2008) used rare event corrected logit analyses to account for genocides and mass killings, which occurred only thirty-two times over the period of their study, 1955 to 2003. As the events I measure are much more common, panel data is a better fit.

**Dependent Variables**

Disappearances, according to Cingranelli et. al (2013, 3), are “cases in which people have disappeared, political motivation appears likely, and the victims have not been found.” The perpetrators and circumstances of the disappearances are both known publicly, in most cases. The extrajudicial killing variable is comprised of “killings by government officials without due process of law, . . . [which] may result from the deliberate, illegal, and excessive use of lethal force by the police, security forces, or other agents of the state whether against criminal suspects, detainees, prisoners, or others” (Cingranelli et. al, 3).

Political imprisonment is the “incarceration of people by government officials because

---

\(^3\) The full list of eight states excluded are as follows: Cape Verde, Comoros, Djibouti, Equatorial Guinea, São Tomé and Príncipe, Seychelles, Somalia, and South Sudan. South Sudan was not considered a state during the years of my study.
of: their speech; their non-violent opposition to government policies or leaders; their religious beliefs; their non-violent religious practices including proselytizing; or their membership in a group, including and ethnic or racial group” (Cingranelli et. al 2013, 3). They define torture as “the purposeful inflicting of extreme pain, whether mental or physical, by government officials or by private individuals at the instigation of government officials” (Cingranelli et. al 2013, 4).

In the most recent coding (Cingranelli and Richards, 2008), the four CIRI variables were scored as follows: a score of 0 means there were frequent occurrences, which are numbered at 50 or more. A score of 1 means there were infrequent occurrences and these fall between 1 and 49 instances. A score of 2 means none of the violations occurred. However, for the goals of this research, a recode was necessary. Previous scores of 2 were recoded to 0, and previous scores of 0 were recoded to 2. Previous scores of 1 remained the same.

The dependent variable for this study is the state’s concern for physical integrity rights, taken from the Cingranelli-Richards (CIRI) dataset. The physical integrity rights variable is an additive index that is constructed using the following four variables: torture, extrajudicial killing, political imprisonment, and disappearances. These four categories include scores ranging from 0 to 2. At 2, the country has no occurrences of the violation in question. A score of 1 means there were low levels of the violation, while a score of 0 signifies that there were high levels of the violation occurring. Therefore, the physical integrity rights variable is a range of 0 to 8, 0 meaning no government respect for these rights and 8 meaning there was full government respect for these rights. As with the recode for the four base variables, this physical integrity rights variable was renamed “physical integrity rights violations,” as the recode means a score of 0
means full government respect for physical integrity rights and a score of 8 means no government respect for physical integrity rights.

There were some missing data in the CIRI data for the African cases used. As the official data comes from Amnesty International and State Department Annual Reports, I referenced these to discern the number of violations per year, according to the same coding rules as the CIRI data used. Totals were kept for the following CIRI variables: torture, political imprisonment, extrajudicial killing, and disappearances. The 104 missing data were coded according to the previously mentioned coding rules for each variable. The basis for the data in these situations is included in the appendix, with the country, year, new value, and justification for each.

I also used data from the Social Conflict in Africa Database (Hendrix and Saleyhan, 2011), which includes a “repression variable,” coded 0 for no repression, 1 for nonlethal repression, and 2 for lethal repression. This was used to construct two dependent variables: nonlethal repression and lethal repression. These dichotomous variables were given a 0 for absence of repression and 1 for presence of repression. The SCAD data was utilized to test the robustness of my theories. It has broader categories for repression and can show whether states use more extreme forms of repression or not. It helps to show the strength of the theories outlined for this research, and may provide further insight into when and how states repress.

Independent Variables

Using the Global Terrorism Database (LaFree and Dugan, 2006), a continuous variable was constructed to note when terrorist attacks occur in a state. These terrorist attacks were limited to agents or organizations that originate in said state, and do not include external terrorist
groups or individuals. The variable was coded by measuring the number of casualties that result from terrorist attacks within the given year.

Peaceful protests and violent protests were also investigated. The Social Conflict in Africa Database (SCAD) was utilized to construct these dichotomous variables (Hendrix and Salehyan, 2011). The events classified as organized demonstrations, spontaneous demonstrations, general strikes, and limited strikes were coded as peaceful forms of protest. The appearance of peaceful forms was coded as 1, with the absence of peaceful protest coded as 0. Organized riots, spontaneous riots, anti-government violence, and extra-government violence were coded as violent forms of protest, with the presence of these given a value of 1. The absence of violent protest was given a value of 0. Pro-government violence was excluded from this. It is possible that, during some years, both peaceful and violent protests appear.

Involvement in civil war is a dichotomously coded variable. Using the Correlates of War (COW) dataset (Singer and Small, 1994), states involved in a civil war were given a 1, while all others were given a 0. Regardless of the month in which the civil war begins, the entire year was designated a 1. This can be cross-referenced with SCAD.

State involvement in conventional or irregular warfare was shown using two constructed dichotomous variables derived from the Kalyvas and Balcells appendix (2010). States involved in conventional war were given a 1 value, with the absence of conventional war given a value of 0. States involved in irregular war were given a 1 value, with the absence of irregular war given a value of 0.

There were instances in which the COW dataset noted a civil war but the Kalyvas and Balcells appendix (2010) did not specify as to whether it was conventional, irregular, or both.
Therefore, I researched using books and articles referencing the civil wars, scanning for specific words like insurgency, militia, guerrillas, and rebels to signify irregular warfare. I coded according to the rules of the irregular war variable. Further details, including the sources, are included in the appendix.

