

ECONOMIC STRESS IN SELF-DETERMINATION CHALLENGES

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ABSTRACT

Daniel J. Gustafson: Economic Stress in Self-Determination Challenges
(Under the direction of Stephen E. Gent)

This dissertation analyzes the motivations and consequences of behaviors undertaken by actors engaged in self-determination challenges. Self-determination movements (SDMs) are characterized by their long-term aspirations for self-rule, but they are also motivated by short-term fluctuations in their environments. I argue that economic stress shapes self-determination challenges in complex ways. The state of the economy influences how movements behave, how governments respond to groups making claims, and how public audiences signal support for violent tactics. I clarify the patterns of behavior between movements, states, and individuals by exploring how economic stress and violence by groups and governments affect these actors' preferences and decisions.

The first substantive chapter seeks to explain SDMs' use of violent versus nonviolent tactics. Movements increasingly engage in anti-government violence when their individual members become willing to use violent tactics. The value of the status quo for each individual within a SDM is partially determined by economic stress factors such as the unemployment rate and food price within a country. Additionally, government repression in times of poor economic conditions compounds on top of previous grievances and alters individuals' strategic calculus, leading them to pursue violent tactics. I test my expectations using an original dataset of self-determination movements in Sub-Saharan Africa from 2000-2014, finding strong support for the economic determinants of violence and limited support for the repression hypothesis.

In the second chapter, I explore the conditions under which governments use violent repression against SDMs. When a state encounters a self-determination challenge, it faces an important decision about how to respond to anti-government actions. On one hand, governments can use repression to attempt to quell movements and deter future dissent. On the other hand, repression can radicalize SDM members and cause the challengers to escalate from nonviolent contention to violence. I model the interaction between a government and SDM to show the conditions under which government

repression spurs the movement to escalate to violence. Analysis of an original dataset of SDM events in Africa from 2000-2014 supports the hypothesis that governments use observed economic indicators of cost-tolerance to determine whether or not to use violent repression.

Finally, the third chapter considers the conditions under which individuals signal support for political violence in states experiencing self-determination challenges. I argue that individuals will be more likely to signal support for political violence when they experience economic stress and observe government repression. However, the degree to which individuals perceive antigovernment movements as blameworthy moderates the effects of these sources of grievance. I test my expectations using survey data from the Afrobarometer, an original dataset of SDM events, and general opposition events in Africa. The analysis supports the expectation that individual grievances increase public support for antigovernment violence, but only when opposition groups use violent tactics infrequently. With these three chapters, I demonstrate that economic stress factors consistently impacts the actor behavior in self-determination challenges.

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CHAPTER 1: INTRODUCTION

Why do some self-determination challenges result in large-scale conflicts while other are relatively peaceful affairs? Some instances in which movements make self-determination claims, such as the cases of Somalis in Ethiopia and Tuaregs in Mali, result in bloody civil wars that stretch over several years. Other self-determination struggles, like those of the Khoisan in South Africa or the Lozi in Zambia, primarily proceed through peaceful demonstration or routine political participation. Additionally, some self-determination challenges experience intermittent periods of intense conflict and lulls. Indeed, there is a great deal of variation in self-determination movement (SDM) and government behavior both within and across challenges. I argue that economic stress—economic conditions that impose costs on individuals—is fundamentally important in explaining the patterns of behavior between states and groups engaged in self-determination challenges.

SDMs are groups that share a common identity and a belief to self-rule (Cunningham, 2014). Their claims for independence or drastically increased autonomy often represent an existential threat to their home states. Governments have strong incentives to resist SDMs' demands for several reasons. A group wishing to break away from its home state or exercise its own political control directly threatens the government's sovereignty. Further, the territory that a SDM desires as their own may have cultural significance or strategic value in terms of location, natural resources, or as a tax base. In states with multiple SDMs, governments will be reticent to make concessions because of the potential that cooperation will embolden other groups to make demands. As a result of the intense desire for self-determination on behalf of groups and the substantial negative incentives for states to concede, self-determination challenges are some of the thorniest predicaments in politics. In order to understand the contours of the contention between SDMs and states, I explore the tactical decision-making of groups, responses of governments, and public opinion over antigovernment violence. In doing so, I demonstrate that the degree to which individuals experience economic grievances within a state has profound effects on self-determination challenges.

Individuals make decisions that produce the behavior attributed to groups. Therefore, I consider the factors that affect individual members of movements to form expectations about SDM behavior. Specifically, I focus on how grievances formed from economic stress factors and violent repression coalesce to influence movement behavior. After observing SDM events, governments face the difficult choice of whether or not to use violent repression to attempt to control dissent at the risk of spurring greater violence. However, governments are able to observe the same conditions that may make violence following repression more likely. Finally, public audiences play a crucial role in self-determination challenges by actively and tacitly supporting each side in the conflict. Economic stress plays an important, yet different, role in shaping the behavior of movements, governments, and the public populations that support them.

In the case of group behavior, economic stress represents a salient cause of grievance formation in individuals. As economic stress factors—such as food prices and the unemployment rate—increase, individuals that make up SDMs are more likely to demand improvements over the status quo. Because of this, they will be more likely to use violence to redress their grievances quickly. Next, governments can observe economic stress factors and use them to estimate the level of grievance that individuals bear. After determining the likelihood that repression will lead to increased violence, they can strategically decide whether or not to violently crackdown upon a movement. For public audiences, economic stress acts as a grievance-formation mechanism, similarly to the way it does for movement behavior. However, the effect of economic stress is moderated by antigovernment behavior—it only leads individuals to support violence when they perceive the government as culpable for their grievances. Thus, economic stress affects each of these facets of self-determination challenges, and it does so in very different ways.

To test my expectations of the role of economic stress in self-determination challenges, I introduce a new dataset of SDM events. The data collection effort covers Sub-Saharan African SDMs from 2000-2014. I gather the information from local and international newspapers, newswire services, and human rights reports. Specifically, I collect data on the occurrence of events, characteristics of specific events, and contextual information about movements. Crucially, this includes indicators of whether events are violent or nonviolent and how the government responded to the event in terms of repression. With the introduction of the SDM event dataset, I am able to test my claims about economic stress and violence in self-determination challenges.

The remainder of this dissertation proceeds in three chapters that are thematically connected but written as individual papers. Chapter 2 explores the conditions under which SDMs use violent tactics. Here, I argue that economic stress and violent government repression compound, leading movements to be more likely to use violence to redress their grievances. In Chapter 3, I consider how governments decide whether or not to use repression given that it might push movements to embrace violent tactics. Using a formal model of a SDM-government interaction, I show that governments have incentives to use repression during periods of severe economic downturn and great prosperity. The model and empirical analysis suggest that governments refrain from using violent repression during periods of intermediate economic performance out of the fear that a crackdown will lead movements to use violent tactics. Chapter 4 explores how public audiences signal support for antigovernment violence in states experiencing self-determination challenges. I argue that economic stress and repression drive public support for violence only when individuals are likely to blame the government for their grievances. The final chapter of this dissertation discusses implications of these three research projects, including pathways for future inquiry into the politics of self-determination and policy recommendations for conflict prevention.

CHAPTER 2: COMPOUNDING GRIEVANCES: WHY SELF-DETERMINATION MOVEMENTS USE VIOLENCE

How do economic stress factors and government repression influence whether self-determination movements use violent tactics? Movements increasingly engage in anti-government violence when their individual members become willing to use violent tactics. When the status quo becomes worse, individuals within self-determination movements value the present more. As a result, they prioritize short-term goals over the long-term aspiration for self-determination. The desire to redress immediate grievances and the benefit of coordination among individuals using violence increases the likelihood that the movement as a whole will use violence. The value of the status quo for each individual within a self-determination movement is partially determined by both economic stress factors such as the unemployment rate and food price within a country. Additionally, government repression in times of poor economic conditions compounds on top of previous grievances and alters individuals' strategic calculus, leading them to pursue violent tactics. I test my expectations using an original dataset of self-determination movements in Sub-Saharan Africa from 2000-2014, finding strong support for the economic determinants of violence and limited support for the repression hypothesis.

Introduction

In early 2008, Cameroonian president Paul Biya proposed an amendment to the national constitution that would allow him to take another term in office after already serving for 26 years. Disenfranchised groups in Cameroon, including the Anglophone population with self-determination aspirations, deeply opposed this proposal. This political grievance coincided with massive spikes in the price of fuel and other essential products, leading to mass anti-government demonstrations. Joshua Osih, vice president of the largely Anglophone opposition Social Democratic Front (SDF) party highlighted the multiple causes of the unrest by saying, “What’s happening in Cameroon has nothing to do with a simple strike against a rise in fuel prices. It’s the expression of multiple frustrations among the Cameroonian people. The trouble runs deep” (Pigeaud, 2008). Days after the protests in large cities, demonstrators clashed with Cameroonian security forces in smaller towns in the Western part of the country, where the Anglophone population largely resides. While the self-determination dispute between the government of Cameroon and the Anglophone population has largely taken place in institutional and peaceful contexts, this week of events stands out as particularly violent.

Politically aggrieved individuals engaged in self-determination movements (SDMs) have a variety of options available to them to redress their grievances. In societies where unsatisfied people are politically included, they can run in elections, cast votes, or lobby political actors in an attempt to alter the status quo. However, democratic institutions do not guarantee that all citizens can affect change. Freeman Mbowe, leader of the Tanzanian party Chadema, summarized this well in a speech to his supporters in 2011, remarking that “whenever we raise pertinent issues in the law-making organ they heckle us because they have a numerical advantage. Because they steal elections, our only hope is to use people’s power...” (Katulanda, 2011). Even when individuals are politically excluded, they have a range of potential strategies from which they may choose. Some SDMs decide to pursue nonviolent strategies such as protest, boycott, or strike against the government. Others choose to rebel, revolt, or otherwise use violent tactics against the state. When individuals within a country seek self-determination, what explains their patterns of violence and nonviolence?

I argue that the confluence of government violence and exogenous stress factors lead SDMs to become more violent. Because SDMs are strategic actors, the government’s behavior toward the group helps to determine whether a movement will become more violent. Specifically, when a

government initiates violent repression against a SDMs, the group becomes more likely to embrace violence. This argument is not new, and there have been several mechanisms proposed for why this relationship exists (Sambanis and Zinn, 2005). However, repression alone does not always encourage anti-government violence.

Exogenous environmental conditions may alter group members' strategic calculations such that they become willing to use violence. As the utility a group member derives from the status quo decreases, a wider range of tactics become available in an attempt to coerce quick change. Thus, individuals involved in SDMs facing environmental stress can be thought of as having a shrinking discount rate because they devalue future gains relative to present ones. Rather than continuing on the same course and receiving the status quo payoff, group members will increasingly become willing to change tactics out of desperation. One example of a stress factor is the price of food available to a consumer. As dissidents involved in SDMs become less able to provide food for themselves and their families, they will be more willing to use violence against the state. Another example of an economic stress factor is the unemployment rate within a country. As unemployment rises, more individuals will be unable to secure necessities. My empirical analysis of the relationship between economic stress factors and the likelihood of violence strongly supports these claims.

When coupled with stress factors, repression can trigger movements to use violence when they might have remained peaceful. Thus, the relationship between repression and violent tactics is conditional upon the presence of stress factors. When individuals place less weight on the utility they derive from the future, repression is more likely to trigger a violent shift. Conversely, if group members are relatively comfortable in their current environments, repression alone may not cause SDMs to escalate to violence. I find limited support for this mechanism in my empirical analysis.

This project pushes the literature on opposition movements and tactical selection forward in two primary ways. First, it emphasizes the importance of short-term grievances that are generally ignored in studies of groups with long-term goals such as SDMs. While the overarching desire for self-rule allows researchers to group SDMs together, they are not one-track minded. I show that movements' behaviors are motivated by short-term considerations such as alleviating economic grievances and retaliating to government violence. Second, I test my expectations using an original dataset of SDM events. This dataset represents an improvement over those that aggregate to the group or group-year level of analysis. Because it centers around SDMs, I am able to attribute actions to movements unlike

most machine-coded events datasets. Both the theoretical and data contributions of this project builds upon current knowledge of opposition groups and their patterns of violent and nonviolent activity.

This paper proceeds in four parts. First, after discussing the extant literature on self-determination and contentious tactics, I develop a theory of tactical choice that revolves around economic stress factors and government repression. Second, I introduce an original data collection project of self-determination violent and nonviolent events and lay out a method for testing my hypotheses. Third, I present the results of my analysis. Finally, I discuss the implications of this study and directions for future research on this topic.

Self-Determination Movements & Contentious Tactics

Countless studies have examined opposition group behavior in relation to violent civil conflict. Scholars of domestic conflict suggest that civil wars are more likely to occur in places where individuals are motivated by deep grievances (Gurr, 1970; Sambanis, 2001) or economic incentives (Collier and Hoeffler, 2004; Regan and Norton, 2005) and where environmental factors make civil war more feasible (Collier, Hoeffler and Rohner, 2009; Fearon and Laitin, 2003). Other scholars of civil conflict have used Fearon's (1995) rationalist explanations for war to help explain why we observe conflict instead of a mutually preferable negotiated settlement. In these analyses, researchers argue that actors' incentives to misrepresent their private information (Bapat 2011, Bapat *et al.* 2016, Walter 2006) or inability to form credible commitments (Bell and Wolford, 2015; Fearon, 2004) result in the onset or continuation of inefficient conflict.

Other scholars have noted that in addition to violent strategies, aggrieved populations can use various nonviolent tactics in an attempt to influence the government. Groups that wish to remain peaceful may be able to change the status quo by working through political institutions to redress their grievances. However, aggrieved groups are often unable to produce meaningful changes through traditional political avenues, necessitating the use of non-traditional political action (Celestino and Gleditsch, 2013; Chenoweth and Stephan, 2011; Tarrow, 1994). Common forms of nonviolent action include protest, strikes, and boycotts.

Scholars have produced a great amount of research on the conditions under which protests or other forms of nonviolent demonstrations occur. One popular area of study has focused on the

relationship between coercion and mass mobilization (Francisco, 1995). The classical argument about the relationship between government violence and protest suggests that mobilization will be most likely when governments use moderate levels of repression (DeNardo, 1985; Hibbs, 1973). Empirical evidence for this inverted-U relationship has been inconsistent (Lichbach, 1987; Tsebelis and Sprague, 1989).

Building upon these theories, scholars of social movements also suggest that contentious mobilization is fundamentally dynamic process that relies upon political opportunity structures and threats against collective action (Tarrow, 2011). Similarly, some scholars have argued that the type of mobilization that emerges depends upon repertoires of contention and historical strategies embedded within a society (Kertzer, 1989; Tilly, 1971, 1978). These macro-level theories help to explain why specific forms of contention emerge but do not explicitly explore the ways in which individuals make decisions that produce opposition group behavior. In an attempt to discover more general findings of collective action, some scholars have considered the individual agents that compose movements and how their preferences produce mass behavior (Schelling, 2006). In these studies, scholars often employ threshold models in which one person's decision to act influences others' choices, creating a cascade of participation (Granovetter, 1978; Kuran, 1989, 1997).

Historically, scholars have implicitly assumed that violent tactics like rebellion are more effective than non-traditional nonviolent strategies such as protest (Lichbach, 1995; Pape, 1997, 2005). Other research challenges this assumption, suggesting that strategic nonviolence can be equally as effective for redressing grievances (Celestino and Gleditsch, 2013; Chenoweth and Stephan, 2011; Karatnycky and Ackerman, 2005). While much of the literature on nonstate actors' tactical choices treats mass mobilization and rebellion as fundamentally different actions, several studies of opposition group behavior emphasize that they are different manifestations of similar grievances. Some scholars have treated oppositional tactics as interchangeable (Asal et al., 2013; Cunningham, 2013*b*; Moore, 1998), but few have examined why actors use one tactic versus another. Notable exceptions include the literatures on tactical diversification and diffusion (Cunningham, Dahl and Frugé, 2017; Gleditsch and Rivera, 2017; Pearlman and Cunningham, 2012).

While the existing literature offers several explanations of why civil conflict or mass mobilization occurs in general, it does not fully explain the patterns of violent and nonviolent conflict employed by SDMs. This project aims to clarify the conditions under which SDMs pursue violent tactics rather

than nonviolent ones. I build upon previous research by contextualizing the role of government repression and developing a theory of how economic stress factors influence the behavior of SDMs. Additionally, I test my expectations using an original dataset of nonviolent and violent SDM events.

Group Members, Stress Factors, and Repression

While much theorizing about group behavior treats the group as a single entity, groups frequently do not make decisions as a whole. Instead, individuals make decisions that get translated into the movement's action. Therefore, we must explore the factors that affect individual members of groups to determine why some SDMs are more likely to use violent or nonviolent tactics. I begin by exploring this decision-making process in the context of a movement that is a unitary actor. Next, I complicate the process by considering the implications of a divided movement made up of two factions. Finally, I expand the logic of my theory to the individual level to determine the fundamental factors that encourage members of SDMs to prefer violent or nonviolent tactics.

To determine the conditions under which SDMs use violence, I first consider a group as a unitary actor. Here, the movement is a monolithic actor that makes decisions without needing to deal with strife caused by internal divisions. Because SDMs select their tactics strategically, a unitary movement's decision between using violent and nonviolent tactics is relatively straightforward. As rational actors, movements approach decisions over tactics as utility-maximizers. Therefore, a movement will choose its tactical behavior based upon the strategies' relative costs and the likelihood that they can improve the status quo. Tactics of contention have various costs, such as the risk of physical harm and lost wages due to participation. The benefits that movements are attempting to secure target a combination of long-term existential goals, such as a solution to self-determination aspirations, and short-term practical goals, including economic and political concerns outside of the right of self-determination. Additionally, the effectiveness of contentious behavior depends upon the tactic and the environment in which the group operates. Groups select tactics by weighing costs against the potential benefits and likelihood of success of each strategy. If the effectiveness of violent and nonviolent tactics is equivalent, a group would prefer to use peaceful tactics since nonviolent tactics are generally less costly than violent ones. A movement would instead use violent tactics when the expected benefit outweighs additional costs.

Additionally, the degree to which SDMs value present gains relative to future gains depends upon the value of the status quo. When the status quo for a movement is favorable, it will be less stressed, and redressing its current status becomes less pertinent. Therefore, a movement operating in an opportune environment will want to continue drawing current benefits, meaning that it will place a high value on future gains. Conversely, consider a group for which the status quo is poor. This group will be eager to change its current status, and as a result, it will focus its efforts on improving the status quo. Indeed, a movement suffering in its current environment will devalue the future relative to the present.

The fact that the value of the status quo affects how movements weight the present relative to the future has large implications for its tactical decisions. While groups will choose nonviolent tactics all else equal, they may have incentives to become violent if a peaceful strategy does not solve their immediate grievances. When the status quo worsens, movements are more likely to use violent tactics in an attempt to gain benefits immediately with little regard for future payoffs. These groups are willing to bear the higher costs of violence in the short-term in the hopes that they will coerce quick concessions. However, if the status quo is relatively beneficial for the group, it has incentives to remain peaceful and assure continued gains rather than absorb the high costs of violence in the short-term. Therefore, groups for which the status quo is unfavorable are more likely to use violence to redress immediate grievances because they devalue the future relative to the current time period. While this applies to a movement that is a unitary actor, a similar logic extends to divided groups made up of two factions.

In recent studies of SDMs and other opposition groups, scholars have emphasized how internal divisions within movements complicate the interaction between governments and nonstate actors (Christia, 2012; Cunningham, 2011, 2013*a*). While subgroups are tied together within movements by their self-determination aspirations, they may not be identical. Factions within groups add complexity by introducing new agents that can behave similarly to or different from other factions within a movement. Divided movements may still present a unified front, but factions can also select different strategies from one another. Divisions complicate interactions by allowing a group to pursue both violent and peaceful avenues of change, but the decision-making process for factions within SDMs is largely similar to the unitary actor case in which factions make decisions strategically. Therefore, they will weigh the costs and benefits of each strategy and make an optimal decision given the

information they have. An individual faction will function as a unitary actor such that it will devalue future benefits and be more likely to use violence if it is suffering from the status quo. To examine the dynamics of a divided group, I consider a movement with two equally sized factions.

Factions within movements still attempt to maximize their utilities, but the choice over tactics in divided groups is more complex for each faction because one must consider how the decision of the other faction affects its expectations. Factions likely have systematic differences, meaning that their valuation of the status quo will be different. For example, one subgroup may find the status quo acceptable while the other cannot tolerate it if the two are differentially affected by political or economic circumstances. The faction with the lowest valuation of the status quo is most likely to be willing to use violent tactics because it will value future gains the least relative to current gains. Therefore, the relatively disadvantaged faction will be more apt to exhaust their tactical options in an attempt to redress their immediate grievances. When one faction chooses to engage in anti-government violence, the other must consider the implications for its expected utility of violent and nonviolent tactics. While considering a movement made up of two equally sized factions demonstrates the ways in which divisions complicate decisions, I consider the individual level decision-making process to understand when groups use violence.

Individual members of SDMs have preferences over using violent and nonviolent tactics. These preferences inform a willingness to use either type of tactic, and in turn, lead individuals to make choices about their behavior. Since individual choices drive group behavior, we must consider the conditions under which group members become willing to use violence against the state. Opposition group members, however, are heterogeneous in their willingness to use violence. Members decide whether or not they will become violent based upon the status quo in which they live.

Individuals have two grievance thresholds to clear in order to be willing to engage in anti-government violence. The first threshold determines whether citizens will participate in any opposition action. Therefore, current members of contentious SDMs are sufficiently aggrieved that they are willing to use nonviolent direct action such as protests or boycotts in support of their cause. The second threshold pertains to whether or not opposition group members are willing to use violence against the state. An individual's placement on this "grievance scale" is a function of their grievances and the perceived efficacy of each strategy. As individuals become more aggrieved, they become willing to engage in more costly actions conditional on perceiving a tactic as being effective. Indeed,

individuals often use violent tactics if they believe they will have a better chance of eliciting a reaction a response from the government. Even in a developed country like South Africa in 2013, for example, one writer notes that “[w]e’ve heard from protesters repeatedly over the last few years: if we don’t burn things and use violence, the government doesn’t take notice” (The Mercury, 2013).

Individuals have unique grievance thresholds, meaning that the value of the status quo at which one individual becomes willing to use violence may be higher or lower than another group member. Because of this, SDMs will have different distributions of individuals and grievance thresholds. Some groups may be more likely on average to become more violent just based on the makeup of the movement. Understanding the factors that lead individuals to meet their violence threshold is necessary for understanding whether or not a group will become more violent.

An individual within a SDM who prefers to act nonviolently has incentives to join others using anti-government violence because other members’ actions change her expected utility calculation over tactics. First, the effectiveness of sustained nonviolence decreases as a smaller portion of the group pursues peaceful tactics. Individuals who might rather pursue peaceful tactics also suffer from a loss of credibility when they are linked to violent actors. In addition, individuals may suffer higher costs from nonviolence as the probability that any given person is arrested or otherwise affected by state security forces increases when the number of actors decreases. Second, the decrease in expected utility from using nonviolence is complemented by an increase in the expected utility from using violent tactics. The more individuals pursue violence, the more effective the tactic becomes. The costs to actors can be dispersed amongst the individuals, meaning that expected costs of violence decrease as more individuals join the fight.

As a result, when individuals begin embracing violence, a cascade effect can occur that causes several individuals to become violent even when the motivations for violence vary among group members. For example, consider a SDM with two factions: one that is relatively pleased, with no short-term grievances and one that is suffering from the status quo. Individuals within the disadvantaged faction may initiate anti-government violence in an effort to gain short-term concessions. This changes the expected utility calculation for individuals within the relatively advantaged faction, making violence a more attractive option to redress their long-term self-determination aspirations. Thus, short-term grievances may spark a movement’s transition into a violent SDM.

Economic conditions play an important role in determining individuals' valuations of the status quo. When individuals are economically secure, the status quo is relatively acceptable. While they may still have self-determination aspirations for which they are willing to take action, they will not be as willing to bear the costs of violence. However, when individuals are economically insecure, they face an status quo in which their long-term aspirations of self-rule and daily needs are going unfulfilled. As a result, when individuals within SDMs are subject to poor economic conditions, they are likely to be willing to bear greater costs in an attempt to force an upwards shift in their status quo. Therefore, movement members will be more likely to embrace violent tactics.

This increases the likelihood that we will observe the movement become more violent for two ways. First, movements will be more likely to use violence individually because they are personally more aggrieved. A low status quo payoff makes them devalue future payoffs, meaning that they will be more willing to attempt to increase their future payoffs, even if it requires bearing more short-term costs. Second, when some members become willing to engage in violence, the overall likelihood that violent tactics will coerce change increases. The effectiveness of anti-government violence increases as more individuals are willing to participate. Therefore, when one individual crosses her violence threshold, others become more likely to cross their violence thresholds, leading to a cascade effect. One group member embraces violence, and this increases the perceived efficacy of violence for another member. This shift in expected effectiveness leads that individual cross her violence threshold. As she embraces violence, a different member crosses her violence threshold, and the process continues until we observe a group behaving more violently. In summary, poor economic conditions lead individuals to become more likely on average to be willing to use anti-government violence due to personal strategic calculations and group dynamics.

Evidence from specific cases supports the claim that economic stress is on the minds of individual members of SDMs. Economic stress can push groups to make more extreme self-determination demands. In the case of Afrikaners in South Africa, "self-determination and the establishment of a Volkstaat [independent Afrikaner homeland] are the only ways to ensure there is no economic discrimination against them..." (Godinho, 2014). Additionally, economic stress often represents the primary short-term grievance that leaders of SDMs discuss. For example, Charles Peter Mayiga, the prime minister of the traditional kingdom of the Baganda people in Uganda, noted that the "lack of

markets for produce...and joblessness among Baganda youth” were the top challenges that his people faced (The Daily Monitor, 2013).

Specifically, I argue that the unemployment rate and food price within a country are two specific manifestations of economic stress. The unemployment rate within a country is a strong indicator of economic stress because it corresponds to the number of individuals who lack the necessary means to provide for themselves and their families. The higher the unemployment rate, the greater the number of people without income. Unemployed individuals will struggle to secure basic necessities such as food, hygiene products, and medicine. Attainment of each of these goods is fundamentally linked to individuals’ valuations of the status quo. When the unemployment rate is high, more SDM members will be unable to procure basic necessities. As a result, they will value the present less and will be more willing to use any means necessary to redress their short-term grievances.

Additionally, the food price within a country will be strongly associated with an individual’s economic stress because it specifically affects individuals’ abilities to access a necessary good. When food prices are low, economic stress will decrease as more individuals will be able to feed themselves and their families. However, more people will feel economically stressed when food prices are high. In this case, more SDM members will have relatively low valuations of the status quo. On average, when food prices are high, more individuals involved in the struggle for self-determination will be willing to use violent tactics to redress their immediate grievances.

Food crises in states facing self-determination challenges are particularly common. For instance, Mali faced severe food shortages during the Tuareg Rebellion in 2012, as a representative from the United Nations noted that large portions of the country’s population were “affected by a combination of drought, poverty and high grain prices” (Hirsch, 2012). While conflict can sometimes lead to food crises, this was not the case in Mali. In fact, “...before the conflict, the food security situation in Mali was precarious” (PR Newswire, 2013). The majority of the conflict during the Tuareg Rebellion took place in Northern Mali, but during the conflict, “85 percent of the nearly 500,000 children at risk of acute malnutrition live[d] in southern Mali” (Lederer, 2014). The Tuareg case suggests that food crises can contribute to an increased likelihood of movement violence.

The effects of unemployment rate and food price increases within a country also depend upon one another. For employed individuals, food price increases may lower the value of the status quo because these citizens have to expend more of their income on necessities. However, food

price increases can be devastating for impoverished or unemployed citizens because they may be unable to secure food. Periods of high unemployment within countries exacerbate the effects of food price increases because more individuals cannot obtain nutritional necessities. In addition, a high unemployment rate diminishes a popular government strategy for managing periods of food price increases. In times of economic strife, leaders may increase the minimum wage as a temporary strategy to alleviate the effect of price increases. A high unemployment rate makes this strategy ineffective because the groups most vulnerable to food price shocks—the unemployed—do not experience the remedy of increased wages. Therefore, the effect of food price increases and high unemployment rates are conditional on one another.

To summarize, the unemployment rate and food price within a country determine how aggrieved individuals are within SDMs. These grievances, in turn, affect group members' preferences over violent and nonviolent tactics. When individuals feel economically stressed, they will be more willing to use violence to quickly redress their grievances. Additionally, some subset of a group using violence can encourage other members to use violence. Finally, these two economic stress factors reinforce one another, meaning that one's effect is greater when the other is at a high value. Therefore, as individuals become more willing to use violence according to the economic stress-grievance mechanism, a group will be more likely to become violent. This logic leads to my first hypothesis.

Hypothesis 1. *As economic stress factors worsen, SDMs will be more likely to use violent tactics. The effect of an individual economic stress factor will be stronger (more positive) when the other is high.*

In addition to environmental economic stress factors, government responses to contentious acts by SDMs affect group behavior. Several theories of civil conflict suggest that state coercion encourages violent anti-government action (DeNardo, 1985; Francisco, 1995; Sambanis and Zinn, 2005). Specifically, repression makes nonviolent action seem ineffective, leading demonstrators to embrace violent tactics (Lichbach, 1987). Government violence also raises the costs of collective action and can radicalize otherwise moderate individuals (Tarrow, 1989; Tilly, 1978). Scholars have proposed emotional mechanisms in which repression leads to fear or resentment and can lead to violence on the part of the group (Petersen, 2002). Emotional arguments for violence often have

roots in grievance based theories such as Gurr's (1970) frustration-anger mechanism stemming from relative deprivation. In this view, government repression can lead afflicted individuals to become increasingly frustrated with ineffective tactics and begin to use violence.

Additionally, government repression affects individuals' cost-benefit analyses and their valuations of the status quo. Specifically, repression causes individuals within SDMs to recalibrate their strategic calculations because it sharply increases the immediate costs of nonviolent contention. As a result, individuals' cost-benefit analyses of different tactics change as the difference in costs between nonviolent action and anti-government violence shrinks. Therefore, since nonviolent and violent tactics present similar costs and repression makes nonviolent action seem ineffective, individuals may be more likely to use violence on average.

Repression also affects how individuals prioritize goals. When governments initiate violent repression, group members will be more likely to prioritize the short-term aspiration of alleviating repression over the long-term goal of self-determination. This means that individuals' discount rates will shrink, leading them to value the present more than the future. Government repression will cause more individuals to be willing to use violence in an attempt to gain quick concessions from the state.

However, government repression of nonviolent demonstrators does not always lead to anti-government violence. Even if repression makes violent action more likely on average, whether or not a movement actually initiates violence against the state is conditional on the distribution of individuals who comprise the group. Facing poor economic conditions, government repression can spark violent behavior from SDMs. When group members face daily economic insecurity and possess self-determination grievances, they are on average more willing to engage in violent behavior. In these times, government repression can spark violent behavior because it indiscriminately worsens the status quo for all group members. As a result, each individual will be more inclined to exhaust all potential tactics to improve their personal status quo. Repression increases individuals' placements on the grievance scale and makes each individual more likely to cross her violence threshold. Therefore, while repression in isolation should increase a SDM's likelihood of becoming more violent, the effect of repression will be greater when economic conditions are poor. This leads to my second hypothesis.

Hypothesis 2. *Government repression will be more likely to increase the likelihood of a SDM using violent tactics as economic stress factors in a country worsen.*

Research Design

To test my hypotheses on the likelihood that a SDM will use violent tactics, I use an original dataset of SDM events. The unit of analysis for this study is therefore the event-level. My dataset contains information on SDM actions in Sub-Saharan Africa from 2000-2014. To establish my universe of SDMs, I use a random sample of Kathleen Cunningham's (2014) sample of SDMs. Cunningham (2014) defines SDMs as groups that share a common identity and a belief to self-rule. I choose to focus on Sub-Saharan Africa because a large number of SDMs who pursue violent and nonviolent contentious strategies exist throughout the continent. To code these data, I rely upon secondary sources such as newspapers and radio transcripts from international publications and local African media.

The dataset contains information on SDM actions by movements in Sub-Saharan Africa from 2000-2014. Events include peaceful tactics such as nonviolent protests or the distribution of pamphlets with separatist goals to attacks against government troops or civilians. The sample is established from Cunningham's (2014) global sample of SDMs and includes groups that share a common identity and a belief in the right to self-rule. I have coded the data from secondary sources including newspapers, radio transcripts, news wires, and human rights reports from international publications and local African media. The sample of African SDMs represents an excellent group of movements to analyze because colonial legacies lead to the creation of several movements seeking self-rule. Additionally, these movements use tactics that span the menu of options available to groups—from near-total nonviolence to all-out civil conflict.

The dependent variable for my analysis is a binary indicator of whether the event was violent. It takes on a value of 1 if the event is violent and 0 if it is peaceful in nature. Examples of violent events include coordinated anti-government attacks, violent riots¹, and terrorist attacks on civilians. Examples of nonviolent events in my sample include peaceful protests, boycotts, and distributing

¹I code protests that escalate to violence following government repression 0. I code protests that escalate to violence without government repression 1.

flyers or leaflets with separatist messages. As a result of this coding, I am modelling the probability that a SDM uses violent tactics in a given event.

To evaluate H_1 , I include two measures that capture economic stress and a multiplicative interaction between them. First, I include a monthly measure of the increase or decrease in the food price within a country. I create this measure from the International Labour Organization's (ILO) consumer price indices (CPI) for food and non-alcoholic beverages. This monthly measure captures the percentage change in the food price from the previous month by country. I standardize the price changes by dividing the difference between a state's monthly food price and the state's long-term mean food price by the long-term standard deviation of that state's food price change.² I lag this measure by one month to ensure that SDM events are not affecting the food price change measure.

Second, I include a measure of the unemployment rate at the country-year level from the ILO. The unemployment rate is reported as the percentage of the total labor force that is unemployed but seeking work in a given country-year. Rather than using the national estimates, I use the modeled ILO estimate. Given that I expect the effects of food price changes and unemployment rate to be conditional on one another, I also include a multiplicative interaction term between the two. This will allow me to assess whether the reinforcement mechanism proposed before H_1 is at play. I expect the lagged monthly food price and yearly unemployment rate to be positively associated with the probability of violence, and I expect the interaction term to be positively associated as well.

To evaluate H_2 , I code a categorical variable that measures whether or not a government has used violent repression against the SDM within the past six months. Values of 0 indicate that the government has not used violent repression against the movement over this time period. The variable takes on a value of 1 for instances of non-lethal repression and a value of 2 for cases of lethal repression within the past six months. Because this measure uses the previous six months as its basis, I drop all events from the original period in my sample. In my analysis, I use no repression as the excluded category, meaning that the coefficients on lethal and nonlethal repression should be interpreted as relative to the no repression

I control for three additional factors that might affect the probability that a SDM's event is violent. First, I include the *Polyarchy* measure from the Varieties of Democracy (V-Dem) dataset

²The long-term mean and standard deviation are calculated from months between 2000-2014 (Smith, 2014).

(Coppedge *et al.* 2017). I condition my analysis on a measure of regime type to account for the possibility that SDMs' decisions over tactics, economic indicators, and government violence may vary systematically across regime types. Second, I control for the development of a country using a yearly measure of the logged GDP per capita from the World Bank. Finally, I control for GDP growth in a given country-year using a measure of GDP growth from the World Bank. GDP growth is an important indicator of the overall state of the economy, and by including it, I can be more certain that I am attributing the proper amount of explanatory power to my economic variables of interest.