When applying the statistical methods to the data I had gathered, I realized the coding for the war variables (civil war, conventional war, and irregular war) resulted in collinearity. Because my main hypothesis in regards to irregular civil wars, I simply dropped the civil war and conventional war variables and renamed the irregular war variable irregular civil war. Because the variable for irregular war was only given a 1 value if there was a civil war recorded, it does not include irregular interstate wars because irregular interstate wars were never a focus for the study – I did not have a variable for interstate war, only the presence of intrastate war. This solved the problem and allowed for a more accurate approach.

Control Variables

For this study, the Freedom House data on regime type was employed, with the “Free” states being considered democratic and the “Partly Free” and “Not Free” states being considered authoritarian. The collapse of the latter two variables into one solid category account for situations in which transitioning regimes are more likely to use repression. The democratic states were coded as 0, with the authoritarian states coded as 1.

The strength of states was measured with the World Bank’s indicator of improved sanitation facilities, which is measured by the percent of population with access to these facilities. States with a high percentage of access are generally more developed in their infrastructure, and if the following hypothesis finds support, are therefore less likely to repress.
This variable was formed using information from the World Health Organization and UNICEF’s Joint Monitoring Programme (JMP) for Water Supply and Sanitation, compiled by the World Bank (2008). This is a new manner of measurement for the strength of states, differing from Fearon and Laitin’s (2003) use of GDP, a measure that will be utilized in a different variable for this study. As this study uses GDP per capita as a measure for state wealth, this sanitation data is better for measuring the infrastructure, and therefore better for state strength.

The wealth of states was measured using the gross domestic product (GDP) per capita in US dollars. The adjustment into a base currency allows stabilization of the variable in question. This information is gathers from the World Bank and Organization for Economic Cooperation and Development (World Bank, 2008). According to this, states with a high GDP per capita will be less likely to use repression than states with a low GDP per capita.

This study uses the KOF Index of Globalization to measure the extent to which a state is considered globalized. This index measures the three “main dimensions of globalization: economic, social, and political” (Dreher, 2006). It also measures actual economic flows, economic restrictions, data on information flows, data on personal contact, and data on cultural proximity (Dreher, 2006). This data is appropriate to use as it not only measures the extent of economic globalization, but social and political. Sometimes underestimated within political theory, there have been examples of how social globalization affects certain crises, like the recent protests in Colombia across social media websites.

Ethnic fractionalization was measured using Matthew Krain’s (1997) data, which is a valuable update to that of Taylor and Hudson (1972). This is a continuous index and measures “the proportion of the population of each ethnic group to the total population of the country is

24
squared; the squared proportions for all groups are then summed and that number is subtracted from one to come up with the fractionalization measure for that country” (Krain 2005, 377). A low score means there is ethnic homogeneity within the population, while a high score shows many ethnic groups at about equal percentages of the total population.

Methodology

The methodology used to test these hypotheses is panel data regression. The panel dataset is necessary since my dataset contains a set of observations across multiple states over many years. Additionally, panel data allows for controlling factors that vary across states but do not vary over time. It also allows a control for unobserved factors as well as controlling for omitted variable biases.

Using STATA, models were run to determine the relationships between variables. For the seven dependent variables, it is important to run the correct models in accordance with the types of variables. The base CIRI variables are ordinal variables, which require a linear regression model. The two SCAD variables are dummy variables and therefore require logistic regression. The final dependent variable, physical integrity rights violations, is an interval level variable and needed linear regression like the other CIRI variables.

The next important move in running the appropriate models was the Hausman test. This is a test to determine whether the models will need to have fixed-effects or random-effects. The Hausman test showed that only the torture and political imprisonment models would need random-effects models, which means that variables may either remain the same over time but vary across cases, or they may remain the same across cases and vary over time. The equation for the random-effects models is:
\[ y_{it} = \beta_1 \cdot domter_{it} + \beta_2 \cdot ppro_{it} + \beta_3 \cdot vpro_{it} + \beta_4 \cdot irr_{it} + \beta_5 \cdot ethfrac_{it} + \beta_6 \cdot glob_{it} + \beta_7 \cdot wealth_{it} + \beta_8 \cdot sani_{it} + \beta_9 \cdot regime_{it} + a_i + u_{it} + \varepsilon_{it} \]

The fixed-effects models used for the other dependent variables accounts for certain variables that differ between cases but are constant over time. The equation for the fixed-effects models is as follows:

\[ y_{it} = \beta_1 \cdot domter_{it} + \beta_2 \cdot ppro_{it} + \beta_3 \cdot vpro_{it} + \beta_4 \cdot irr_{it} + \beta_5 \cdot ethfrac_{it} + \beta_6 \cdot glob_{it} + \beta_7 \cdot wealth_{it} + \beta_8 \cdot sani_{it} + \beta_9 \cdot regime_{it} + a_i + u_{it} \]

Disappearances, extrajudicial killing, the physical integrity rights index, lethal repression, and nonlethal repression models used the fixed effects model.

One issue amongst panel data is heteroskedasticity (Gujarati, 652). This is when there is an unequal spread, or variance, of the dependent variable. This is symbolized as follows:

\[ \text{var}(u_i|X_i) = \sigma_i^2 \]

In STATA, this can be easily accounted for using the modified Wald test. This test was used for the linear regression models, which therefore excludes the SCAD dependent variables, and also excludes the random-effects models for torture and political imprisonment. Thus, the modified Wald test was needed for the disappearances, extrajudicial killing, and physical integrity rights violations models, the equation for which is as follows:

\[ W = \sum_{i=1}^{N_g} \frac{(\sigma_i^2 - \sigma^2)^2}{V_i} \]

After having run this test, it was determined that there is groupwise heteroskedasticity in the three models, so it was important to account for this using the robust modifier.
There are, however, limitations to each statistical methodology. There are also problems with standard errors being too low. It is possible to account for these issues, but they may pose a problem in interpreting the models effectively.
FINDINGS

Reaction Variables

As the estimates of Models 1 through 7 show, irregular civil war is the most significant predictor of human rights violations. The variable is significantly related to many of the variables, like torture, killing, disappearances, lethal repression, and the physical integrity rights violations index. The variable does not predict political imprisonment and nonlethal repression.

Irregular civil war makes torture somewhat more likely to occur ($\beta = .1481576$, $p = .038$, see Model 2). Irregular civil war would make torturing opponents useful, as the guerilla tactics employed during irregular warfare allow the opposition to blend in with society. The coalition in power, then, would authorize the use of torture to reveal the location, members, plans, and civilian supporters of the opposition in an attempt to end the irregular civil war.

Models 3 and 4 show that the effects of irregular civil war on killings and disappearances is stronger than torture ($\beta = .3425143$ and $\beta = .3068596$; $p = .001$ and $p = .003$ respectively). Governments would need to kill and disappear within irregular civil wars as a means to consolidate power, dissolve the opposition, and intimidate the citizens that would otherwise give shelter to the opposition. This is consistent with the hypothesis.

Consistent with these measures, Model 7 shows irregular civil war is the strongest and most significant indicator for SCAD variable lethal repression ($\beta = 2.160279$, $p = .000$). This data coincides with the killing and disappearances variables from the CIRI dataset, which shows agreement between the two variables and the methodology used in collecting the data.
**Table 1 Regression Table**

<table>
<thead>
<tr>
<th></th>
<th><strong>Model 1</strong> Political Imprisonment</th>
<th><strong>Model 2</strong> Torture</th>
<th><strong>Model 3</strong> Extrajudicial Killing</th>
<th><strong>Model 4</strong> Disappearances</th>
<th><strong>Model 5</strong> Physical Integrity Rights Violations Index</th>
<th><strong>Model 6</strong> Nonlethal Repression</th>
<th><strong>Model 7</strong> Lethal Repression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Terrorism</td>
<td>.0003128 (.0001633)</td>
<td>-.001127 (.0001424)</td>
<td>.0004122*** (.0001108)</td>
<td>.0007268*** (.0001764)</td>
<td>.001545*** (.0003829)</td>
<td>-.0001395 (.007153)</td>
<td>-.0010199 (.0009212)</td>
</tr>
<tr>
<td>Peaceful Protests</td>
<td>.0105614 (.0443342)</td>
<td>-.002168 (.0386726)</td>
<td>.0025648 (.0518688)</td>
<td>-.0092963 (.0407317)</td>
<td>-.0186002 (.1192681)</td>
<td>2.322368*** (.2552591)</td>
<td>.7064415** (.2264533)</td>
</tr>
<tr>
<td>Violent Protests</td>
<td>.0313633 (.0420014)</td>
<td>.0682267 (.0366188)</td>
<td>.0372582 (.0500716)</td>
<td>.1010209* (.0427222)</td>
<td>.2151649 (.1416429)</td>
<td>1.475138*** (.2022171)</td>
<td>1.092544*** (.2065628)</td>
</tr>
<tr>
<td>Irregular Civil War</td>
<td>.1405365 (.0821829)</td>
<td>.1481576* (.0712841)</td>
<td>.3425143*** (.0978319)</td>
<td>.3068596** (.0959088)</td>
<td>.9015662** (.2973996)</td>
<td>-.062972 (.4095964)</td>
<td>2.160279*** (.4941312)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>-.1582853 (.3077383)</td>
<td>.0048604 (.2249986)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Globalization</td>
<td>-.0127377 (.003571)</td>
<td>.015056*** (.0030194)</td>
<td>.0022216 (.007214)</td>
<td>.002114 (.0055384)</td>
<td>.0049626 (.0172572)</td>
<td>.0757508** (.0219282)</td>
<td>-.0240679 (.0212156)</td>
</tr>
<tr>
<td>Wealth</td>
<td>.0000432* (.000022)</td>
<td>-.20e-06 (.0000184)</td>
<td>-.000663 (.0000382)</td>
<td>-.000198 (.000042)</td>
<td>-.0000114 (.0263374)</td>
<td>-4.46e-06 (.0001268)</td>
<td>.0001491 (.0001208)</td>
</tr>
<tr>
<td>Sanitation</td>
<td>.0057246 (.0030492)</td>
<td>.0017327 (.0023205)</td>
<td>.0084824 (.0131873)</td>
<td>-.0070637 (.0071028)</td>
<td>.0021301 (.377965)</td>
<td>-.0119738 (.0324775)</td>
<td>-.0272193 (.0312039)</td>
</tr>
<tr>
<td>Regime</td>
<td>.7161552*** (.2878594)</td>
<td>.2934556*** (.0772438)</td>
<td>-.0932576 (.1309807)</td>
<td>.1264258 (.2082938)</td>
<td>.8197081** (.8505145)</td>
<td>.3527386 (.5204304)</td>
<td>1.559127** (.612507)</td>
</tr>
</tbody>
</table>

Note: $p>|z|*.05, **.01, ***.001; Models 1 & 2 use random-effects; Models 3 - 7 use fixed-effects; CIRI data, n=939; Model 6, n=918; Model 7, n=900
For the physical integrity rights violations index, irregular civil war makes government respect for such rights disintegrate ($\beta=.9015662$, $p=.004$, see Model 5). Irregular civil war is a strong indicator on what may make the leadership of a state have less respect for the human rights of its citizens. This is in accordance with the hypothesis.

Irregular civil war is not a significant predictor for political imprisonment and nonlethal repression, which is not surprising. Political imprisonment of the opposition during an irregular civil war could be counter effective to the leadership, as there may be fears that once released, the opposition would then gather to incite yet another war. Additionally, the costs of imprisoning a large number could be unmanageable, which would make the leadership turn to killings and disappearances, since they appear to be less expensive forms of control.

Other independent variables were inconsistently related to the dependent variables. Domestic terrorism, peaceful protests, and violent protests only reach significance in some models.