Results

	Model 1	Model 2	Model 3	Model 4
Food Price Increase_{t-1}	0.21 [†]	0.05	0.13	0.34 [†]
	(0.12)	(0.14)	(0.25)	(0.20)
Unemployment Rate	0.53*	0.71*	0.47	0.29
	(0.22)	(0.22)	(0.58)	(0.34)
Food Price Increase_{t-1} × Unemployment Rate	1.10*	0.75*	1.02*	0.91*
	(0.20)	(0.23)	(0.33)	(0.28)
Non-Lethal Repression	-1.28	-0.40	-0.32	0.15
	(0.84)	(0.47)	(0.56)	(0.28)
Lethal Repression	0.80	2.14*	-0.29	0.47
	(1.11)	(0.46)	(0.68)	(0.30)
GDP Growth	0.62	0.26	-0.01	-0.02
	(0.74)	(0.25)	(0.59)	(0.14)
Polyarchy	0.69	-0.09	-0.54	-0.26
	(0.87)	(0.38)	(1.04)	(0.29)
ln(GDP_{pc})	-2.21*	-1.15*	-1.69*	-0.33
	(0.34)	(0.42)	(0.67)	(0.23)
Constant	2.69*	0.49	2.17 [†]	0.27
	(0.92)	(0.44)	(1.25)	(0.53)
<i>N</i>	864	1,282	864	1,282
Random Effects			✓	✓
Multiply Imputed		✓		✓

* $p < 0.05$, [†] $p < 0.1$

Table 1: Logistic Regressions of Violence

Table 1 shows the results from four logistic regressions of Violence. I present the result from four models that vary the method of accounting for nonindependence of observations and dealing with missing data. In Models 1 and 2, I present standard errors clustered by SDM, while in Models 3 and

4, I estimate the regressions with random intercepts by SDM. Because the economic indicators are missing for a large portion of the country-years in my sample, I estimate models using two different strategies to account for the missingness. First, I fit the model on the sample of 864 events that results from casewise deletion and I present these estimates in columns 1 and 3 of Table 1. Second, I use multiple imputation to create 100 imputed datasets to replace missing values, resulting in a sample of 1,282 events. I analyze each of these datasets separately, and I pool the results for presentation. The estimates of the model fit using the imputed sample are presented in columns 2 and 4 of Table 1. I scale all continuous variables to be centered on 0 and have standard deviations of 1. All marginal effects and predicted probabilities are calculated using the results from the model fit to the multiply imputed sample with random effects by SDM, Model 4 in 1. I choose this model because it best reflects the data-generating process on the full sample of events.

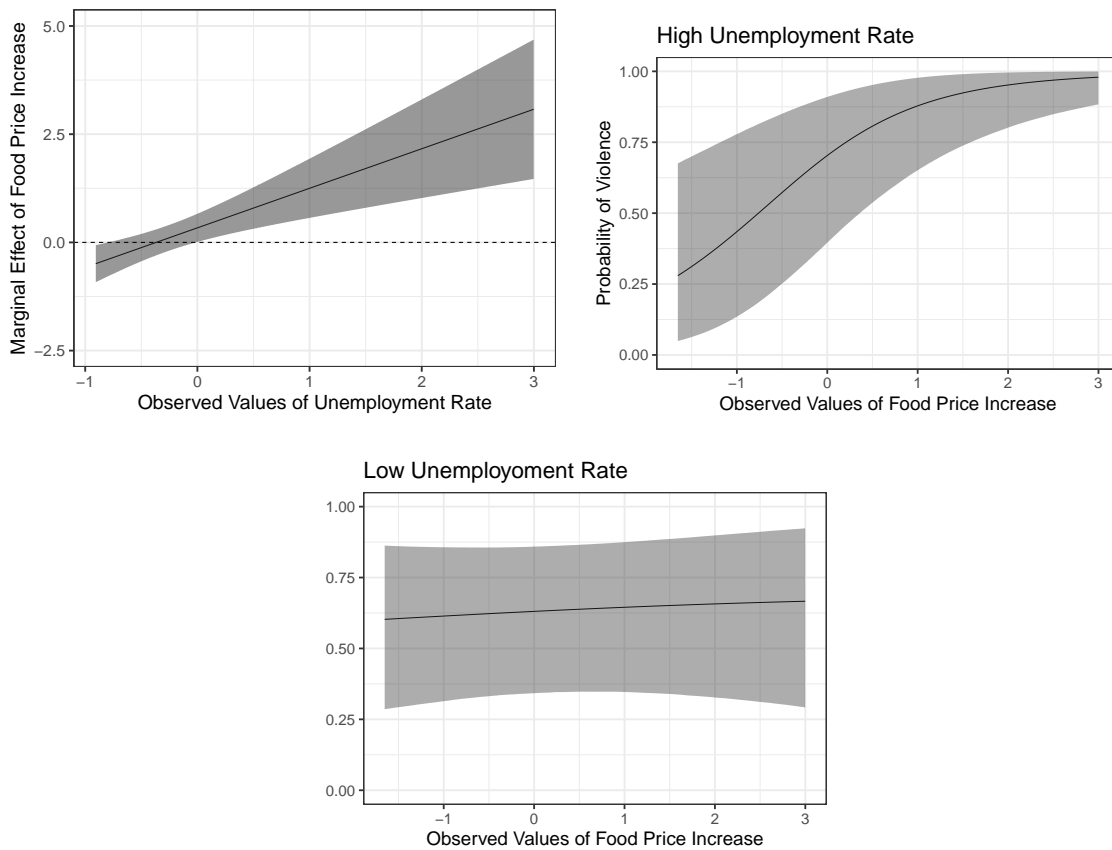


Figure 1: Marginal Effects and Predicted Probabilities of Violence Over Values of Food Price Increase

Leading up to Hypothesis 1, I argued that as economic stress factors worsen, SDMs will be more likely to use violent tactics, and that the effects of food price increases and the unemployment rate would be conditional upon one another. I find that food price increases have a positive association with the likelihood of a violent event only when the unemployment rate is high. The top panel of Figure 1 shows the marginal effect of food price increases over the observed values of the unemployment rate. The black line shows the point estimate, and the grey ribbon represents the 95% confidence interval around that estimate. The marginal effect is increasing over values of the unemployment rate, and it is statistically significant at the .05 level when the unemployment rate is slightly above its mean. The positive and significant relationship holds only for higher values of unemployment rate across the other three specifications shown in Table 1.

I investigate the interactive effects further by examining the model's predictions. In the lower panels of Figure 1, I plot the simulated predicted probability of violence across values of food price increases. On this plot, 0 indicates the mean food price increase value, and each unit represents a standard deviation increase in this variable. The bottom-left panel of Figure 1 shows the predicted probability that an event is violent when the unemployment rate is at one standard deviation above its observed mean. This plot shows large increase in the predicted probability of violence as food prices rise, as the probability of violence rises from about 28% at the minimum value of food price increases to roughly 70% at its mean and 95% when food price increases are two standard deviations above average. The bottom-right panel of Figure 1 shows the probability of violence when the unemployment rate is at its median observed value. Here, the predicted probability only slightly increases, and the uncertainty around the estimate is substantial enough to suggest that there is no significant effect for a change in food price increases. These results lead me to conclude that there is a positive association between food price increases and violence only when the unemployment rate is high.

Similarly, I find that the unemployment rate in a given country-year is positively associated with the likelihood of violent tactics during periods of food price increase. The top panel of Figure 2 shows the marginal effect of unemployment rate across observed values of food price increases along with a 95% confidence interval. The marginal effect is positive and statistically significant for all values of food price increases that are .45 standard deviations above its mean.

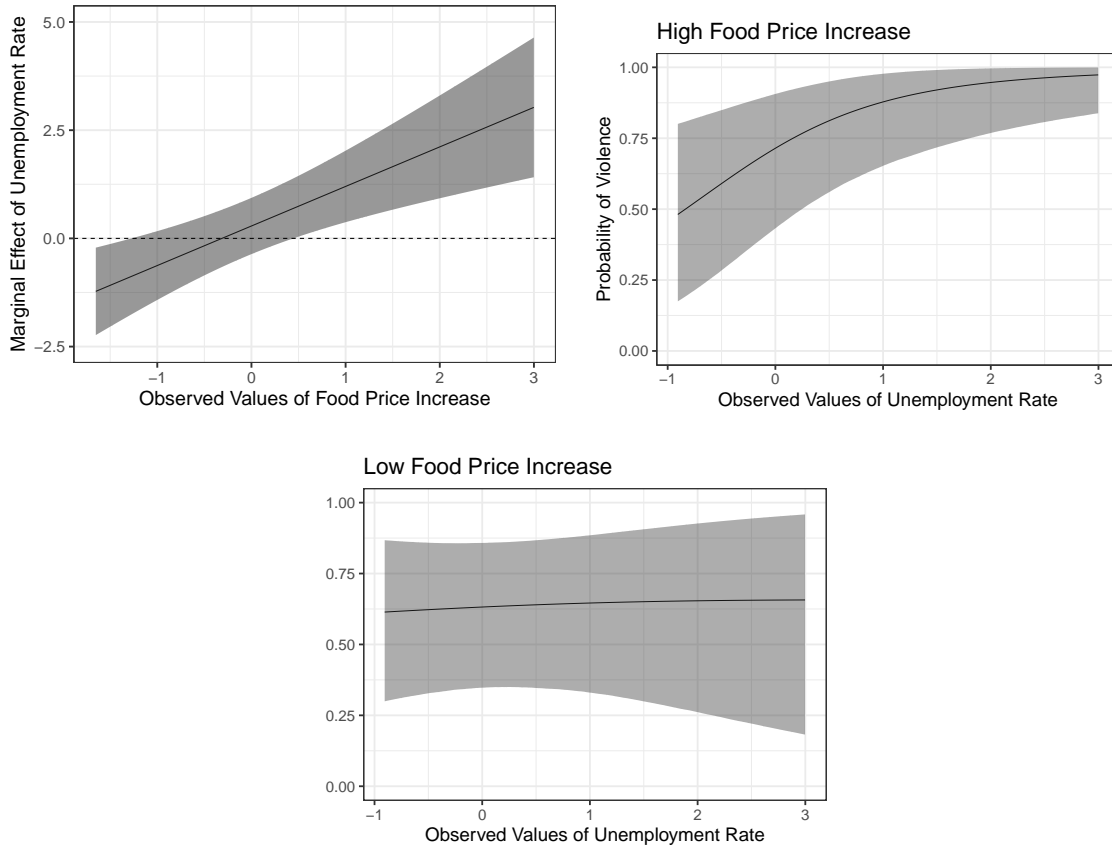


Figure 2: Marginal Effects and Predicted Probabilities of Violence Over Values of Unemployment Rate

The lower panels in Figure 2 further demonstrate the relationship between economic stress and violence. These plots display the predicted probability of a violent event across observed values of unemployment rate for high food price increases and median food price increases. In the left panel, the probability of violence is simulated using a food price increase that is one standard deviation above its mean. The probability dramatically increases from 48% at a minimum food price increase to 72% at an average food price increase and to 89% when food price increases are two standard deviations above their average value. In the right panel, the I plot the probability of violence across values of unemployment rate when food price increases are at a median level. This plot shows a slight decrease in the probability of violence when increasing unemployment rate, but the uncertainty around the estimate suggests no discernible effect. Taken together, the results for food price increases and the unemployment rate suggest that these two indicators of economic stress are positively associated with the likelihood of violence by SDMs when both are at high levels.

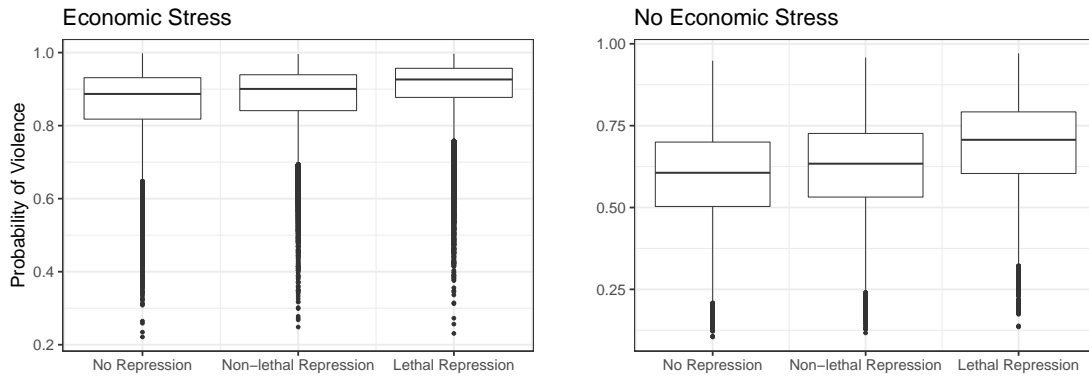


Figure 3: Predicted Probability of Violence Over Values of Repression in Periods of Economic Stress (Left) and No Economic Stress (Right)

In Hypothesis 2, I argued that government repression will have a greater effect increasing the likelihood of violence when economic conditions within a country are poor. I find little support for this hypothesis, as the effect of lethal repression is positive and significant relative to the no repression category in one of the four models shown in Table 1. Additionally, I do not find that non-lethal repression is statistically different from no repression in terms of explaining violent events. Figure 3 shows the predicted probabilities of SDM violence across the levels of the repression measure in the presence (left panel) and absence (right panel) of economic stress. To simulate probabilities under the economic stress condition, I fix the values of food price increase and unemployment rate to 1, representing the presence of a food price increase in the past month and an unemployment rate value one standard deviation above the average.

Under relatively good economic conditions, the model predicts that the likelihood of violence is 60%, 63%, and 71% for no repression, non-lethal repression, and lethal repression respectively. However, the predicted values across the levels of previous repression rise significantly under economically stressful conditions to 89%, 90%, and 93%. This lends some support to Hypothesis 2, but given the great uncertainty around the relationship between non-lethal repression and violence, I do not find full support for this hypothesis.

My model suggests that one of the country-year level control variables in my analysis is associated with the likelihood of violent tactics. I find that the level of development in a given country-year as measured by the logged GDP per capita is negatively related with the likelihood of violent tactics in three of the four specifications in 1. This finding is to be expected, as more

developed countries likely have institutions through which aggrieved groups can work and may include less aggrieved individuals in general. Interestingly, I find no relationship between regime type or the general state of the economy as measured by GDP growth and the likelihood that a SDM uses violence versus nonviolence. This provides more evidence in support of the grievance mechanism driven by economic stress on individuals rather than the overall state of the country.

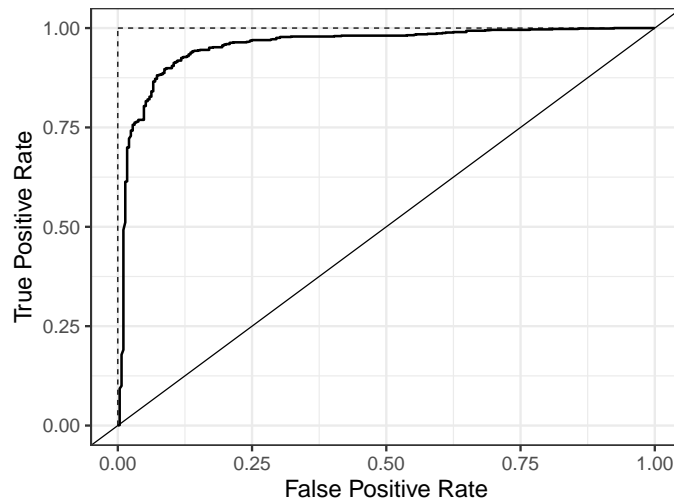


Figure 4: In-Sample ROC Plot

To assess the in-sample fit of my full model, I plot the receiver-operator characteristic (ROC) curve in Figure 4. The area under the ROC curve (AUC) is commonly used to characterize how well a model fits the data by measuring how well the model predicts binary outcomes. A hypothetical perfect model is represented by the dashed line and its associated AUC of 1. A null model with an AUC of .5 is shown by the diagonal line. My logistic model of violent tactics is an excellent discriminator, as the area under the ROC curve is .95. This suggests that my model fits the data well in-sample

Conclusion

Aggrieved individuals with self-determination goals often take part in anti-government activities, and they have a number of tactics available to them in their attempt to gain concessions from their home governments. While conflicts between SDMs and governments are most often defined by the domestic opposition's long-term aspirations, I argue that movements' behaviors are subject to

short-term concerns. In order to understand the patterns of violent and nonviolent tactics used by movements in self-determination disputes, we must focus on short-term grievances caused by poor economic conditions and the use of violence. I hypothesize that as economic stress factors worsen in tandem and governments engage in repression, SDMs become more likely to use violent tactics rather than nonviolent ones. By analyzing an original dataset of SDM events, I show that as food prices and the unemployment rate increases, movements become more likely to use violence. Additionally, I find very little evidence that previous lethal government repression is significantly more likely to be associated with a high likelihood of violence when movements face economic stress.

This project focuses on SDMs, but the theory could apply widely to any groups with long-term aspirations. For example, religious movements often have stated goals that are either incredibly ambitious or pertain to unobservable spiritual aspirations. These groups would also likely be subject to similar dynamics in which their behavior is shaped by short-term goals. Future studies could test similar hypotheses on a different sample of groups with long-term goals.

In addition, future studies could alter the operationalization of economic stress factors. While food prices and unemployment represent two sources of desperation for individuals, other observable variation can contribute to economic stress. For example, rising medicine prices often precipitate mass mobilization and violent tactics. However, these data are difficult to obtain, especially for non-developed countries. Future work should focus on operationalizing the stress that results from rising health costs.

The findings of my analysis must be understood in the context of Sub-Saharan African SDMs. While there is significant variation in the sample, the relationship between economic stress, repression, and the use of violent tactics may differ in more developed contexts. The data collection effort required to obtain a global sample of SDM events would be massive, but future work should attempt to tease out differences in these relationships that depend upon regional contexts.

Beyond academic interests, this project has several policy implications. Policymakers interested in conflict prevention may improve real-world outcomes by dedicating resources to attempt to alleviate economic stress. While NGOs often emphasize the importance of access to food and water as humanitarian aid, relief could affect movements' decision-making processes, decreasing violence. Additionally, policymakers should be especially concerned about the role of government repression during periods in which economic conditions are poor. Aid aimed at solving economic

stress problems and repression monitoring play important roles in protecting human rights, but they may have a second importance in preventing future conflict as well.

CHAPTER 3: GROUPS ON THE BRINK: HOW ECONOMIC STRESS AFFECTS GOVERNMENTS' USE OF REPRESSION

When a state encounters a self-determination challenge, it faces an important decision about how to respond to anti-government actions. On one hand, governments can use repression to attempt to quell movements and deter future dissent. On the other hand, repression can radicalize self-determination movement members and cause the challengers to escalate from nonviolent contention to violence. I model the interaction between a government and self-determination movement to show the conditions under which government repression spurs the movement to escalate to violence. The model suggests that movements are most likely to be pushed to violence when their cost-tolerance is at an intermediate level. Knowing this, governments are least likely to use repression in this circumstance. Instead, they are most likely to use repression when a movement's cost-tolerance is very high or very low. I analyze an original dataset of self-determination movement events to test the hypothesis that governments use observed economic indicators of cost-tolerance to determine whether or not to use violent repression. Analysis of an original dataset of self-determination movement events in Africa from 2000-2014 supports this claim.

Introduction

The Ogoni people in Nigeria have made self-rule demands since before Nigeria gained independence in 1960. The Movement for the Survival of the Ogoni People (MOSOP), founded by Ken Saro-Wiwa in 1990, campaigns for economic and environmental autonomy for Ogonis in the Niger Delta. MOSOP brought the Ogoni cause to international audiences, making Saro-Wiwa a target of the Abacha government. The Nigeria government executed Saro-Wiwa in 1995, but the Ogoni struggle for self-determination continues to this day. On the ten-year anniversary of Saro-Wiwa's death, MOSOP president Ledum Mittee outlined the strategic situation in which the Ogoni movement and Nigerian government were engaged, stating that "choices are still available to those in the [D]elta, in government... (BBC, 2005). Specifically, he referred to Niger Delta youths' decisions to engage in violent or nonviolent tactics and government decisions over the use of repression. Indeed, at the march in remembrance of Saro-Wiwa, "[l]arge numbers of police armed with assault rifles were deployed around the area...and organisers called on MOSOP supporters to remain calm." (Agence France Presse, 2005). This period in the Ogoni-Nigeria interaction exemplifies the strategic interaction between a self-determination movement (SDM) and its home government.

Self-determination challenges fundamentally threaten a state's sovereignty, territorial integrity, and ability to accumulate resources. As a result, a government facing a SDM has powerful incentives to eliminate them, and it has a number of available strategies to meet this end. For example, governments can try to quell challengers by engaging in violent repression. Alternatively, they can accommodate groups' demands by granting them greater autonomy or access to governing power. A government's decision of whether or not to use violence on its own citizens with self-determination aspirations is of critical importance. What explains a government's decision to violently crack down on SDMs?

In some cases, the choice is clear for governments that wish to continue holding power. If the state is facing a group that will attempt to secede using violence, it has incentives to violently put down a nascent movement while it is at its weakest (Bapat, 2005). Alternatively, if the SDM will seek to redress its grievances peacefully, repression can backfire on the government (Sutton, Butcher and Svensson, 2014). Repression of nonviolent movements also runs the risk of radicalizing SDM members, leading them to become violent and creating a more serious threat for itself (Della Porta,

2013). The risk of pushing currently peaceful groups to use violent tactics in the future determines how governments will react to SDMs. Therefore, a government's optimal response to a self-determination challenge depends upon what type of group it is facing—violent or nonviolent.

Practically, however, the government's optimal response is not straightforward. There is often a great deal of uncertainty over how SDMs will behave in the future, and governments may have difficulty forecasting whether their opponents will primarily behave violently or nonviolently. For instance, after the Spanish government granted limited autonomy to the Basque country in 1978, the Basque separatist group Euzkadi ta Askatasuna (ETA) drastically increased its use of terrorism (Bueno de Mesquita, 2005). In the case of ETA, concessions led to a spike in violence. Alternatively, after the Bloody Sunday massacre in Derry, Northern Ireland in 1972, mass mobilization and domestic unrest sharply increased (Francisco, 2004). Here, initiating repression worsened the United Kingdom's situation. The similar increase in anti-government violence following very different government responses demonstrates the difficulty that states have in predicting SDMs' actions.

Compounding the uncertainty around group behavior is the observation that SDMs very infrequently behave purely violently or nonviolently. In fact, the vast majority of movements engage in a combination of tactics including traditional political participation, nonviolent demonstrations, violent riots, and anti-government violence (Cunningham, 2014). This worsens the government's ability to accurately determine the type of self-determination challenger it is facing, exacerbating the uncertainty problem in the interaction. Because the signals from SDMs about their type are ambiguous, the state faces a difficult decision of whether or not to initiate repression against a movement.

However, a government can use other sources of information to inform its decision over the use of repression. Specifically, it is able to more accurately estimate the probability that a movement will use violence in the future by observing the degree to which a movement is aggrieved. Economic performance indicators represent one important group of factors that establishes a baseline level of grievance for citizens within a state. When individuals' economic circumstances are positive, they will be less aggrieved and less anxious to alter the status quo. However, when economic conditions are poor, they will have greater incentives to redress their grievances quickly, making violence a more tenable tactic. Knowing this, governments can more accurately predict whether or not repression is likely to trigger a shift in tactics.

This paper proceeds in four main sections. First, I outline decisions that movements make over tactics and the choices that governments make about repression. Next, I introduce a formal model of the strategic interaction between a SDM and government. After extracting a hypothesis about the likelihood that states will engage in responsive repression, I test this expectation using an original dataset of SDM events. Finally, I close the study with a discussion of the implications of this study and potential avenues for future work.

Dissent and Repression

When groups within society become disaffected with their government, they have several avenues through which they may redress their grievances. Some groups can pursue traditional political pathways, but other groups may choose to use irregular activities such as protests, riots, or anti-government violence (Chenoweth and Lewis, 2013; Cunningham, 2013*b*; Tarrow, 1994; Wilkinson, 2009). Within these forms of non-institutional expression, some groups can inflict costs on the state using nonviolent tactics, while others can choose from a menu of violent and peaceful tactics (Asal et al., 2013). Grievances can fall along several dimensions including economic concerns (Hendrix and Haggard, 2015; Tilly, 1971), specific government policies (Kitschelt, 1986), political representation (Jenkins, Jacobs and Agnone, 2003), increased autonomy (Sambanis and Milanovic, 2014), and separatist demands (Cunningham, 2014).

Groups within society that make self-determination demands are of particular interest to governments because they fundamentally threaten the government's legitimacy (Cunningham, 2014). Specifically, a SDM can challenge state sovereignty by eroding territorial integrity and representing a potential loss of resources. States are reticent to sacrifice territory that may have strategic importance, cultural significance, or economic value from natural resources or taxable citizens (Huth, 1996). Even though the prospect of SDM success can be devastating to states, movements often succeed in extracting concessions from their home government or achieving independence (Coggins, 2011; Cunningham, 2011). Given the gravity of the situation in which governments facing self-determination challenges find themselves in, states tend to take autonomy or separatist demands made by SDMs seriously as they consider how to respond (Horowitz, 1981).

Governments frequently have incentives to refrain from negotiating with opponents because of reputational concerns (Walter, 2006) or fears that it will embolden radical factions (Bueno de

Mesquita, 2005). Empirically, states often enter negotiations with nonstate actors throughout the course of civil conflict bargaining (Asal, Gustafson and Krause, 2019; Bapat, 2006; Cunningham, 2011; Thomas, 2014). Often, however, governments may prefer to attempt to quell challengers using violent repression (Davenport, 2007; Hill and Jones, 2014). The primary purpose for which states use repression is to control dissent (Lichbach, 1987; Moore, 2000; Nordås and Davenport, 2013).

Some studies suggest that repression can be effective at limiting future antigovernment behavior during periods of civil conflict (Lyall, 2009), when groups are weak (Kalyvas, 2006), civilian populations are small (Downes, 2007), or conditional on social network structure (Siegel, 2011). Other empirical evidence suggests that governments using an intermediate level of repression are most effective at deterring dissent (DeNardo, 1985; Muller and Weede, 1990). A third group of studies muddy the water by finding mixed results for the effectiveness of repression in controlling mass mobilization (Hibbs, 1973; Rasler, 1996; Tsebelis and Sprague, 1989). Finally, in the early stages of civil conflict, states have incentives to use repression if they are concerned that they are facing a nascent rebel group because new movements are most vulnerable at their creation (Bapat, 2005).

However, states may participate in costly repression in pursuit of ends in addition to deterrence of escalation or future dissent (Davenport and Loyle, 2012). For example, repressive measures may be used to gain information about movements (Marx, 1988). Alternatively, states can use repression to attempt to soften the claims being made by dissidents or prevent them from conducting other activities such as meetings (Bueno De Mesquita and Smith, 2010; Davenport, 2005). Additionally, states may use preventative repression like curfews or closing public spaces to preemptively prevent dissent (Ritter and Conrad, 2016). Some democratic states may face electoral pressure to use repression in the wake of terrorism (Cronin, 2009; Dragu, 2017). Finally, governments can use repression to reinforce power hierarchies and punish political opponents. This process, known as ‘privilege violence,’ occurs when governments use or incentivize repression against “those who challenge the regime, or marginalized portions of the population (Kleinfeld and Barham, 2018, 225). Violence against excluded disempowered groups is common (Kleinfeld, 2019; Koonings and Kruijt, 2007; Schuberth, 2015), and is often perpetrated by the state itself or pro-government militias (Byman and Kreps, 2010; Carey, Colaresi and Mitchell, 2015). In this context, governments gain an extra benefit

from inflicting costs on historically-oppressed enemies that threaten the distribution of political power.

Violent repression can also carry negative externalities beyond the material costs of using violence on civilians. Repressive actions may actually encourage future dissent (Francisco, 1995; Muller and Opp, 1986), especially following terrorist violence (Benmelech, Berrebi and Klor, 2015; Daxecker and Hess, 2013; Dugan and Chenoweth, 2012). Movements can also benefit from provoking indiscriminate violence on behalf of the state (Sutton, Butcher and Svensson, 2014), leading to repression backfire as movements gain sympathetic support from domestic and international audiences (Martin, 2007). Finally, repression can lead to the radicalization of individuals involved in movements (Della Porta, 2013). In these cases, previously nonviolent actors may begin to engage in antigovernment violence in direct response to government violence (McCauley and Moskalenko, 2008), and indiscriminate violence can lead citizens to choose radical groups over moderate groups (Goodwin, 2001; Mason and Krane, 1989).

Given the positive and negative externalities associated with repression, states must make a delicate decision over whether or not to initiate violence against nonstate actors. On one hand, they may have incentives to use repression beyond deterrence of future dissent. On the other hand, repression can backfire and can even cause a nonviolent group to become violent. Using a game theoretic model of government-movement interaction, I consider the conditions under which governments use repression against SDMs.

Model

If the government receives an ambiguous signal from a group of aggrieved individuals such as a mass demonstration in which some anti-government violence occurs, the government is unsure of whether it is facing a rowdy protest group or a nascent violent group. How does a government choose to respond to such a movement? I model the strategic interaction between a government (G) and a self-determination movement (M). The game consists of two moves. First, the government chooses whether or not to initiate repression against the movement. Next, the movement decides whether or not it will escalate to violence and payoffs are distributed.

Figure 5 shows the game in its extensive form, and Table 2 shows the parameters that make up the utility functions for both G and M . The right side of the game tree depicts the potential outcomes

of the interaction when G chooses not to repress. If M chooses not to escalate, the actors receive their status quo payoffs. The value of the status quo, $q \in [0, 1]$, is zero-sum between the two parties such that G receives q and M receives $1 - q$.

However, if G chooses not to repress and M escalates to violence, the actors engage in conflict. For G , the payoff from conflict is determined by its share of material resources $\frac{m_G}{m_M+m_G}$ minus the costs of escalation c_E . Here, the costs of conflict may include material, economic, and political costs. Similarly, M receives a payoff from conflict that is a function of its share of material resources $\frac{m_m}{m_M+m_G}$ and its costs from conflict c_M relative to its cost-tolerance t . Here, as t increases, M becomes more willing to bear the costs of conflict as its payoffs from escalation increase. To formalize the M 's grievance, I assume that $q > \frac{m_G}{m_M+m_G}$. This assumption implies that the status quo is more generous to G than its share of material capabilities would suggest, leading M to seek to alter the status quo.

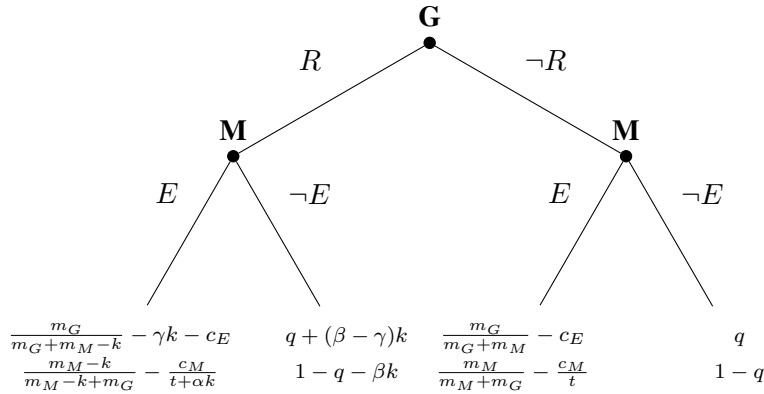


Figure 5: Repression & Escalation Game

The left side of the game tree shows outcomes that occur when G chooses to initiate repression. When G uses repression and M does not escalate, the actors receive the value of the status quo q modified by repression-specific parameters. G receives a benefit to repression β that accounts for the fact that G has weakened M in the future materially and potentially politically. Interactions in which β is high, meaning that the government gains a large benefit for weakening the group, correspond to strategic situations in which the government perceives the challenging movement as threatening to the current distribution of power. Likewise, when β is low, the government will find the movement relatively less threatening and will therefore receive less of an extra benefit of repressing a nonviolent movement. G also pays a cost γ that is the cost of repression. Both β and γ are modified by k , which

-
- $0 \leq q \leq 1$: Status quo
 - $m_i > 0$: Material resources
 - $c_E > 0$: Cost to government of escalation
 - $c_M > 0$: Cost to movement of violence
 - $t > 0$: Cost tolerance of movement
 - $\beta > 0$: G 's benefit for weakening M
 - $\gamma > 0$: G 's cost of repression
 - $k > 0$: Decrease in material resources due to repression
 - $\alpha > 0$: Shift in cost-tolerance due to repression

Table 2: Repression & Escalation Parameters

is M 's decrease in material resources due to repression. Here, a larger decrease in M 's capabilities, the greater the future benefit of weakening M and the greater cost of repression to G .³ M receives its status quo payoff $1 - q$ and suffers a cost that is complementary to the benefit that G receives from repression βk .

However, if M chooses to escalate following repression, the game ends in conflict in which M 's capabilities m_M decrease by k . The payoffs for each actor are similar to those in the conflict outcome on following G 's decision to not engage in repression. G receives a payoff equal to its share of material capabilities $\frac{m_G}{m_G + m_M - k}$ minus its cost for repression γ multiplied by the decrease in resources k . Additionally, G suffers the costs of escalation c_E . M receives a payoff equal to its share of capabilities $\frac{m_M - k}{m_M - k + m_G}$ minus its costs for violence c_M relative to its cost-tolerance t . Unlike the conflict outcome with no repression, M 's cost-tolerance here is affected by how much it is weakened k multiplied by how much repression shifts its cost-tolerance α . For higher values of α , M becomes more cost tolerant, meaning that its costs for violence are relatively less influential in its decision-making. Here, α can be thought of as a movement's ability to violently mobilize in the face of government repression.

³This is currently an exogenous parameter. In a future version of this model, I plan to endogenize k such that G chooses the amount of repression it supplies.

Solution

Following repression, M will choose to escalate if:

$$t > c_M \left(\frac{m_M - k + m_G}{m_M - k} + \frac{1}{q} + \frac{1}{\beta k} - 1 \right) - \alpha k \equiv t_r^* \quad (1)$$

If G does not use repression, M will choose to escalate if:

$$t > c_M \left(\frac{m_m + m_G}{m_M} + \frac{1}{q} - 1 \right) \equiv t_n^* \quad (2)$$

If t exceeds both t_n^* and t_r^* , M chooses escalation regardless of G 's strategy. Likewise, if t is less than both t_n^* and t_r^* , M chooses not to escalate following repression and not repression. However, if t falls between t_n^* and t_r^* , M will vary its decision depending upon G 's choice of whether or not to repress. Conditional on the values of other parameters, t_r^* can be greater or less than t_n^* . Specifically, $t_n^* > t_r^*$ if:

$$\alpha > c_M \left(m_G + \frac{1}{\beta} - \frac{m_G k}{m_M} \right) \equiv \alpha^* \quad (3)$$

Figure 6 shows the two possible orderings of t_n^* and t_r^* . When $\alpha > \alpha^*$, $t_n^* > t_r^*$, which means that when t falls between t_n^* and t_r^* , M will escalate following repression and not escalate following no repression. This situation is shown in Figure 6a. However, when $\alpha < \alpha^*$, $t_n^* < t_r^*$, meaning that intermediate values of t lead M to choose not to escalate following repression and decide to escalate if G does not repress. This scenario is shown in Figure 6b.

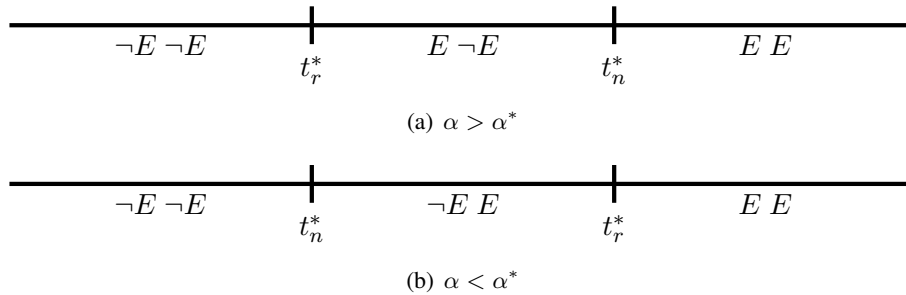


Figure 6: Possible Orderings of t_n^* and t_r^*

α represents the degree to which M 's cost-tolerance increases due to repression, leading M to suffer lower costs following repression. This parameter can be interpreted as a movement's ability to mobilize violently on short notice because it is a reduction in the costs experienced by choosing to escalate after the government initiates repression. I choose to concentrate attention on the case in which $\alpha > \alpha^*$ because empirically, most SDMs that operate outside of political institutions are able to violently mobilize. While not all movements can use sophisticated tactics, nearly every SDM has the ability to escalate to antigovernment violence in some form. Some groups may be able to mobilize well-trained militia wings, and others may only be able to use violent riots. However, most SDMs can inflict costs on the state using violence.

This is evident in several disparate cases in which self-determination challengers emerge. The Ogoni in Nigeria, which are primarily nonviolent, have at times suggested that “the crisis raging in the Niger Delta could be as grievous as the Biafran war” (BBC, 2005). In a different context, an Afrikaner politician in South Africa claimed that “[f]or Afrikaner freedom [he] would also take up arms and kill” (Webb, 2008). Additionally, it is evident that governments are concerned with SDMs' abilities to violently mobilize. In Uganda, the national government and traditional kingdom of Buganda—which has a history of self-rule claims—has argued over the kingdom's ability to maintain a group of armed guards that protects the leader of the traditional kingdom (Kaaya, 2014). The verbal threats of movements like the Ogoni and Afrikaners along with the Ugandan government's suspicion over armed Baganda guards suggest that SDMs have the ability to violently mobilize.