Models 3 and 4 show domestic terrorism is an important indicator of killing and disappearances ($\beta=.0004122$ and $.0007268$; $p=.001$ and $p=.000$ respectively). While these are small coefficients, the unit of the domestic terrorism variable makes it an important indicator. Committing such acts of violence against one’s own country would result in a government response using extreme measures such as killing and disappearances, as it may be more useful for the government in power to eradicate such forces that would aim to harm those in power, as well as innocent civilians.

Domestic terrorism is also an important predictor of the physical integrity rights violations index ($\beta=.001545$, $p=.000$ see Model 5), which is important, but not as strong an
indicator as the killing and disappearances variables. It would be interesting to understand why it reaches significance for the index, but lacks significance for the political imprisonment and torture variables that make up said index.

Peaceful protests only reaches significance for the SCAD data in Models 6 and 7, which may be due to the coding procedures employed by the creators of the dataset. It is, however, a strong indicator for lethal repression and nonlethal repression. Nonlethal repression is the strongest ($\beta=2.2322368$, $p=.000$), which shows a strong relationship in agreement with the hypothesis. Somewhat puzzling is lethal repression ($\beta=.7064415$, $p=.002$). Peaceful protests is not expected to be a significant predictor in the cause of lethal repression, but perhaps there is more at play in this relationship, such as the interaction of regime type in peaceful protests. That is something to research in the future.

Violent protests, like peaceful protests, also reaches significance in the SCAD data. It is the strongest indicator for nonlethal repression ($\beta=1.475138$, $p=.000$). It is also a predictor for lethal repression ($\beta=1.092544$, $p=.000$). While this is in agreement with the hypothesis, it is surprising that disappearances ($\beta=.1010209$, $p=.023$) reaches significance, though at a rather weak level. This is the only variable from CIRI that reaches significance, which, like peaceful protests, could be a result of the coding procedures. It would be understandable for the government to disappear violent protesters so as to intimidate the participants and prevent further escalation from the protesters.
Regime type is an additional variable that has the effect expected. It is an important indicator for political imprisonment, torture, lethal repression, and the physical integrity rights violations index.

Regime type is another predictor for political imprisonment ($\beta=.7161552$, $p=.000$, see Model 1). This is understandable, as democratic institutions have mechanisms in place to prevent political imprisonment without trial. Authoritarian regimes, however, may be able to so due to the coalition of power and the need to reduce the opposition’s influence on the population.

In Models 2 and 7, respectively, regime type also affects the likelihood of torture and lethal repression ($\beta=.2934556$ and 1.559127; $p=.001$ and $p=.001$). While the importance of these two variables is in accordance with the hypotheses, it does leave some room for questions. Why does lethal repression reach significance when neither killing nor disappearances reach significance? As in irregular war, there is an agreement between the three variables that is not seen for regime type. Perhaps it is the coding differences in the SCAD and CIRI datasets that can account for the discrepancy.

According to Model 5, regime type is understandably important for the physical integrity rights violations index ($\beta=.8197081$, $p=.002$). This is in accordance with the hypothesis that democratic regimes will be less likely to use repression against its citizens.

Globalization is a predictor for torture and nonlethal repression. It is the strongest indicator for nonlethal repression ($\beta=.0757508$; $p=.001$, see Model 6), while it is a weak indicator of torture in Model 2 ($\beta=.0045876$, $p=.001$). This is an interesting relationship, as globalization prevents “extreme” forms of repression but allows for torture against the citizens.
The differences between the magnitudes of the two variables is also understandable, as nonlethal repression is coded as use of tear gas and imprisonment, which is less extreme than torture.

Finally, wealth is only a significant predictor for political imprisonment ($\beta=0.0000432$, $p=0.049$, see Model 1). The small coefficient is due to the units of the wealth variable, which is in thousands of US dollars. This is an interesting relationship, as political imprisonment can be very expensive for the government, with the cost of feeding, housing, and guarding large numbers of political prisoners being an impossible expense for poor countries. There is something to say for democracies being, on average, more rich than non-democracies, which means there could be additional relationships between wealth and repression.

**Dependent Variables**

Political imprisonment is predicted by wealth ($\beta=0.0000432$, $p=0.049$) and regime type ($\beta=0.7161552$, $p=0.000$). The wealth of the regime will affect its ability to provide housing, food, and security for prisoners, and therefore, poorer regimes would be less likely to use political imprisonment against its opponents. Additionally, regime type may affect the decision to politically imprison citizens. Democratic regimes will have the institutions in place to prevent arbitrary detention, as it would likely violate constitutional measures. It is interesting that neither peaceful protests nor violent protests are indicators for political imprisonment, along with irregular war. Arguably the least extreme of the CIRI variables, one would expect that it would be an important indicator if the others were to reach significance.

Torture is predicted by regime type, irregular civil war, and globalization ($\beta=0.2934556$, $\beta=0.1481576$, and $\beta=0.0045876$; $p=0.001$, $p=0.038$, and $p=0.001$). The use of torture in democratic regimes is unlikely, due to constitutional restrictions, institutions, and the ratification of
international treaties. The use of irregular civil war is consistent with Kalyvas (2006), as the use of selective violence allows for the identification of the opponent and supporters, which is imperative when trying to end guerilla warfare. While the magnitude for globalization is rather small, it is an indicator for torture. This is interesting due to international treaty ratification. One might assume that the more globalized a state is, the less likely its government would be to use torture for fear of economic sanctions and international intervention. However, the findings contradict this. Peaceful protests, violent protests, and domestic terrorism do not predict the use of torture.

Killing is predicted by domestic terrorism and irregular civil war ($\beta=.0004122$ and $\beta=.3425143$, $p=.001$ and $p=.001$). These are expected outcomes, as they are the more organized and extreme predictors that would incur such government reaction. It would be important to use killing as response in order to prevent future domestic terrorism and to end an irregular civil war. These predictors are consistent with the hypotheses.

Disappearances is predicted by irregular civil war, violent protests, and domestic terrorism ($\beta=.3068596$, $\beta=.1010209$, and $\beta=.0007268$; $p=.003$, $p=.023$, and $p=.000$). Irregular civil war is the strongest indicator, which is understandable, as the government would need to intimidate both those participating and supporting the guerilla war. It makes sense that violent protests would result in disappearances over killings because killing protesters would likely cause the protestors to escalate rather than cease operations. Domestic terrorism is a weak indicator of disappearances. The government would likely need to strong arm the terrorist groups and show the general public that such terrorism is dealt with effectively, so disappearances might not be as effective as killings.
The physical integrity rights violations index is predicted by irregular civil war, regime type, and domestic terrorism ($\beta=.9015662$, $\beta=.8197081$, and $\beta=.001545$; $p=.004$, $p=.002$, and $p=.000$). Irregular civil war and domestic terrorism are extreme indicators that may cause repression, which is shown in the results. They are consistent with the hypotheses as they are more likely to cause the government to disregard particular human rights. Regime type is also consistent, as the lack of respect for such rights would be more likely to be from authoritarian regimes rather than democratic regimes.

Nonlethal repression is predicted by peaceful protests, violent protests, and globalization ($\beta=2.322368$, $\beta=1.475138$, and $\beta=.0757508$; $p=.000$, $p=.000$, and $p=.001$). These indicators are consistent with the hypotheses, but it is interesting that irregular civil war was not significant. It is possible that the SCAD coding affects this, as the nonlethal repression may not be as extreme as the requirements for torture in the CIRI data.

Lethal repression is predicted by irregular civil war, violent protests, and peaceful protest ($\beta=2.160279$, $\beta=1.092544$, and $\beta=.7064415$; $p=.000$, $p=.000$, and $p=.002$). Both irregular civil war and violent protests as indicators are consistent with the hypotheses. A surprising indicator is peaceful protests. One may not expect peaceful protests to be an indicator of lethal repression, but this is perhaps due to the coding of such SCAD data.
DISCUSSION

The most important finding from this study is the effect of irregular civil wars on repression. In five of the seven dependent variables, irregular civil war was found to have strong relationships with various types of repression, including the physical integrity rights violations index. Irregular civil war is not a significant predictor of political imprisonment and nonlethal repression, in accordance with the theoretical framework. Conventional civil wars were not studied here because they are not common within the region chosen. These findings support the hypothesis that states will be more likely to use repression during years when irregular civil wars occur, but with forms of repression strategic to the situation. These findings are in agreement with Valentino et. al (2004), but provide further insight on when certain types of repression will be used, instead of only mass killings.

Carey’s (2010, 167) study found evidence of guerrilla warfare being the sole reason behind repression onset over protests movements, but these findings show that both peaceful and violent forms of protest are cause for repression, which is in accordance with Cleary’s (2000) research. This research, however, uses data from the Social Conflict in Africa Database, whereas Cleary (2000) used the more mainstream Minorities at Risk Database. The results from the protest models are somewhat puzzling due to the lack of significance with the CIRI variables. Nonlethal repression in the SCAD data is characterized by the use of tear gas and arrests, which may not fall under the definitions provided in the CIRI data, so the discrepancies there may be due to this reason. Violent protest is a significant predictor for the disappearances variable, though at a much smaller magnitude. It would be interesting to look into this to see why violent
protests would be an indicator for disappearances but no other human rights violations within the CIRI data. These results show that $H2a$ and $H2b$ are strongly supported.

The findings suggest that domestic terrorism increases extrajudicial killings and disappearances, also found by Piazza and Walsh (2009), who measured repressive acts in response to transnational terrorism. As in my study, Piazza and Walsh (2009) also failed to find significance for political imprisonment and torture. They measured human rights using the same data by Cingranelli-Richards, but did not limit simply to human rights abuses and included their five measures of political empowerment.³ Based on the findings, we see support for $H1$ across CIRI variables, but there is again a slight concern with the SCAD data for lethal repression. One may expect to see domestic terrorism as an important indicator for lethal repression, but again, this may be a result of coding differences.

The results of the control variables differed from the findings of the previous literature and were not significant predictors across dependent variables. Regime type was the second strongest predictor of repression after irregular civil war, as expected from the theoretical intuition, with globalization and wealth as predictors for certain variables, but not others. State strength and ethnic fractionalization are not predictors of human rights violations.

Regime type is perhaps one of the most common variables used in studies on human rights practices in the world. Many (Bueno de Mesquita et. al, 2005; Davenport, 2007; Colaresi and Carey, 2008) agree that democratic institutions prevent the use of human rights violations against citizens and provide support for such claims. The findings from my research are in

³ Cingranelli-Richards provide five measures of political empowerment that are not used in this study because it simply focuses on the physical human rights violations. These five measures are: rights to association, speech, religion, movement, and political participation.
agreement with these studies. However, unlike Hegre et. al (2001), my study does not test for intermediate regimes and instead places such intermediate regimes in the same category as authoritarian regimes. It is possible that, should this variable be separated in order to differentiate between the two, the findings may show that intermediate regimes are most likely to use repression.

Globalization, which is said by many (Hafner-Burton, 2005; Blanton and Blanton, 2009; Abouharb and Cingranelli, 2006; Dreher et. al, 2012) to have been an important factor in the decision to repress, was not a strong predictor in my study. Using the same measure for globalization as Dreher et. al (2012), the KOF Index of Globalization was only a significant indicator for torture and nonlethal repression. There are many possible reasons for this; the authors used 106 countries, which may not have had representation on the African continent and they only used the Cingranelli-Richards variable physical integrity rights. Additionally, my research includes the effect of irregular civil war on human rights violation, while the previous studies that held globalization as an important indicator for human rights violations were mainly focused on economic issues. It is therefore possible that they omitted a critical variable, irregular civil war, from their studies.