Therefore, I consider the case in which $\alpha > \alpha^*$ and $\{E, \neg E\}$ is a possible strategy profile for M . G must decide whether or not to initiate repression conditional on M 's potential strategies. It chooses to repress under the following circumstances:

- $\sigma_M = \{\neg E, \neg E\}$

$$\gamma < \beta \tag{4}$$

- $\sigma_M = \{E, \neg E\}$

$$\gamma < \frac{1}{k} \left(\frac{m_G}{m_G + m_M - k} - q - c_E \right) \equiv \gamma_5 \tag{5}$$

- $\sigma_M = \{E, E\}$

$$\gamma < \frac{1}{k} \left(\frac{m_G}{m_G + m_M - k} - \frac{m_G}{m_G + m_M} \right) \equiv \gamma_6 \quad (6)$$

In the case where $\alpha > \alpha^*$, $t_n^* > t_r^*$, meaning that M will have $\{\neg E, \neg E\}$, $\{E, \neg E\}$, and $\{E, E\}$ as potential strategy profiles. If $t < t_r^*$, M will not escalate regardless of whether or not G chooses repression. In this case, G will choose repression if $\beta > \gamma$, or if the benefit of weakening M outweighs the cost of repression. If $t_r^* < t < t_n^*$, M 's strategy will be to escalate if G uses repression and not escalate otherwise. In this case, G will use repression if $\gamma < \gamma_5$, where γ_5 is equivalent to the right side of the inequality expressed in (5). Finally, if $t > t_n^*$, M will always escalate no matter what G chooses to do. Here, G will choose to repress if $\gamma < \gamma_6$, where γ_6 is the right side of the inequality expressed in (6).

To explore how the probability of government repression varies as a function of M 's cost-tolerance, I must determine the possible orderings of the three cutpoints on γ : β , γ_5 , and γ_6 . First, consider the relationship between γ_5 and γ_6 . Given that we assume that M 's grievance implies that $q > \frac{m_G}{m_G + m_M}$, or the status quo is tilted in G 's favor, γ_6 must be greater than γ_5 . Because of this, the condition required for the G to initiate repression when M plays $\{E, \neg E\}$ ($\gamma < \gamma_5$) is met less frequently than the condition required for G to repress given M 's strategy of $\{E, E\}$, suggesting that G will repress more frequently when $t > t_n^*$ than when $t_r^* < t < t_n^*$.

β represents the extra benefit to governments of using repression against movements that do not escalate. Therefore, β is the degree to which the government gains from inflicting costs on the movement. One way to conceptualize this benefit is by tying it to states' incentives to reinforce power relationships between empowered and political excluded groups. Governments use repression as a form of privilege violence that punishes marginalized groups and maintains the traditional distribution of power within a state. Therefore, the positive externality of repression for governments— β in the model—is conditional on how threatening a movement's goals are to the status quo power hierarchy.

I label situations in which β is low as containing *Low Threat* movements with respect to the current distribution of power. Here, *Low Threat* groups are not attempting to fundamentally alter the power dynamics between the ruling state and the opposition. They are not necessarily benign groups that the government can ignore, but they do not present existential threats to the state. In

these situations, repression does not have much additional benefit outside of its deterrence of violent escalation. Alternatively, I label situations in which β is high as consisting of a challenge from a movement that represents a *High Threat* to the status quo power hierarchy. When β is high, the benefit to repressing the movement is large because it allows the government to effectively consolidate its hold on power.

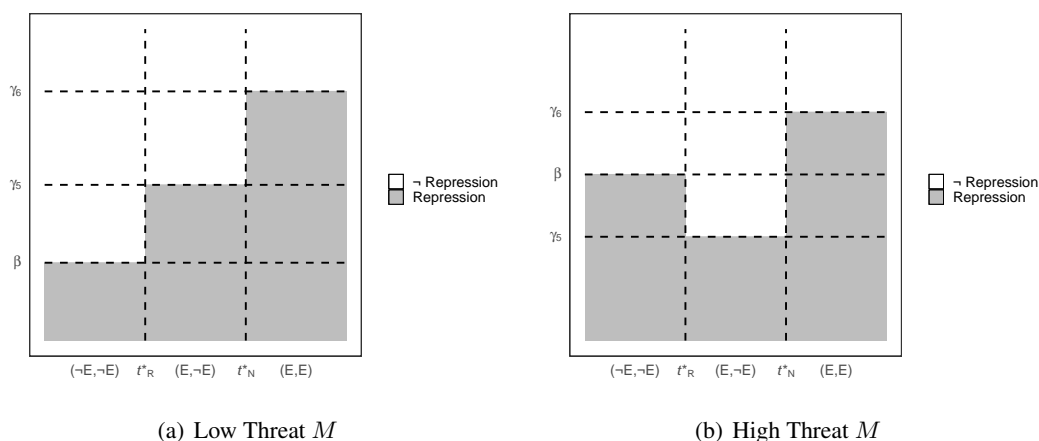


Figure 7: G 's Use of Repression as a Function of t

The relationship between β and γ_5 is less straightforward than the relationship between γ_5 and γ_6 . Depending on the values of other parameters, β may be greater or smaller than γ_5 . Consider the case in which β is relatively low, and the government is facing a *Low Threat* movement with respect to the status quo power distribution. When $\beta < \gamma_5$, the condition for repression is more frequently reached in cases where $t_r^* < t < t_n^*$ and $\sigma_M = \{E, \neg E\}$ than when $t < t_r^*$ and $\sigma_M = \{\neg E, \neg E\}$. These are cases when the benefit to weakening M is relatively low, and it implies that the probability of repression is monotonically increasing in cost-tolerance. This is shown in panel (a) of Figure 7, where the x-axis shows t along with cutpoints t_r^* and t_n^* and the y-axis shows γ with cupoints β , γ_5 , and γ_6 . The plot shows the G 's equilibrium strategy for different combinations of t and γ , with grey-shaded areas indicating repression and white areas showing non-repression.⁴

However, the relationship differs when the government is facing a movement that is *High Threat*. When $\beta > \gamma_5$, repression becomes more likely when $\sigma_M = \{\neg E, \neg E\}$ than when $\sigma_M = \{E, \neg E\}$. This implies a nonmonotonic relationship between M 's cost-tolerance and the likelihood of repression

⁴To create this figure, I used the following parameter values: $\{m_G = .8; m_M = .2; k = .5; q = .85; c_E = .25; c_m = .5; \alpha = .9\}$. In panel (a), $\beta = .5$, and in panel (b), $\beta = 1.3$.

in which repression is most likely when t is high or low and is least likely when t is at an intermediate level. Panel (b) of Figure 7 demonstrates the nonmonotonic relationship between t and the probability of repression because the likelihood of repression is lowest for intermediate values of t .

Therefore, the model suggests that the relationship between cost-tolerance and repression is conditional on the degree to which the movement threatens the status quo power arrangement between the state and movement. For *Low Threat* groups, the probability of repression is increasing in cost-tolerance, as seen in panel (a) of Figure 7. For *High Threat* groups, however, the probability of repression is lowest for intermediate values of cost-tolerance. In the case of politically excluded groups, the likelihood of repression is highest when cost-tolerance is very high or very low, as shown in panel (b) of Figure 7.

Movements that exemplify the *Low Threat* category generally make limited demands of the government. This includes groups that form around temporary policies, such as anti-nuclear protest movements (Kitschelt, 1986) or one-off food protests (Tilly, 1971). These groups still challenge the government and necessitate a response but do not seek to fundamentally alter the power distribution within the country. Movements in the *High Threat* category make claims that severely impact a government's hold on power. These include, for example, center-seeking states that aim for regime change (Hale, 2013). It is important to note that movements' threat levels are not necessarily fixed, as the aims of protests can change over time. For example, during the Arab Spring, there is evidence that protesters originally had more-limited economic aims that developed into larger, more threatening demands (Costello, Jenkins and Aly, 2015; Sternberg, 2012).

SDMs fundamentally threaten the power distribution with a state by challenging territorial integrity and the government's ability to draw economic resources from a region. Because of this, states have great interest in maintaining the current hierarchy of power by keeping these movements weak. Physical repression represents one potential tactic for a government to weaken SDMs and consolidate its power. Thus, SDMs would be classified as *High Threat* with respect to the state's hold on power. As Figure 7 shows, the model suggests that there is a nonmonotonic relationship between movement cost-tolerance and government repression for these movements.

Economic Stress as Cost Tolerance

The model predicts that a movement's cost-tolerance has a nonmonotonic relationship to the willingness of governments to use repression. Economic stress is a major determinant of cost tolerance. As established in the previous chapter, economic stress factors play a large role in shaping individuals' decision-making processes. Economic stress can lead members of movements to value short-term economic gains over long-term self-determination goals, resulting in violence. Thus, individuals become more impatient and desperate to alter the status quo, even if this entails absorbing more costs.

Additionally, in the model, cost-tolerance moderates the costs incurred by a movement for choosing to escalate to violence. Violence is inherently risky, and conditions under which movements accept this risk varies (Lichbach, 1995). When cost-tolerance is high, movements are less impacted by the costs of violence. Relative deprivation theory suggests that when citizens are unsatisfied with their political or economic standings, the individuals that comprise movements become more willing to take costly actions to improve their positions (Gurr, 1993). Periods of economic stress can cause individuals to feel relatively deprived and lead groups to undertake antigovernment actions ranging from nonviolent demonstrations to large-scale civil conflict (Cederman, Gleditsch and Buhaug, 2013; McAdam, Tarrow and Tilly, 2003; Regan and Norton, 2005).

The primary grievances of the Ogoni in Nigeria are economic in nature. Their most prominent complaints stem from the policies of the Royal Dutch Shell oil corporation in concert with the Nigerian government. The oil extraction has had harmful environmental effects for the Niger Delta, but it has also led to economic crisis in the form of food shortages and price shocks. "The pollution is making agricultural harvests very poor... Many families are not able to provide for themselves" (Africa News, 2007). Indeed, oil spills that cause crops to die and lead to food crises have been "a routine observation in Ogoniland" (Vanguard, 2011). I argue that in periods of economic downturn, movements like the Ogoni become more cost-tolerant in an attempt to rectify their short-term grievances.

Price increases are important indicators of economic stress, and a large body of literature has identified necessary commodity price shocks as a key driver of risky contentious behavior (Brinkman and Hendrix, 2011; Gailus, 1994). Previous research has found that an increase in food prices strongly

predicts nonviolent demonstrations and violent riots (Arezki and Bruckner, 2011; Bellemare, 2015; Hendrix and Haggard, 2015) and can lead to the violent escalation of peaceful events (Gustafson, 2019). Because of the strong theoretical and empirical links between economic stress and groups' willingness to engage in more costly behaviors, I argue that economic stress captures movement cost tolerance, and price increases are an appropriate measure of economic stress. Price increases capture economic stress for individuals, but studies of economic conditions often consider changes in GDP to be indicative of the state of the economy as a whole. Therefore, I also consider GDP growth as a measure of economic stress. Taken together, the logic underlying the model's prediction and these possible operationalizations lead to my primary hypothesis.

Hypothesis 3. *There is a nonmonotonic relationship between economic stress and the likelihood of repression. The probability of repression will be lowest for intermediate values of economic stress and highest for very low and very high values of economic stress.*

Research Design

To test my hypotheses about the conditions under which governments use repression against opposition movements, I primarily use an original dataset of SDM events. The dataset contains information on SDM actions by movements in Sub-Saharan Africa from 2000-2014. Events include peaceful tactics such as nonviolent protests or the distribution of pamphlets with separatist goals to attacks against government troops or civilians. The sample is established from Cunningham's (2014) global sample of SDMs and includes groups that share a common identity and a belief in the right to self-rule. I have coded the data from secondary sources including newspapers, radio transcripts, news wires, and human rights reports from international publications and local African media. The sample of African SDMs represents an excellent group of movements to analyze because colonial legacies lead to the creation of several movements seeking self-rule. Additionally, these movements use tactics that span the menu of options available to groups—from near-total nonviolence to all-out civil conflict.

The outcome variable for my analysis of government repression originates from this original SDM event dataset. I measure repression using a binary indicator that takes on a value of 1 or not the government uses force against the movement during the event and 0 otherwise. This encompasses

both lethal and non-lethal physical repression by state security forces, including killings, beatings, and dispersive measures such as the use tear gas. The measure is not inclusive of preventative repression such as curfew enforcement or closing public spaces, and it does not include repression that occurs absent movement actions such as mass arrests or unprovoked government violence. Therefore, this repression variable encodes for a government's use of responsive physical repression against SDM events.

I use three separate variables to measure economic stress. First, I proxy for movement cost tolerance using a lagged monthly measure of food price changes. This variable comes from the International Labour Organization's (ILO) consumer price indices (CPI) for food and non-alcoholic beverages and measures the percentage change in the food price from the previous month by country. Second, I measure economic stress using the general CPI measure from the ILO. This variable—often used as an indicator of inflation—measures the percentage change in price from the previous month for a basket of goods that includes food and beverage, but also includes other commodities. I standardize each price change variable by dividing the difference between a state's monthly price and the state's long-term mean price by the long-term standard deviation of that state's price.⁵ I lag this measure by one month to ensure that SDM events are not affecting the food price. Third, I measure economic stress using a yearly measure of GDP growth from the World Bank. GDP growth is often used as a macroeconomic indicator for the overall state of the economy within a country. Therefore, it may not necessarily relate to individual economic stress in the same way as price changes. I lag this measure one year.

I control for characteristics that could affect both food price changes and government repression in my analysis. First, I control for the nature of the event using a binary indicator that measures whether or not it was a violent event. This allows me to assess the alternative explanation that violent events may lead to higher food prices and more instances of government repression. Second, I include a binary measure that indicates whether the movement was involved in a civil war at the 1,000 battle-death threshold. Civil wars are largely disruptive to states' economies and also lead governments to heighten security, which could lead to more instances of repression. Finally, I include two popular country-level indicators to capture between-state variability in economic development

⁵The long-term mean and standard deviation are calculated from months between 2000-2014 (Smith, 2014).

and regime type. I control for the level of development within a country-year by including a measure of states' logged GDP per capita from the World Bank. I also include a control for regime type using the polyarchy measure from the Varieties of Democracy (V-Dem) dataset (Coppedge *et al.* 2017).

Given that my outcome variable is binary, I estimate logistic regressions. I account for the non-independence of observations in my analysis in two ways. In my main analysis, I cluster standard errors at the movement level to ensure that I properly characterize the uncertainty around the estimates in my analysis. As a robustness check, I estimate a model with random intercepts by movement to capture the structure in the data. This multilevel model is inestimable using conventional maximum likelihood estimation methods because the estimated variance amongst movement-level intercepts is very close to zero. Therefore, I estimate this model using a Bayesian framework and report the results in the appendix. This estimation strategy does not meaningfully change the results presented in the main text of the paper.

Results

Table 3 displays the results of three logistic regressions of Violent Repression using a sample of events by Sub-Saharan African SDMs from 2000-2014.⁶ It shows the estimated β coefficients along with standard errors clustered by SDM. Model 1 measures economic stress using Food Price Increases, Model 2 uses general Consumer Price Increases, and Model 3 uses GDP Growth. I use casewise deletion to remove observations with missing covariates. Due to missing data in the economic indicators, I have slightly different samples in each of the models.

The results from the logistic regressions support the expectation from Hypothesis 3 of a non-monotonic relationship between Food Price Changes and the probability of Violent Repression. The coefficient on Food Price Change is negative and statistically significant at the .05 level, and the coefficient on this variable's squared term is positive and statistically significant. This suggests that as Food Price Changes increase, the probability of Violent Repression decreases for lower values of Food Price Changes and increases for higher values of Food Price Changes. This is also true when measuring economic stress using the more general Consumer Price Increases. Model 3, which uses GDP Growth as a proxy for economic stress, also supports this expectation. The coefficient on GDP

⁶All continuous variables are rescaled to have a mean of 0 and standard deviation of 1.

	Model 1	Model 2	Model 3
Food Price Increase $_{t-1}$	-0.40*		
	(0.05)		
Food Price Increase $^2_{t-1}$	0.11*		
	(0.01)		
Consumer Price Increase $_{t-1}$		-0.33*	
		(0.08)	
Consumer Price Increase $^2_{t-1}$		0.08*	
		(0.02)	
GDP Growth $_{t-1}$			-0.30 [†]
			(0.16)
GDP Growth $^2_{t-1}$			0.06*
			(0.03)
Violent Event	1.36*	1.26*	0.87*
	(0.58)	(0.32)	(0.34)
Civil War	-0.09	0.18	-0.04
	(0.47)	(0.27)	(0.37)
ln(GDP_{pc})	-0.19	-0.09	-0.34*
	(0.13)	(0.06)	(0.15)
Polyarchy	-0.27*	-0.32*	-0.38*
	(0.05)	(0.07)	(0.10)
Constant	-1.36*	-1.44*	-0.85*
	(0.55)	(0.26)	(0.17)
<i>N</i>	854	954	1,114

* $p < 0.05$, [†] $p < 0.1$

Table 3: Logistic Regressions of Repression

Growth is negative and statistically different from 0 at the .10 level. The coefficient on GDP Growth's squared term is positive and significant at the .05 level. Thus, the expected relationship is present, but with slightly more uncertainty around the estimates. To further explore these relationships, I plot the predicted probability of Violent Repression across the observed values of the three measures of economic stress in Figure 8.

I plot the predicted probability of Violent Repression across observed values of the three indicators of economic stress in Figure 8. Here, the x-axis shows the measure of the rescaled variables such that 0 indicates the empirical mean of the variable and each unit represents one standard deviation. Therefore, the value 2 on on Food Price Increases would indicate a value that is two standard deviations above the average value of Food Price Increases. Figure 8 shows the U-shaped relationship specified in Hypothesis 3 across the three measures of economic stress. For the lowest observed value of Food Price Change, the probability of Violent Repression is about 71%.