State wealth, characterized in this study by GDP per capita, had significant results for political imprisonment. Like with the research of Conrad and DeMeritt (2013), my research finds that state wealth is an indicator of repression. While wealth is an indicator of repression, it is only an indicator of political imprisonment. This is likely due to the lack of infrastructure of poor states. Young (2013, 529) also agrees, stating that “repression is . . . costly for states as they have to maintain an apparatus capable of repressing. This state agency requires some
portion of the budget that could be spent in other areas.” One thing to consider here is that repression is costly. However, there is a sliding scale as to how costly, depending on the type of repression utilized. A bullet is less costly than providing food, shelter, and security for the opposition.

Ethnic fractionalization failed to reach significance for any of the dependent variables. Unlike Humphreys and Weinstein (2006) that found those sharing co-ethnic ties reduced levels of abuse, this study was unable to produce any relevant results, which may be due to a difference in data. Walker (2007) uses the Ethnolinguistic Fractionalization Index (ELF), which calculates the probability that two randomly selected individuals from a given country will not belong to the same group. This may be data to use in future studies, as Matthew Krain’s (1997) data proved unsuccessful in testing my hypotheses.

State strength is the other variable that failed to report any significant results across the seven dependent variables. As with the previous literature by Mason and Krane (1989), weak states will be more likely to use violent repression, because they lack the infrastructure to use viable alternatives. As the literature suggests, there is a lack of data, as well as a lack of consensus on how to measure the strength of a state. While my research chose the percent of population with access to improved sanitation facilities, there are other options that can be used for replication. As Fearon and Laitin (2003) used overall state GDP, I used GDP per capita to measure state wealth, which failed to reach significance for all variables except political imprisonment. This causes me to question the importance of the effect of state strength on the
government’s decision to repress. One such trouble with using African states as cases is the lack of available data for certain indicators.

One problem that occurred while running the data was differentiating between civil wars, conventional wars, and irregular wars. While coding for conventional war and irregular war, the issue of collinearity arose, which resulted in a need for a change of testing. Rather than testing for hypotheses $H3a$ and $H3b$, I tested for $H3c$, which was rather successful. Two dependent variables did not report significant results: political imprisonment and nonlethal repression. This could be due to the SCAD data requirements and the potential that political imprisonment may not be a viable response to irregular civil wars.

This research fills in a hole in the literature when it comes to the impact of irregular civil war on repression. Perhaps one of the most important pieces of information to take from this is that certain factors may cause state leaders to repress, but they may choose to do so in different ways, depending on the incident. Many factors come into play to make this decision, some of the more important ones being initial cause (domestic terrorism, irregular civil war, nature of protest), regime type, and wealth of state.

---

4 The question remains: how does one accurately measure significance in regards to viewing the effect of state strength on the state’s decision to repress? It is possible that a significant relationship will not be achieved within the statistical models, but that state strength will be an important indicator of repression.
CONCLUSION

In my research, I tried to explain the effects of certain actions on the government decision to repress. Governments are strategic in their choices, but instead of using human rights violations across the board, it is clear that irregular civil war has an effect on the decision to repress. I also expected that infrastructure and wealth, in combination with regime type, would influence both the decision to repress and what repressive actions to take. While my indicator for infrastructure failed to reach significance in this study, I still believe that it is important to further research.

My findings agree with previous literature (Piazza and Walsh, 2009) on terrorism and repression. The findings on protests and human rights violations are also significant and provide a different measure for protests than Cleary (2000). The contribution of the effects of irregular civil war on the decision to repress is the most significant portion of this study. That said, there are improvements and suggestions for future research.

It would be interesting to view the effect of conventional civil wars on human rights violations and whether the implications are similar to those of irregular civil war. It was excluded from this study because the cases of conventional civil wars were rare. Perhaps widening the scope of the project to include other regions of the world to see if these effects are simply limited to the African continent or they can be more widely generalized. I would expect that developed countries are less likely to use repression. North America, Western Europe, and Australia would not likely use repression, but areas of interest that seem likely to use it are Asia, Eastern Europe, and South America. This is due to the levels of development within the states,
as high levels of development reduces the risk for civil war and other violent challenges to the state like domestic terrorism.

Finding new indicators for globalization, ethnic fractionalization, and state strength would also be necessary, as the variables used in this study failed to reach significance for many of the dependent variables. Using more completed indicators from the World Bank for another continent or region would benefit this study in that it would be more comprehensive and more generalizable.

The findings of this study are important as they identify that states are strategic in their decisions to repress. Not only will they use repression as a response to some situations and not others, they will choose the form or forms of repression necessary for said situation. This could be helpful in preventing state-sponsored repression in the future. As stated, international treaties have attempted to prevent repression, but have not always been successful. With more specific information of the decision to repress, it is possible to create specific international treaties to prevent human rights violations. It can also raise international alarms when the situations that cause repression appear. Instead of waiting for reports by human rights organizations to be published before such an issue reaching international attention and outrage, the indicators can be used to implement strategies to prevent repression from being used in the first place. These strategies may be related to UN security force placement or the employment of international commission in states where such conditions exist.

While the findings show that across the board repression will not be used, they do suggest that the more extreme types of extrajudicial killings and disappearances will occur more often as a response to irregular civil wars. This is not great news for citizens for states likely to repress,
especially in times of civil war, which is all too common in Africa. However, it does provide hope. If the international community can address these wars earlier, repression may not be necessary.
APPENDIX A.

CIRI VARIABLES
**CIRI Human Rights Variables:** All information found in Amnesty International Annual Reports.

The values were found by reading the reports and adding the number of each particular human rights violation (disappearances, torture, etc.) and placing them within the re-coded CIRI values: 0 for no instances of the violation, 1 for 1 to 49 instances of the violation, and 2 for 50 or more instances of the violation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disappearances</td>
<td>Angola</td>
<td>1992</td>
<td>0</td>
<td>There was no mention of disappearances.</td>
</tr>
<tr>
<td></td>
<td>Burundi</td>
<td>1993</td>
<td>0</td>
<td>There was no mention of disappearances.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1994</td>
<td>2</td>
<td>Page 83: “dozens of people ‘disappeared’”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1995</td>
<td>2</td>
<td>Page 105: “dozens…disappeared”</td>
</tr>
<tr>
<td></td>
<td>Dem. Rep. of Congo</td>
<td>1992</td>
<td>0</td>
<td>There was no mention of disappearances.</td>
</tr>
</tbody>
</table>
1993 0
There was no mention of disappearances.

1994 0
There was no mention of disappearances.

1995 0
There was no mention of disappearances.

1996 0
There was no mention of disappearances.

1997 2
Page 105: “reports of disappearances”

1998 0
There was no mention of disappearances.

1999 0
There was no mention of disappearances.

2000 0
There was no mention of disappearances.

**Ethiopia**

1991 0
There was no mention of disappearances.

**Guinea-Bissau**

1998 0
There was no mention of disappearances.
Lesotho

1998  0
There was no mention of disappearances.

Liberia

1990  0
There was no mention of disappearances.

1991  0
There was no mention of disappearances.

1992  0
There was no mention of disappearances.

1993  0
There was no mention of disappearances.

1994  0
There was no mention of disappearances.

1995  0
There was no mention of disappearances.

Sierra Leone

1997  0
There was no mention of disappearances.

1998  0
There was no mention of disappearances.

1999  0
There was no mention of disappearances.
There was no mention of disappearances.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Extrajudicial Killing</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td></td>
<td>1992</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Page 52: “government forces committed scores of extrajudicial executions”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td></td>
<td>1993</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Page 83: “thousands became refugees…executed extrajudicially”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Page 83: “thousands of people were killed”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Page 105: “thousands of people were victims of political killings”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dem. Rep. of Congo</td>
<td></td>
<td>1992</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Page 102: “five people killed”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Page 106: “government opponents were reported to have been executed extrajudicially”

1994  2

Page 104: “dozens of civilians…killed”

1995  1

Page 124: “several people…extrajudicially executed”

1996  1

Page 126: “several people…killed”

1997  2

Page 137: “hundreds of extrajudicial executions”

1998  2

Page 136: “thousands…extrajudicially executed”

1999  2

Page 79: “government soldiers…killed several hundred”

2000  1

Page 77: “at least 35 people were executed”

Ethiopia

1991  2

Page 115: “over 120 political prisoners were extrajudicially executed”
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea-Bissau</td>
<td>1998</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 182: “arbitrary killings by forces fighting on the government side”

Note: taken from Amnesty International Report “Guinea-Bissau: Human Rights Under Fire”

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>1998</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no mention of extrajudicial killings.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberia</td>
<td>1990</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 145: “thousands were extrajudicially executed”

1991  1

Page 173: “renewed killings…by groups supporting the interim government”

1992  1

Page 191: “six people…executed”

1993  2

Page 196: “forces loyal to the interim government…massacred 600 people”

1994  1

Page 195: “killing of civilians”
1995  1
Page 210: “killings of civilians and torture by all parties”

**Sierra Leone**

1997  2
Page 298: “dozens of extrajudicial executions”

1998  2
Page 296: “more than 650 bodies found”

1999  2
Page 210: “large numbers of…were extrajudicially executed”

2000  1
Page 209: “government forces were responsible for extrajudicial executions”

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Political Imprisonment**

**Angola**

1992  2
Page 52: “Over 40 people…were detained…12 others”

**Burundi**

1993  2
Page 83: “500 political prisoners”
1994  2
Page 83: “several hundred people were arbitrarily detained”

1995  2
Page 105: “political detainees were tortured and dozens disappeared”

Dem. Rep. of Congo

1992  1
Page 102: one person “detained for several days”

1993  2
Page 106: “several dozen…detained”

1994  1
Page 104: “government security forces…were responsible for arbitrary detention”

1995  1
Page 124: “prisoner of conscience”

1996  1
Page 126: “critics…imprisoned”

1997  2
Page 137: “scores of people…detained”

1998  2
Page 136: “hundreds…detained”

1999  2
Page 79: “more than 1,000 prisoners”
Page 77: “10 members…detained”

**Ethiopia**

1991 2

Page 113: “several hundred political prisoners”

**Guinea-Bissau**

1998 2

Page 182: “eight…prisoners of conscience”

**Lesotho**

1998 2

Page 237: “150…held prisoner”

**Liberia**

1990 1

Page 145: “three prisoners”

1991 0

There was no mention of political imprisonment.

1992 0

There was no mention of political imprisonment.

1993 1

Page 196: “soldiers continued to detain…citizens”

1994 0

There was no mention of political imprisonment.
There was no mention of political imprisonment.

**Sierra Leone**

1997  2

Page 298: “hundreds…arbitrarily detained”

1998  2

Page 296: “detained prisoners”

1999  0

There was no mention of political imprisonment.

2000  2

Page 209: “several hundred…held without trial”

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Justification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Torture**

**Angola**

1992  2

Page 52: “over 40 people (12 more mentioned later)…were detained…tortured during interrogation”

**Burundi**

1993  0

There was no mention of torture.
1994 2
Page 83: “several hundred people were arbitrarily detained, many of whom alleged that they were tortured”

1995 2
Page 105: “political detainees tortured”

Dem. Rep. of Congo

1992 0
There was no mention of torture.

1993 1
Page 106: “some repeatedly tortured”

1994 2
Page 104: “scores of people…tortured”

1995 0
There was no mention of torture.