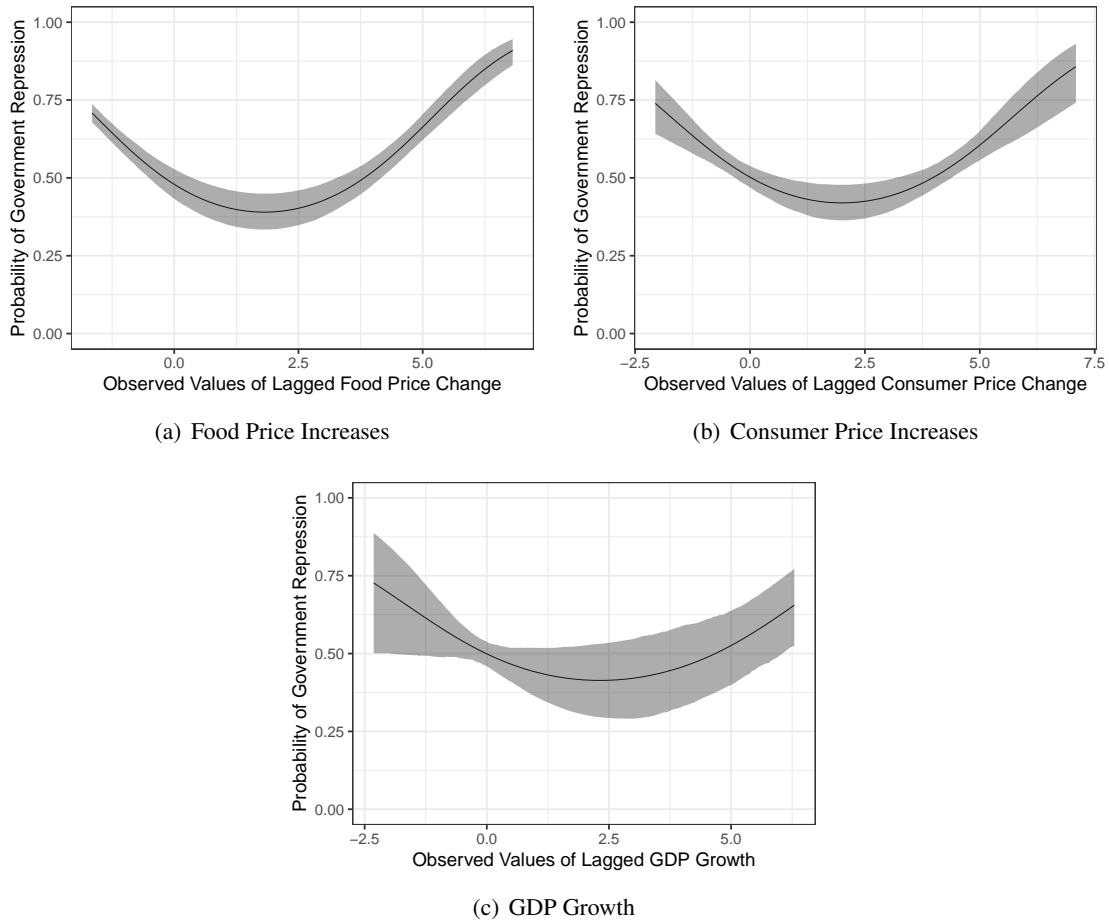


Figure 8: Predicted Probability of Repression Across Different Measures of Economic Stress

This likelihood decreases 32 percentage points to roughly 39% at its minimum and then rises to about 91% at the maximum value of Food Price Change. This relationship holds when using the more general Consumer Price Increases variable.

I find slightly increased uncertainty around the predicted probability of Violent Repression when using GDP Growth to measure economic stress. I argue that this increased uncertainty is a product of some concept slippage between GDP Growth and individual economic stress. While price increases directly impact individuals in a fairly predictable way, it is often unclear how GDP Growth affects citizens within a country. Given high amounts of income inequality, especially in Sub-Saharan African countries, growth in the overall economy is likely not distributed as evenly across individuals as price changes. Taken together, the results from the three models suggest that the likelihood that

governments use Violent Repression in response to SDM events is lowest for intermediate values of economic and highest at extreme values.

I find that two of my control variables are statistically significantly associated with Violent Repression. First, whether or not the event is violent on behalf of the SDM is strongly related to the likelihood of Violent Repression. The results suggest that governments are much more likely to initiate repression in response to violent events compared to nonviolent events. This conforms with the expectation that governments tend to match levels of antigovernment violence with state repression. Second, I find that regime type as measured by Polyarchy is strongly associated with the probability of Violent Repression. As the Polyarchy increases, indicating more democratic countries, the likelihood of Violent Repression decreases. This supports the commonly held notion that autocratic governments are more likely to use repression against political opponents.

Conclusion

In response to antigovernment behavior, governments must decide how they will react. One potential response for the state is to use physical repression to quell dissent and inflict costs on political opponents. However, a repressive response can lead movements to become more radical and pursue a violent strategy. I model the strategic interaction between a government and movement to derive a hypothesis about the conditions under which states will use violent repression. The model suggests that when movements can credibly threaten violence and fundamentally challenge the status quo power distribution, there is a nonmonotonic U-shaped relationship between movement cost tolerance and the likelihood of government repression. Because SDMs satisfy both the potential for violence and the threat to ruling party power, I test this hypothesis using a sample of violent and nonviolent SDM events. I measure movement cost tolerance using three variables that proxy for economic stress—food price changes, consumer price changes, and GDP growth. I find support for the hypothesis that government violence is least likely when economic stress is at an intermediate level and most likely when economic stress is very high or very low.

This finding represents a departure from the conventional wisdom that governments use repression to control antigovernment violence. In the formal model, governments have incentives to violently crack down on some movements that will never rationally use violence. This behavior

is driven by an incentive to inflict costs on political opponents rather than the commonly cited deterrent function of repression. The model also suggests that governments are able to use observable economic features to infer whether or not repression will lead movements to pursue violence.

Additionally, this study suggests two main potential areas for future contributions. First, the repression-dissent research agenda would greatly benefit from an increased focus on repressive factors and human rights violations that occur outside of events. Governments may also use strategies of preventative or preemptive repression to screen out challengers, and the conditions under which they do so may not be related to economic stress in the same way that responsive physical repression is. Second, future research should center on the mechanisms of movement radicalization. Many theories of grievance suggest, including the formal model in this study, assume that physical repression can increase the likelihood of future violence. The mechanisms that underpin radicalization—especially whether repression is changing current group members’ decision calculus or the composition of movements—warrant more analysis.

The formal model and quantitative analysis also have broad implications for policymakers. Actors that monitor human rights violations may be able to better identify situations in which governments are likely to use violent physical repression by focusing on economic stress. Additionally, this study underscores the paramount importance of economic stress factors in explaining the patterns of antigovernment violence and state repression. By understanding how economic factors affect state and challenger behavior, policymakers can focus on actions that address dangerous conditions and improve the prospects conflict prevention.

CHAPTER 4: ECONOMIC STRESS & PUBLIC OPINION OVER SELF-DETERMINATION MOVEMENT BEHAVIOR

Under what conditions do individuals signal support for political violence in states experiencing self-determination challenges? Public opinion over the use of antigovernment actions is an important link between macro-level theories and micro-level observations, and it is important for movements that challenge the state. I argue that individuals will be more likely to signal support for political violence when they experience economic stress and observe government repression. However, the degree to which individuals perceive antigovernment movements as blameworthy moderates the effects of these sources of grievance. I test my expectations using survey data from the Afrobarometer, an original dataset of self-determination movement events, and general opposition events in Africa. The analysis supports the expectation that individual grievances increase public support for antigovernment violence, but only when opposition groups use violent tactics infrequently.

Introduction

Self-determination movements (SDMs) present an existential challenge to their host governments' grips on power. Because of this, states frequently rebuff their demands, choosing a strategy of coercion over conciliation. In response, SDMs may use direct political action in the form of peaceful protests, violent riots, or coordinated political violence. SDMs and their host governments do not engage in these contentious disputes in isolation, however. Domestic public audiences observe these interactions and form opinions over their host governments and self-determination challengers. Both governments and SDMs seek the support of the public, but antigovernment groups face an uphill battle in securing even tacit support. Under what conditions do individuals support political violence in periods of SDM-government disputes?

Patterns of contention and coercion by movements and states frequently occur when groups make self-determination demands. A self-determination movement is a group of individuals with a common identity and a belief in the right to self-rule (Cunningham, 2014). Because these groups seek to establish their own rule, public support for their cause is crucial. Therefore, I focus on citizens' attitudes toward antigovernment violence in states that are experiencing self-determination challenges. Given that the previous two chapters are macro-level studies of individual-level theories, this analysis of individual public opinion helps to support the theorized relationships between economic stress and patterns of violence in self-determination disputes.

Following studies of relative deprivation, inequalities, and grievance formation, I argue that individuals experiencing acute grievances are most likely to support antigovernment violence. Specifically, citizens facing economic stress or observing government repression will have an increased likelihood of signalling support for violent opposition behavior. However, these expected relationships depend upon movement actions. Individuals will only support antigovernment violence if they view it as justified. Therefore, opposition group behavior—measured by the frequency with which movements use violent relative to nonviolent tactics—moderates the relationship between grievances and public support for antigovernment violence. Individual grievances are associated with higher support for antigovernment violence, but only when movements infrequently use violent tactics. As opposition groups use violence more frequently relative to nonviolence, the effect of grievance on public support decreases.

In the remainder of this study, I first consider the extant literature on on antigovernment movements and public support for political violence. Next, I introduce a theory of the link between grievances induced by economic stress and government repression and public support for movement violence. I empirically test my hypotheses using survey data from the Afrobarometer and an original dataset of SDM events. Finally, I close my analysis with a discussion of my findings, suggestions for future research, and policy implications.

Antigovernment Behavior & Public Opinion

When citizens are unable to affect change through political institutions, political direct action becomes necessary for individuals to express their grievances. Disaffected citizens that are unable to effectively access political institutions of change may turn to tactics such as peaceful demonstrations, violent protests, or organized political violence (McAdam, Tarrow and Tilly, 2003; Tarrow, 1994). Groups may resort to these tactics when their demands are not met by their states, and governments may choose coercive rather than conciliatory strategies when common barriers to bargaining exist (Walter, 2009).

Historically, macro-level studies of civil conflict have suggested that participation is motivated by deep grievances (Sambanis, 2001) and economic incentives (Collier and Hoeffler, 2004). Additionally, conflict is more likely to break out when environmental features make organizing and evading government forces more feasible (Collier, Hoeffler and Rohner, 2009; Fearon and Laitin, 2003). Scholars beginning with Gurr (1970) have posited that individual relative deprivation causes citizens to engage in rebellion, but empirical evidence largely refutes their claims (Brush, 1996; Muller, 1972; Snyder and Tilly, 1972). However, more recent research shows that greater group-level differences, or horizontal inequalities, are related to a higher probability of civil conflict (Cederman, Gleditsch and Buhaug, 2013; Cederman, Weidmann and Gleditsch, 2011; Østby, 2008; Stewart, 2002).

Micro-level research adds to the literature on civil conflict by more directly testing the proposed relationships. Specifically, survey-based research has become central to exploring the mechanisms in conflict studies that are difficult to manipulate with researcher intervention (Balcells and Justino, 2014). To this end, scholars have examined individual support for antigovernment violence for two main reasons. First, empirical evidence suggests that civil conflict is more likely in areas where the

population is more accepting of violence (Hirose, Imai and Lyall, 2017; Linke, Schutte and Buhaug, 2015). This suggests that some of the same mechanisms that drive participation in antigovernment violence also help to determine public opinion over political violence. Therefore, analysis of support for antigovernment violence can lend micro-level evidence to macro-level civil conflict theories.

Second, support from citizens is hugely important for allowing movements to survive and succeed in their challenges against the state (McCormick and Giordano, 2007). Rebel groups often rely on populations for membership (Hegghammer, 2013; Weinstein, 2005) or tacit support, and they often seek to effectively rule the same citizens following conflict. For these reasons, the analysis of public support for antigovernment violence makes a strong contribution to the study of civil conflict broadly.

Previous research has put forth numerous determinants of public opinion over political violence, but the empirical record of a relationship between grievances and support for political violence is inconsistent. While macro-level studies routinely fail to find support for the individual relative deprivation hypothesis, some scholars find that vertical inequalities increase the acceptance of violence. (Hillesund, 2015; Koos, 2018; Rustad, 2016). In accordance with the horizontal grievances literature, survey-based research suggests that populations will express increased support for political violence due to group differences in living conditions (Rustad, 2016), distribution of natural resource revenues (Koos, 2018), and ethnic discrimination (Detges, 2017; Miodownik and Nir, 2016). Dyrstad and Hillesund (2020) show that citizen support for violence increases along with perceived grievances and decreases with perceived political efficacy. Importantly, public opinion over political violence is driven by perceptions of individual or group standing rather than objective conditions (Langer and Smedts, 2013; Langer and Ukiwo, 2008). Other studies fail to find a link between grievances and support for militant violence (Blair *et al.* 2013, Fair *et al.* 2018, Lyall, Blair, & Imai 2013, Oyefusi 2008).

The mixed results on the association between grievance and support for antigovernment violence suggests the existence of a conditional relationship. I argue that while individual grievances are important predictors of support for antigovernment violence, their effects are moderated by governments' and movements' behaviors. In particular, citizens may place blame on actors that they perceive responsible for grievances, leading them to support antigovernment violence only when they are aggrieved and perceive opposition movements as justified in their actions.

Determinants of Support for Antigovernment Violence

Individuals vary in the extent to which they approve of opposition actions. Some people may be opposed to all antigovernment action while others might be in favor of any behavior that challenges the status quo. However, it is unlikely that people have solely unchanging likelihoods to support antigovernment actions. Rather, individuals' approval or disapproval of contentious behavior is made up of a fixed propensity and a dynamic component that changes along with their situations. Some citizens may be innately more accepting of antigovernment violence due to idiosyncratic personality traits. Additionally, individuals' relatively fixed demographic characteristics might help explain why some people support opposition violence and others do not. Individual personalities and demographic characteristics will determine a baseline level of violence acceptance, but they are fundamentally context-dependent. For example, a fixed preference for authoritarianism can lead citizens to support antigovernment violence in democracies and oppose it in nondemocracies. The most important and generalizable determinants of support for antigovernment violence are those factors that vary across individuals and time.

Dynamic conditions that create grievances contribute greatly to the support or lack thereof for antigovernment violence. The first chapter of this dissertation suggests that SDMs will be more likely to use violence as the status quo becomes worse for the members that comprise the movement. Similarly, individuals will be more likely to approve of violent opposition action when they have a greater desire to see a change in the status quo. Thus, approval will be driven by a preference for change. Individuals will be increasingly likely to prefer an alteration to the status quo as their political and economic grievances worsen. Therefore, as individuals' circumstances worsen (improve), they are more likely to approve (disapprove) of antigovernment violence. To determine the degree to which citizens support or oppose opposition behavior, we must explore the factors that affect individuals' evaluations of their status quo positions along with their perceptions of who deserves blame for their grievances.

Blame Attribution in Civil Conflict

The idea that citizens attribute blame and responsibility to governments for events is a core assumption of politics, especially in democratic societies (Malhotra and Kuo, 2008). Political scientists have

drawn from a robust literature in social psychology that shows that individuals use attributions of blame or responsibility to connect actors to events (Heider 1958, Schlenker *et al.* 1994, Shaver 2012, Weiner 2008). Classic theories of political participation assume that individuals attribute responsibility for positive and negative events to leaders, allowing citizens to reward or punish officials based upon those judgments (Key *et al.*, 1966; Kramer, 1971). Therefore, understanding how individuals allocate responsibility or blame is crucially important for scholars and for leaders who wish to excuse themselves from responsibility (McGraw, 1990). Studies have found strong support for the expectation that individuals hold incumbent leaders responsible for the state of the economy (Hibbing and Alford, 1981; Peffley, 1984; Rudolph, 2003), but partisan cues may bias citizens' judgments (Malhotra and Kuo, 2008; Tilley and Hobolt, 2011).

Scholars of civil conflict have also considered how citizens allocate responsibility for events to governments and antigovernment groups. Condra and Shapiro (2012) show that both insurgents and Coalition forces paid costs following attacks that resulted in collateral damage against noncombatants. Here, the mechanism driving this result is based upon civilian cooperation—after noncombatant casualties, citizens are less likely to cooperate with the perpetrating belligerent. This finding is consistent with a broader literature that suggests that one-sided violence by belligerents reduces civilian cooperation, indicating a shift in blame for grievances (Carr, 2003; Kalyvas, 2006; Valentino, Huth and Balch-Lindsay, 2004).

Building upon the work that explores blame attribution in civil conflict and politics more broadly, I argue that individuals attribute blame for their grievances to both governments and antigovernment movements. Citizens will generally disapprove of antigovernment violence because they recognize that movements have alternative tactics at their disposal. Knowing that groups can press demands using institutional mechanisms and nonviolent strategies, individuals will be reticent to support violent tactics unless they view violence as justified. As a precondition for public support for violence, citizens must believe that movements are engaging in political violence as a last resort. Whether or not citizens perceive attacks as justified strongly influences the likelihood of support for violence by governments or antigovernment movements (Benmelech, Berrebi and Klor, 2010). If individuals believe that challenges can be mounted through political institutions or peaceful tactics, they will regard antigovernment violence as unnecessary or unjust.

As a result, citizens may attribute blame to the opposition movement for some of their grievances, such as economic downturn. However, if individuals believe that the movement has exhausted its alternative tactics to no avail, they will be more likely to perceive the violence as justified and may support its use. Individuals will view an antigovernment movement more positively as they observe more examples of nonviolent activities because it demonstrates a commitment to securing change rather than a commitment to violence. Thus, when movements use violent tactics sparingly relative to their use of nonviolent actions, citizens will be more likely to view the acts of violence as justified. Alternatively, if antigovernment groups use only violent tactics, individuals will be apt to blame them for negative circumstances that create grievances. Given that blame attribution shapes how individual grievances translate into support for movements, I now consider specific factors that lead citizens to be aggrieved.

Economic Stress, Government Repression, and SDM Violence

I focus on two different types of grievances that affect whether citizens approve or disapprove of antigovernment acts, and I argue that each of the factors is conditioned by responsibility attribution. First, individuals' characteristics that vary as a function of the economic environment impact citizens' support for contentious action. Economic stress is an especially salient grievance during periods of civil conflict because of the economic disruptions that occur as a result of fighting. For example, large-scale civil conflict causes significant macroeconomic downturn, especially in less-developed countries (Blomberg, Hess and Orphanides, 2004). Even violence that does not affect entire states or regions, such as terrorist attacks, can have a significant negative effect on an individual's economic standing (Gaibulloev and Sandler, 2009). Additionally, civil war leads to long-term public health concerns for individuals, exacerbating economic grievances (Collier, 2011; Ghobarah, Huth and Russett, 2003).

Factors such as employment status, wealth, and food security strongly influence whether or not individuals approve of antigovernment behavior. When citizens are facing a favorable economic situation, they will be unlikely to signal their support for political violence. During periods of economic prosperity, individuals will be satisfied with the status quo and will be unlikely to desire to see change. Conversely, during periods of economic downturn, citizens will be more likely to support

political violence because they will prefer altering their current situation. Therefore, as economic stress factors worsen, individuals will be increasingly likely to support antigovernment violence.