1996 1
Page 126: “several people…allegedly tortured”

1997 2
Page 137: “torture…widespread”

1998 2
Page 138: “torture…widespread”

1999 1
Page 79: “many…tortured”
2000  1

Page 77: “12 students tortured”

**Ethiopia**

1991  2

Page 113: “several hundred political prisoners…tortured”

**Guinea-Bissau**

1998  2

Page 182: “military and civilian detainees were frequently tortured”

**Lesotho**

1998  1

Page 233: “torture was reported”

**Liberia**

1990  1

Page 145: “two journalists…deprived of food and water for several days”

1991  0

There was no mention of torture.

1992  0

There was no mention of torture.

1993  0

There was no mention of torture.

1994  1

Page 195: “these groups tortured…civilians”
Page 210: “torture by all parties”

Sierra Leone

1997  2

Page 298: “widespread use of torture”

1998  2

Page 296: “also responsible for…torture, though on a significantly smaller scale”

1999  0

There was no mention of torture.

2000  1

Page 209: “government forces were responsible for…torture”

**Physical Integrity Rights Index:** Scores determined by adding the four CIRI variables for the country-year. Renamed Physical Integrity Rights Violations and variables recoded.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Physical Integrity Rights Violations Index**

**Angola**

1992  6
<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>1993</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1997</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>3</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1991</td>
<td>6</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>1998</td>
<td>5</td>
</tr>
<tr>
<td>Lesotho</td>
<td>1998</td>
<td>3</td>
</tr>
<tr>
<td>Liberia</td>
<td>1990</td>
<td>4</td>
</tr>
<tr>
<td>Year</td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Sierra Leone

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>6</td>
</tr>
<tr>
<td>1998</td>
<td>6</td>
</tr>
<tr>
<td>1999</td>
<td>2</td>
</tr>
<tr>
<td>2000</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX B.

CONTROL VARIABLES
<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Justification</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: To fill in for the missing values in the sanitation data, I looked for patterns within the available data. I have made a note of these patterns as justification for the new values.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Eritrea</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Eritrea had about a .2% increase each year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gabon</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>35.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>35.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>36.0</td>
<td></td>
</tr>
<tr>
<td>Gabon had about a .1% increase each year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gambia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>60.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>60.2</td>
<td></td>
</tr>
<tr>
<td>Gambia had about a .1% increase each year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Guinea-Bissau</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Growth Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>10.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>10.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>10.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guinea-Bissau alternated a .1 and .2% increase every other year.

**Lesotho**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>23.7</td>
</tr>
<tr>
<td>1991</td>
<td>23.8</td>
</tr>
<tr>
<td>1992</td>
<td>23.9</td>
</tr>
<tr>
<td>1993</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Lesotho had about a .1% increase each year.

**Liberia**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>8.9</td>
</tr>
<tr>
<td>1991</td>
<td>9.2</td>
</tr>
<tr>
<td>1992</td>
<td>9.5</td>
</tr>
<tr>
<td>1993</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Liberia had about a .3% increase each year.

**Republic of the Congo**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>19.8</td>
</tr>
<tr>
<td>1991</td>
<td>19.8</td>
</tr>
<tr>
<td>1992</td>
<td>19.8</td>
</tr>
<tr>
<td>1993</td>
<td>19.8</td>
</tr>
<tr>
<td>1994</td>
<td>19.8</td>
</tr>
</tbody>
</table>
Republic of the Congo had a constant 19.8% each year.

**Somalia**

<table>
<thead>
<tr>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>20.9</td>
</tr>
<tr>
<td>1991</td>
<td>21.0</td>
</tr>
<tr>
<td>1992</td>
<td>21.1</td>
</tr>
</tbody>
</table>

Somalia had about a .1% increase each year.

<table>
<thead>
<tr>
<th>Variable</th>
<th>State</th>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealth</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: I referenced the CIA World Factbook to find the GDP per capita during the years in which there was missing data.*

**Libya**

<table>
<thead>
<tr>
<th>Year</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>15900</td>
</tr>
</tbody>
</table>

Source: CIA World Factbook
Variable State Years

Justification

**Irregular Civil War**

*Note: For the missing values in the Kalyvas and Balcells Appendix, I used books and articles referencing the civil wars, scanning for specific words like insurgency, militia, guerrillas, and rebels to signify irregular warfare.*


*Control, Politics and Identity in the Angolan Civil War* – Justin Pearce

militias and rebellions until the end of the war in 2002


*Understanding Civil War* - Sambanis and Collier

militias and mass slaughters

**Chad** 1990, 1998 -2000, 2005-2006

*The Roots of the Darfur Conflict and the Chadian Civil War* – Roland Marchal

mentions of militias and insurgents

**Cote d’Ivoire** 2002 - 2004

*They Killed Them Like It Was Nothing* – HRW Report

suggestion of militias, security forces, and armed individuals


Congo: Between Hope and Despair – Michael Deibert

mention of insurgency and rebellion
Guinea 2000 – 2001

_Violent Order: Rebel Organization and Liberia’s Civil War_ – Lidow
rebels supported by Charles Taylor

Guinea-Bissau 1998 - 1999

_Navigating Terrains of War: Youth and Soldiering in Guinea Bissau_ – Vigh
mentions of rebel insurgencies and pro-government militias


_Civil Militia: Africa’s Intractable Security Menace?_ – Francis
civil militias in Liberian civil war


_Civil Militia: Africa’s Intractable Security Menace?_ - Francis
militias in Nigerian civil war


_Outreach Programme on the Rwanda Genocide and the United Nations_
militias and other armed groups


_The West Side Boys: military navigation in the Sierra Leone Civil War_ –
Utas and Jörgel
mentions of guerrilla movements, militias, and Sierra Leone army
REFERENCES