The first two chapters of this dissertation present arguments that individuals involved in movements are affected by economic stress, but this is true for all individuals. Indeed, a representative from the Ogoni people in Nigeria claims that price increases “compounded the difficulties of the masses and pointed out that it is unfair for the administration to have ignored genuine and overwhelmingly outcry of the people on the matter” (The Daily Champion, 2005). The mechanism of price increases leading to heightened grievances is not only a phenomenon that occurs in impoverished, underdeveloped states. In South Africa, for example, Afrikaners often cite high prices as evidence that they have a right to self-rule. One citizen blames the government for poor economic performance that affects all individuals, stating “[t]he whole of South Africa is struggling. The prices of food, petrol, kerosene are too high. Can’t they (government officials) bring them down a little?” (Jacobson, 2008). Thus, anecdotal evidence from individuals in states facing self-determination challenges suggests that economic downturn can lead to widespread grievances.

The proposed relationship between economic grievances and support for opposition violence is similar to the expectation about the likelihood of SDM violence in the first chapter of this dissertation. Additionally, the association between economic stress factors and realized antigovernment activity is well-established. For example, economic downturn is associated with higher rates of peaceful protests (Arezki and Bruckner, 2011), violent protests (Gustafson, 2019) and spontaneous riots (Smith, 2014). However, questions about the mechanism underlying this relationship persist. Thus, the analysis of public opinion over political violence can serve to support proposed grievance mechanisms.

While the expected positive relationship between economic stress and public support for antigovernment violence also follows from traditional grievance-based explanations, I argue that the manner in which individuals attribute blame for their grievances moderates this relationship. Specifically, the association between economic stress factors and support for antigovernment violence is conditional on observed SDM behavior. When SDMs behave violently, more individuals are likely to have experienced the direct and indirect costs of violence. Additionally, they may blame the act of antigovernment violence for any negative conditions. Given that domestic unrest can lead to economic downturn, citizens not engaged in challenging their home government may disapprove of political violence when they experience economic stress. This logic leads to my first two hypotheses.

Hypothesis 4. *When the proportion of violent events used by SDMs is relatively low, the likelihood of signalling support for political violence will increase as economic stress factors worsen within a country.*

Hypothesis 5. *There is a negative interaction between economic stress factors and the proportion of violent events perpetrated by SDMs within a country on the likelihood of signalling support for political violence. As the proportion of violent events used by SDMs increases, the effect of economic stress factors on the likelihood of expressing support for violence will decrease.*

Second, government behavior in the form of repression helps to determine public support for antigovernment violence. Citizens that observe or experience violent repression will view the incumbent government less favorably. For victims of state repression, the grievance formation mechanism is clear—through killings, disappearances, beatings, or threats, the government inflicts massive costs on citizens. Members of victims’ social networks, including family and colleagues, also bear the costs of repression. Government violence versus domestic opponents can also create a culture of fear in which other citizens choose not to seek concessions. Thus, violent government repression increases grievances for citizens through direct and indirect mechanisms, leading individuals to be more likely to support change in the status quo.

However, citizens may perceive the government’s use of violence against SDMs as justified if groups are also behaving violently. As in the case above, when SDMs frequently use antigovernment violence, individuals are more likely to attribute responsibility for grievances to the movement. In these cases, governments can use repression as a tactic for preventing future conflict. Governments may justify the use of violence against SDMs as mitigating costs to civilians, or they can use this explanation as political cover for weakening domestic opponents. Regardless of whether the motivation to protect individuals is sincere or strategic, citizens will be more likely to see government repression as a legitimate tactic in these cases. Therefore, government repression will lead to grievance formation and an increase in support for antigovernment violence, but only when SDMs receive little blame for increased government violence. This logic leads to my second set of hypotheses.

Hypothesis 6. *When the proportion of violent events used by SDMs is relatively low, the likelihood of signalling support for political violence will increase when governments use violent repression.*

Hypothesis 7. *There is a negative interaction between a government's use of repression and the proportion of violent events perpetrated by SDMs within a country on the likelihood of signalling support for political violence. As the proportion of violent events used by SDMs increases, the effect of government repression on the likelihood of expressing support for violence will decrease.*

Research Design

To test my hypotheses on public support for antigovernment violence, I use a sample of African countries facing self-determination challenges from 2002-2013. I have chosen to focus on states facing SDMs because it provides me with a group of countries facing movements that can credibly challenge the government using violent or nonviolent tactics. Additionally, SDMs are likely to be salient movements, and their behavior will be important for survey respondents. I draw data from a number of sources. I use individual-level survey responses from rounds 2, 3, and 5 of the Afrobarometer (Afrobarometer Data, 2014). These survey rounds took place in 2002-2003, 2005-2006, and 2011-2013. To measure antigovernment violence and government repression, I draw data from two sources. First, I use an original dataset of SDM events by African movements, including both violent and nonviolent events perpetrated by SDMs. Second, I draw data from the Social Conflict Analysis Dataset (Salehyan *et al.* 2012), which codes violent and nonviolent cases of antigovernment actions by any actors within a state. By using multiples sources of data on antigovernment violence and repression, I am able characterize the conditionality relationship grievances, violence, and public support for violent tactics for both SDMs and opposition groups more generally.

My outcome variable, support for antigovernment violence, is taken from the Afrobarometer survey.⁷ The variable is coded based on respondents' answers to the question:

Which of the following statements is closest to your view? Choose Statement A or Statement B.

A: *The use of violence is never justified in [Country's] politics.*

B: *In this country, it is sometimes necessary to use violence in support of a just cause.*

⁷The question used to generate this variable is available in Afrobarometer waves 2, 3, and 5. The survey data were collected in 2002-2003, 2005-2006, and 2011-2013, respectively.

The respondents responses were coded into five categories: Agree very strongly with A, Agree with A, Agree with neither, Agree with B, Agree very strongly with B. Therefore, the outcome variable ranges from 1-5, with higher values indicating greater support for antigovernment violence.

Consistent with the previous two chapters in this dissertation, I measure economic stress using a variable that captures food insecurity. In this analysis, I measure food insecurity using respondents' answers to the question:

Over the past year, how often, if ever, have you or anyone in your family gone without enough food to eat?

The survey responses were coded into five categories: Never, Just once or twice, Several times, Many times, and Always. Thus, the food insecurity variable ranges from 0-4, with higher values indicating greater food insecurity.

I use observational data on repression and antigovernment violence from two sources. To measure government repression, I calculate the proportion of events which experienced repression in the previous six months from when a respondent's data was collected. Similarly, I measure antigovernment violence by calculating the proportion of opposition events that are violent within the six-month window before a respondent's survey. I calculate each of these proportions using both my original dataset of SDM events and SCAD.⁸

I include several control variables from different levels in my analyses. At the country-level, I control for three factors. I include the total number of opposition events from the six-month window before a respondent was surveyed to account for different levels of antigovernment action. Additionally, I control for the level of development in a given country-year using logged GDP per capita from the World Bank and the regime type of a state as measured by the polyarchy variable from the Varieties of Democracy (VDem) dataset (Coppedge *et al.* 2017). These allow me to control for salient state-level factors that might influence citizens' preferences over antigovernment violence and grievance levels. Next, I include two demographic characteristics in my statistical models. First, I control for gender using a binary measure that takes a value of 1 for female respondents.⁹ Second, I

⁸For the SCAD events, I code all observations that are classified as organized violent riot, spontaneous violent riot, antigovernment violence, and extra-government violence as violent events.

⁹Afrobarometer surveys classify individuals into only male and female gender categories.

control for individuals' ages using their survey responses. Finally, I include a categorical variable that indicates Afrobarometer respondents' survey wave, and I use Wave 2 as the excluded category. These indicators capture important differences caused by the time period in which the survey was administered.

Results

Analysis of SDM Events

	Model 1	Model 2	Model 3	Model 4
Food Insecurity	0.04* (0.01)		0.04* (0.01)	
Repression		-0.06 (0.06)		-0.00 (0.06)
Movement Violence	0.40* (0.05)	0.61* (0.08)	0.39* (0.05)	0.55* (0.07)
Food Insecurity × Movement Viol.	-0.01 (0.02)		-0.01 (0.02)	
Repression × Movement Viol.		-0.35* (0.11)		-0.33* (0.11)
Number of Events	-0.02* (0.01)	-0.01* (0.01)	-0.03* (0.01)	-0.02* (0.01)
ln(GDP_{pc})	0.27* (0.06)	0.34* (0.07)	0.18* (0.05)	0.24* (0.06)
Polyarchy	-1.14* (0.42)	-1.86* (0.54)	-0.63 [†] (0.34)	-1.08* (0.44)
Female	-0.06* (0.01)	-0.06* (0.01)	-0.06* (0.01)	-0.06* (0.01)
Age	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)
Wave 3	-0.02 (0.03)	-0.01 (0.03)	0.01 (0.03)	0.02 (0.03)
Wave 5	-0.26* (0.07)	-0.30* (0.08)	-0.16* (0.06)	-0.20* (0.07)
Intercept	0.87* (0.33)	0.63 [†] (0.36)	1.46* (0.27)	1.34* (0.32)
<i>N</i>	34, 781	34, 846	34, 781	34, 846
Country Fixed Effects	✓	✓		
Country Random Effects			✓	✓

* $p < 0.05$, [†] $p < 0.1$

Table 4: OLS Regressions of Public Support for Antigovernment Violence (SDM Sample)

Table 4 shows the results of my analysis of support for antigovernment violence using the original dataset of SDM events to capture patterns of movement and government violence. Models 1 and 3 contain food insecurity as the grievance variable, while Models 2 and 4 include the government repression variable instead. Given the panel nature of the dataset, I account for the structure of the data in two different ways. First, Models 1 and 2 include country fixed effects to capture any unexplained variation in states. Alternatively, I estimate Models 3 and 4 with random intercepts by country to account for different baseline levels of public support across country. The results are relatively consistent regardless of the approach to accounting for data structure in the model.¹⁰

Leading up to Hypothesis 4, I argued that worsening economic stress factors should be associated with a higher level of public support for antigovernment violence when the level of violence used by a movement is low. I find support for this hypothesis, as demonstrated by the positive and significant coefficients on food insecurity in Models 1 and 3 in Table 4. These values show that when the number of violent events perpetrated by a movement is low relative to their nonviolent events, there is slight increase in public support for violence. While the effect is statistically different from 0, it should be noted that the magnitude of the effect is relatively small. A one unit increase in the level of reported food insecurity leads to an average increase of only .04 on the scale measuring public support for violence. Therefore, the model suggests that shifting from the lowest to highest level of food insecurity would lead to a change of about .16 in public support for violence. This is substantively not enough to shift from one category to another. However, given potential social desirability concerns, any increase in the propensity to signal support for antigovernment violence is meaningful.

Hypothesis 5 suggested that there would be a negative interaction between economic stress factors and movement violence. In the left panel of Figure 9, I plot the marginal effect of food insecurity across the observed values of movement violence. The plot reveals two key pieces of information relating to the relationship between food insecurity, movement violence, and support for antigovernment violence. First, the uncertainty around the point estimate for the marginal effect is large. While the model suggests that the effect of food insecurity on support for antigovernment violence is slightly decreasing across values of movement violence, this interaction is not statistically

¹⁰I use the results from the fixed effects models to generate the marginal effects plots.

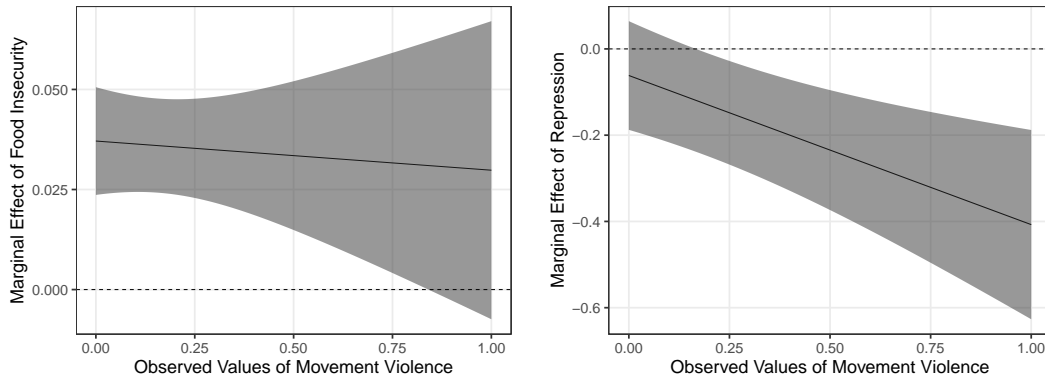


Figure 9: Marginal Effects of Food Insecurity (Left) and Repression (Right) on Public Support for Antigovernment Violence (SDM Sample)

significant at the .05 level. Because of this uncertainty, I am unable to fully support Hypothesis 5. Second, this plot shows that the relationship between food insecurity and support for antigovernment violence is consistently positive in nearly all cases. The effect of food insecurity is positive and statistically different from 0 for all values of movement violence except for the most violent groups. Thus, the model suggests that food insecurity as a grievance is strongly related to support for antigovernment violence when movements do not exclusively use violent tactics.

The expectations in Hypotheses 6 and 7, relating to government repression, are similar to those concerning food insecurity. Hypothesis 6 posited a positive relationship between government repression and public support for violence when movements' use of violence was low. I do not find support for Hypothesis 6, as the coefficient on repression in Models 2 and 4 in Table 4 are negative but not significant at the .05 level. To further investigate the relationship, I plot the marginal effect of repression across observed values of movement violence in the right panel of Figure 9. As the plot shows, there is no effect of repression for groups that used violence very infrequently before a respondent was surveyed.

However, I do find support for Hypothesis 7, which suggested that there is a negative interaction between government repression and movement violence. The interaction term is negative and significant at the .05 level in both Models 2 and 4 in Table 4, and the effect is shown in the right panel of Figure 9. Here, the effect is negative but statistically indistinguishable from 0 for low values of movement violence, and it decreases before becoming statistically significant for higher values of movement violence. The model suggests that when movements are engaging in relatively infrequent

violence, there is no effect of repression on support for antigovernment violence. However, when movements are using mostly violent tactics, government repression is associated with lower support for antigovernment violence. This relationship is in line with the argument that when movements are engaged in high levels of violence, individuals are more likely to see government repression as justified to quell antagonistic actors.

Analysis of All Opposition Events

	Model 5	Model 6	Model 7	Model 8
Food Insecurity	0.04*		0.04*	
	(0.01)		(0.01)	
Repression		0.11 [†]		0.11 [†]
		(0.06)		(0.06)
Antigov. Viol.	0.28*	0.32*	0.27*	0.30*
	(0.06)	(0.05)	(0.06)	(0.05)
Food Insecurity × Antigov. Viol.	-0.03		-0.03	
	(0.02)		(0.02)	
Repression × Antigov. Viol.		-1.01*		-1.04*
		(0.15)		(0.15)
Number of Events	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
ln(GDP_{pc})	0.03	-0.04	0.04	-0.02
	(0.05)	(0.07)	(0.05)	(0.06)
Polyarchy	-1.43*	-1.02*	-1.03*	-0.60
	(0.43)	(0.46)	(0.39)	(0.40)
Female	-0.06*	-0.06*	-0.06*	-0.06*
	(0.01)	(0.01)	(0.01)	(0.01)
Age	-0.01*	-0.00*	-0.01*	-0.00*
	(0.00)	(0.00)	(0.00)	(0.00)
Wave 3	0.05 [†]	0.08*	0.04	0.07*
	(0.03)	(0.04)	(0.03)	(0.03)
Wave 5	-0.04	0.07	-0.05	0.05
	(0.06)	(0.07)	(0.06)	(0.06)
Intercept	2.08*	2.51*	2.51*	2.74*
	(0.31)	(0.36)	(0.32)	(0.33)
<i>N</i>	34,781	34,846	34,781	34,846
Country Fixed Effects	✓	✓		
Country Random Effects			✓	✓

* $p < 0.05$, [†] $p < 0.1$

Table 5: OLS Regressions of Public Support for Antigovernment Violence (SCAD Sample)

In addition to analyzing my original dataset of SDM events, I explore the relationships between grievances, antigovernment violence, and public support for violent tactics using SCAD in Africa. This allows me to include all opposition events in my analysis rather than considering only SDM events. To assure that my analysis speaks to states experiencing self-determination challenges, I use the same sample of states and years as the analysis using SDM events. Table 5 shows the results of four linear regressions of public support for antigovernment violence. As in the previous section, Models 5 and 7 use food insecurity to measure economic grievances, while Models 6 and 8 include government repression instead. Models 5 and 6 account for the hierarchical nature of the data using country fixed effects, and Models 7 and 8 do so using varying intercepts by country. The results are consistent regardless of the multilevel estimation strategy.

The results of the analysis using observations SCAD largely in line with those reported in the previous section. The relationship between economic stress as measured by food insecurity and public support for antigovernment violence is positive and significant for all but the highest levels of movement violence. Additionally, the estimate for the effect of the interaction is noticeably more negative, but the interaction is not significant at the .05 level. This supports the logic of violence justification and economic stress laid out leading up to Hypothesis 4 and provides suggestive support for Hypothesis 5. Unlike the results in the previous section, the models support a positive effect for repression at low levels of antigovernment violence and a negative interaction between government repression and movement violence. The effect here is significant at the .10 level. These results support the expectations in Hypotheses 6 and 7.

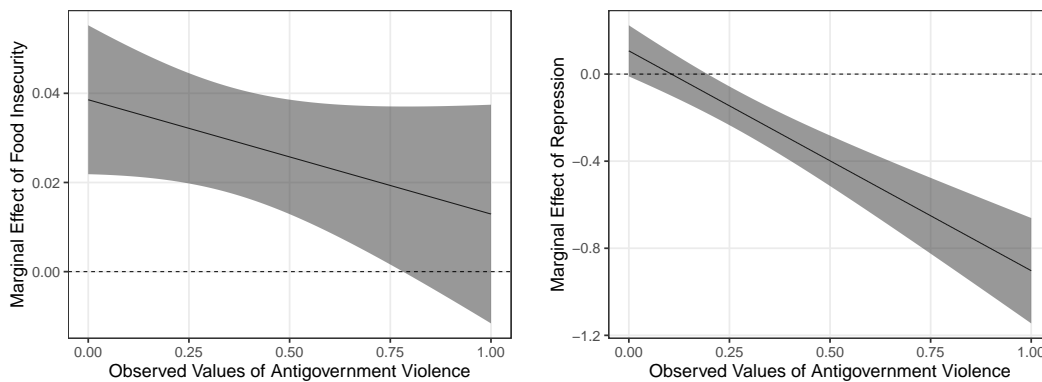


Figure 10: Marginal Effects of Food Insecurity (Left) and Repression (Right) on Public Support for Antigovernment Violence (SCAD Sample)

I turn to the theory that underlies my expectations to reconcile the differences between the two analyses. Leading up to my hypotheses, I argued that the degree to which grievances will increase public support for antigovernment violence depended upon movements' behavior. If citizens viewed movement violence as justified or as a last resort, then grievances would manifest in signalled support for opposition violence. Otherwise, individuals might attribute blame for the negative aspects of their status quos—in terms of economic stress or observed government repression—to antigovernment actors. I find suggestive support for a negative interaction between food insecurity and opposition violence when categorizing antigovernment violence using SCAD, while I fail to find this relationship when coding for SDM violence. I argue that this discrepancy can be explained by the difference between SDM violence and opposition violence more generally. For example, SDM violence may be seen as more justified than all antigovernment violence, and it is possible that more individuals are directly or indirectly affected by the greater sample of violent events included in the SCAD coding.

In addition to my findings on the relationships between grievance, opposition behavior, and public support for violence, I find statistically significant relationships between several of my control variables and public opinion over violence. First, I find negative effects for the demographic characteristics of age and being female. In my sample, women and older citizens are less likely to support antigovernment violence. Next, I find that respondents from Afrobarometer Wave 3 are more supportive of antigovernment violence on average than those from Wave 2. Finally, I find consistent negative associations between development as measured by GDP per capita and public support for violence. Conventional wisdom would suggest that individuals living in more developed societies will be less supportive of violence because other mechanisms for settling grievances exist, and this relationship is supported by the analysis.

Conclusion

The conditions under which public audiences signal their support for antigovernment violence is crucially important for understanding civil conflict dynamics because the mechanisms that drive participation in violent movements are likely similar to those that drive public support for violent tactics. Additionally, opposition groups that use antigovernment violence depend upon the public to survive and effectively challenge the state. Individuals are likely to support antigovernment

violence when they are aggrieved. Common grievances stem from economic stress, such as food insecurity, and the experience or observation of government repression. Thus, as economic stress factors worsen and the use of government repression increases, we should expect public support for opposition violence to increase as well. This relationship, however, is moderated by the degree to which movements see the use of violence as justified. If opposition groups frequently use violent tactics relative to nonviolent ones, individuals may blame economic grievances on nonstate actors and see government repression as deserved. An empirical analysis of public opinion over antigovernment violence in African countries facing self-determination challenges largely supports these claims. The analysis suggests that grievances increase the degree to which individuals support violent tactics but only when movements do not exclusively use violence.

The theory of individual blame attribution in civil conflict and the findings of this study build upon the extensive literature on grievance-based explanations for violence. Macro-level studies of civil conflict have often failed to find support for the hypothesis that individual grievances lead to greater levels of conflict, and micro-level survey studies contain mixed findings on the role of grievances in determining public support for antigovernment violence. I argue that the effect of grievances on public support for antigovernment violence is conditional on observed movement behavior, as individuals balance a desire for change in the status quo with notions of who is to blame and how justifiable violence is. The conditional relationship between individual grievances and salient group behavior explains patterns of support for violence, and it may also help scholars understand the conditions under which grievances cause violence more generally. Thus, this study contributes to the research agenda on the relationship between personal grievances and civil conflict and the survey literature that focuses specifically on how individuals signal their support for opposition violence.

Additionally, the analysis of public opinion over antigovernment violence lends micro-level support for the theoretical foundations of this dissertation. The broader theory of this dissertation emphasizes the role of individual grievances—economic stress and government repression—in driving the behavior of SDMs and governments. However, the first two chapters focus on macro-level observations of movement and government behavior. The findings of this chapter, which explicitly analyzes individual-level preferences, supports the theory that economic stress and government repression leads to a great acceptance of violence. Given that we know that similar mechanisms drive

public opinion over antigovernment violence and nonstate actor behavior, I interpret the findings in this study as supportive of the overall theory in this dissertation.

This study contains two key insights for policymakers beyond its academic contributions. First, given the finding that food insecurity leads to greater support for opposition violence in nearly all cases, this study underscores the importance of combatting economic stress. Greater food insecurity is associated with higher levels of violence acceptance for all but the most violent movements. Therefore, with the knowledge that violence is more likely in areas where it receives support, policymakers should focus on alleviating food insecurity as a form of conflict prevention. Second, this study highlights the central role of government responses in explaining public support for violence. The analysis suggests that when movements are relatively peaceful and repression is widespread, public support for antigovernment violence will increase. This finding is in line with the theory that government repression can backfire on abusive governments. Thus, policymakers may have incentives to find nonviolent, conciliatory policies rather than violent repression that may only worsen their strategic situations.

CHAPTER 5: CONCLUSION

How does economic stress change actors' strategies in self-determination challenges? The findings in this dissertation suggest that economic stress impacts movement decisions, government responses, and public opinion over the use of antigovernment violence. Taken together, the results of this dissertation suggest that SDMs and governments facing challengers are subject to short-term influences rather than being characterized by their long-term goals. While SDMs are defined by their aspirations for self-rule, their behavior is partially determined by fluctuations in the states of the economy. Additionally, even given the existential threat presented by self-determination challenges, governments' actions are also subject to short-term changes in economic factors. Finally, with SDMs and governments seeking support from citizens, my findings suggest that public opinion is affected by economic stress as well.

Movements can choose from a wide array of tactics to attempt to redress their grievances. In Chapter 2 of this dissertation, I argue that individual members of movements are more likely to use violent tactics as the value of the status quo decreases. When individuals are worse off, they are more desperate to change their current situation. As a result, their willingness to use violence increases as immediate grievances worsen. Two of the most salient grievance-formation mechanisms result from economic stress and government repression. My statistical analysis of Sub-Saharan African SDM events suggests that as food prices increase while the unemployment rate within a state is high, movements are more likely to use violent tactics. Additionally, the models suggest that lethal repression increases the likelihood of violence, but non-lethal repression does not. Thus, conflict environmental factors and government behavior strongly influences movements' tactical choices.

Given that violent repression affects movements' strategic decisions over the use of violence, governments face a difficult choice about initiating violent crackdowns. Chapter 3 introduces a formal model of the interaction between a SDM and government to clarify the conditions under which governments will use repression. The model suggests that when movements threaten the status quo power hierarchy—as SDMs inherently do—the relationship between movement cost-

tolerance and the likelihood of repression is U-shaped. Thus, governments are more likely to use repression when movements' cost-tolerance is very high or very low and are less likely to use repression when cost-tolerance is at an intermediate value. I argue that measures of economic stress capture movement cost-tolerance. An empirical analysis supports the expectation of a nonmonotonic relationship between various measures of economic stress and the likelihood of violent repression. These results support my argument that governments can use observed economic indicators to inform their decisions about the strategic use of responsive repression.

While SDMs and their home governments represent the two central actors in self-determination challenges, individuals within states with SDMs can hugely affect the process of contention. Chapter 4 explores the conditions under which individuals will signal support for antigovernment violence in states experiencing self-determination challenges. I argue that individuals become more likely to support violent tactics as their personal grievances worsen. I measure grievances using survey respondents' self-reported food insecurity and the government's use of repression within a state. However, the relationship between grievances and support for antigovernment violence is moderated by a SDM's behavior. When movements primarily use violence, individuals may shift blame to nonstate actors for their grievances. Conversely, if movements primarily use nonviolent tactics, the effect of grievances on support for violent tactics will be stronger. An analysis of survey responses from the Afrobarometer, original data on SDM events and government repression, and data from SCAD supports this expectation. Additionally, the results from this analysis provide micro-level support for the more general argument about the effects of economic stress in this dissertation.

Taken together, the findings from these three chapters have broad implications for the study of the politics of self-determination. First, I find evidence that SDMs' decisions are subject to short-term fluctuations in environmental factors. While movements seeking self-rule are characterized by their long-term aspirations, this dissertation demonstrates that they may stray from strategies that are optimal for achieving self-determination to address more immediate grievances. Similarly, governments ultimately seek to quell self-determination challenges that threaten their hold on power. However, they must also consider environmental conditions that may be separate from purely political concerns when deciding how to respond to challengers. Finally, winning the support of public audiences can hugely influence the outcome of contention. The effect of grievances on support for antigovernment violence is itself conditional on the tactical choices of movements.

Each of these implications suggests that contextual factors—specifically those relating to economic conditions—help to structure self-determination challenges.

Beyond the core finding for the importance of the economic environment in shaping SDM-government interactions, this dissertation makes two additional contributions to the study of contentious politics. Scholars of political violence have recently emphasized the importance of horizontal inequalities in explaining and predicting features of civil conflict (Cederman, Gleditsch and Buhaug, 2013). This dissertation does not diminish the importance of differences between groups within societies, as group-level grievances motivate the creation of SDMs. However, my findings suggest that vertical inequalities still play an important role in determining contentious strategies for movements, governments, and audiences. Additionally, this dissertation introduces new quantitative data to the study of civil conflict. Scholars may use the dataset of SDM events to more precisely answer research questions in which the ability to tie specific events to movements is important. Thus, the introduction of this dataset enhances researchers' abilities to analyze the dynamics of contentious politics.

In addition to presenting new data for scholars to use, this dissertation presents several potentially fruitful avenues for future research. First, the sources of economic stress represents an important next step for contentious politics research. While my findings speak to the importance of economic stress, my analyses do not discriminate between periods of economic downturn caused by government policies versus exogenous shocks. The origins of economic stress may have important implications for how individuals act on grievances or attribute blame. Next, future research could focus on how path-dependence for movements and governments helps explain cycles of violence in self-determination challenges. Specifically, scholars could focus on how a legacy of violent tactics by nonstate actors and governments affects the patterns of coercion and cooperation. This line of inquiry could effectively evaluate the theoretical expectations around 'repertoires of contention,' broadly construed (Tilly, 1978). Finally, future work could contribute to the causal identification of some of the relationships uncovered in this dissertation's analyses. While my results certainly suggest a strong association between economic stress and key outcomes in self-determination challenges, they are not causally identified. Researchers could potentially use experimental survey designs or deploy methods of causal inference on observational data to gain more traction on the relationships discovered in this dissertation.

Policymakers in fields such as conflict prevention, human rights, and food security can use the implications of this dissertation to address pressing issues. The most striking implication of this dissertation is the association between economic stress and the occurrence of violent conflict. My results suggest that policymakers seeking to prevent political violence should particularly focus on groups or individuals suffering from economic stress. Additionally, human rights policymakers may be able to concentrate efforts on observing and reporting violations by focusing on the empirical association between very poor and very favorable economic performance and government repression. Finally, support for violent tactics and participation in antigovernment violence are empirically correlated. The results from this dissertation underscore the importance of framing and blame attribution in determining public support for violence. Therefore, policymakers should be aware of movement and government information campaigns to identify areas of widespread support for violence. The results of this dissertation offer several areas in which policymakers may tangibly redress the grievances of individuals and monitor areas that are likely to experience costly violence.

APPENDIX A: DATA COLLECTION

Existing Data Sources

To test the expectations in my three dissertation chapters, I have collected a dataset of SDM events. Several existing datasets contain information on opposition groups' strategies, but none of them is perfectly suitable for my project. The Minorities at Risk: Organizational Behavior data includes ethno-political groups that represent a MAR group in the Middle East and North Africa at the group-year level (Asal, Pate and Wilkenfeld, 2008). The Nonviolent and Violent Campaigns and Outcomes 2.0 (NAVCO 2.0) dataset considers a global sample of mature maximalist campaign-years. The groups of interest here are defined as “a series of observable, continuous, purposive mass tactics or events in pursuit of a political objective” that involves at least 1,000 members and has separatist or center-seeking ambitions (Chenoweth and Lewis, 2013, 416). Finally, Cunningham (2014) studies a global sample of violent and nonviolent SDMs that seek greater autonomy or independence. A more recent study disaggregates movements into observable organizations and focuses only on nonviolent tactics (Cunningham, Dahl and Frugé, 2017).

The introduction of each of these datasets has greatly benefited the study of contentious politics by allowing scholars to conduct cross-national large-*N* analyses, but no existing dataset is entirely appropriate for my project. While closely related, each source collects data on opposition groups at a different level of analysis and has vastly differing inclusion criteria. Therefore, rather than choosing an extant dataset, I have assembled an original dataset of violent and nonviolent SDM events. This dataset improves upon existing data sources for two reasons.

First, other sources of self-determination data aggregate to the group or group-year level. This aggregation gives all units equal weight in a statistical analysis, which is inappropriate because some groups can go dormant for several years at a time, or they may use a greater number of actions in a given year. A dataset that aggregates to the group-year level would consider years in which groups are very active with years in which groups perpetrate only a few events. As a result, researchers could make inaccurate inferences because they are not capturing the true distribution of behavior due to the aggregation choice. Second, most event-level datasets that contain observations from SDMs are unable to attribute specific events to groups. Given that I am fundamentally concerned

with modelling the behavior of movements themselves, I must be able to group events together based upon the perpetrating movement. This type of grouped, disaggregated data on a comprehensive set of movements is not publicly available. My data collection strategy alleviates each of these concerns and allows me to more accurately draw inferences on my research questions of interest.

SDM Event Dataset

In this dissertation, I present an original dataset of SDM events from 14 Sub-Saharan African movements from 2000-2014. The events include violent and nonviolent actions taken by individuals belonging to SDMs including attacks, protests, and other non-traditional political actions. To establish the sample of SDMs, I use Kathleen Cunningham’s (2014) list of Sub-Saharan African movements. SDMs are defined as groups that share a common identity and a belief in the right to self-rule. To be included, groups must make verbal demands for self-determination, including independence or greatly increased autonomy. My dataset contains 14 randomly sampled movements, shown in Table A.1.¹¹¹² This table shows the movements included in the dataset, their countries, and their total number of events.

Movement	Country	Events
Westerners	Cameroon	73
Anjouanese	Comoros	25
Bakongo	Democratic Republic of the Congo	12
Katangans	Democratic Republic of the Congo	65
Somalis	Ethiopia	651
Tuaregs	Mali	137
Ogoni	Nigeria	92
Oron	Nigeria	9
Puntland Darods	Somalia	18
Afrikaners	South Africa	81
Khoisan	South Africa	18
Zanzibaris	Tanzania	87
Baganda	Uganda	11
Lozi	Zambia	26

Table A.1: Self-Determination Movements in Dataset

¹¹I plan to complete the data collection for all movements before pursuing publication.

¹²Some groups, such as Eritreans in Ethiopia, are excluded from this data collection because they achieved full self-determination before 2000.

For each of these movements, I conducted searches on Nexis Uni (formerly Lexis Nexis) to find all relevant events in which the movement was engaged. I conducted background research to determine which search terms to include for each group to capture any organizations or groups associated with the SDM. A full list of the search terms used is included at the end of this appendix. I used these SDM-identifying terms with a list of terms to capture common events such as “protest” or “attack” to generate a list of articles, radio transcripts, newswires, and reports that constituted potential events. These sources include both international media and local outlets. From these, I read the articles to determine whether a given document constituted an event and recorded information on a several features

Events must satisfy three main criteria to be included as observations in my dataset. First, the events must be political in nature. This ensures that actions are attempting to alter status quos relating to power and excludes events such as common crimes. Second, events must be separate from the traditional political process. Even though many SDMs are associated with political parties, I do not include events such as press conferences or institutional meetings in which all political parties engage. Finally, events must be attributable to some portion of the movement, and this must be verifiable in documented sources. Therefore, instances of societal violence or nonviolent direct action are included in the dataset only if they involve members of the movement, broadly defined. This includes events perpetrated by named organizations and collections of individuals that fit into the SDM. Crucially, the events included in the dataset are not only those that are undertaken with the primary motivation being self-determination. I include events with disparate motivations such as electoral politics, economic circumstances, and general antigovernment sentiment.

Recent work has grappled with reporting biases in event data, especially in the realm of political violence. The proposed methods of bias-correction involve using pre-existing datasets (Donnay *et al.* 2019) or multiple sources of information (Cook *et al.* 2017). However, given that the primary contribution of this data collection endeavor lies in tying events to movements, neither of these approaches can combat potential reporting biases. Additionally, Weidmann (2016) argues that reportion bias is especially pernicious when studying the relationship between communications technology and conflict, such as how cellphone reception relates to violence. This particular concern is not evident in this dissertation research. Given that this dataset draws from secondary reporting, however, bias is still possible. I argue that SDMs challenge the government on salient enough issues

that underreporting bias is less of an issue than it would be in a general dataset as outlined by scholars of communications and conflict.

Variables: Setting

The dataset includes several variables that speak to the contextual setting of the events. I code the beginning and end dates for each of the events. About 89% of the events begin and end on the same date. Most dates are reported exactly, but some are only given in an imprecise window. For example, events are sometimes reported to have occurred “last weekend.” For these events, I choose the most central date included in the window if no source pinpoints the occurrence date. Figure A.1 shows the distribution of events by SDM over time. Next, I code the location of the event to the most specific geographic unit that is named. Events are usually coded as having taken place in cities, towns, or villages, but some can only be tagged as occurring in a more general geographic unit like county or region. I also include a binary indicator for whether an event’s location is rural or urban based on whether the population in a given location exceeds 100,000 individuals.

Variables: Event Characteristics

The largest portion of the data collection effort is dedicated to coding characteristics of the individual events. First, I code the type of event in 4 categories: Protest, Nonviolent (Other), Attack, and Violent (Other). The second category contains actions such as boycotts or pamphlet distribution, and the fourth category includes events such as sabotage or threat. I also code a binary indicator of whether or not the event contained violence. This variable takes on a value of 1 for all attacks and other violent events, but it can also take on a value of 1 for protests that become violent. The distribution of violent versus nonviolent events by movement is shown in Figure A.2. Next, I code the level of government repression that an event experiences. This variable takes on a value of 0 for no repression, 1 for nonlethal repression, and 2 for lethal repression. The distribution of repression experienced during movement events by group is shown in Figure A.3. For all nonviolent events, I code for whether or not the event became violent prior to government repression. This variable attempts to capture the dynamics of sequenced violence, though this is often very difficult to glean from reports.

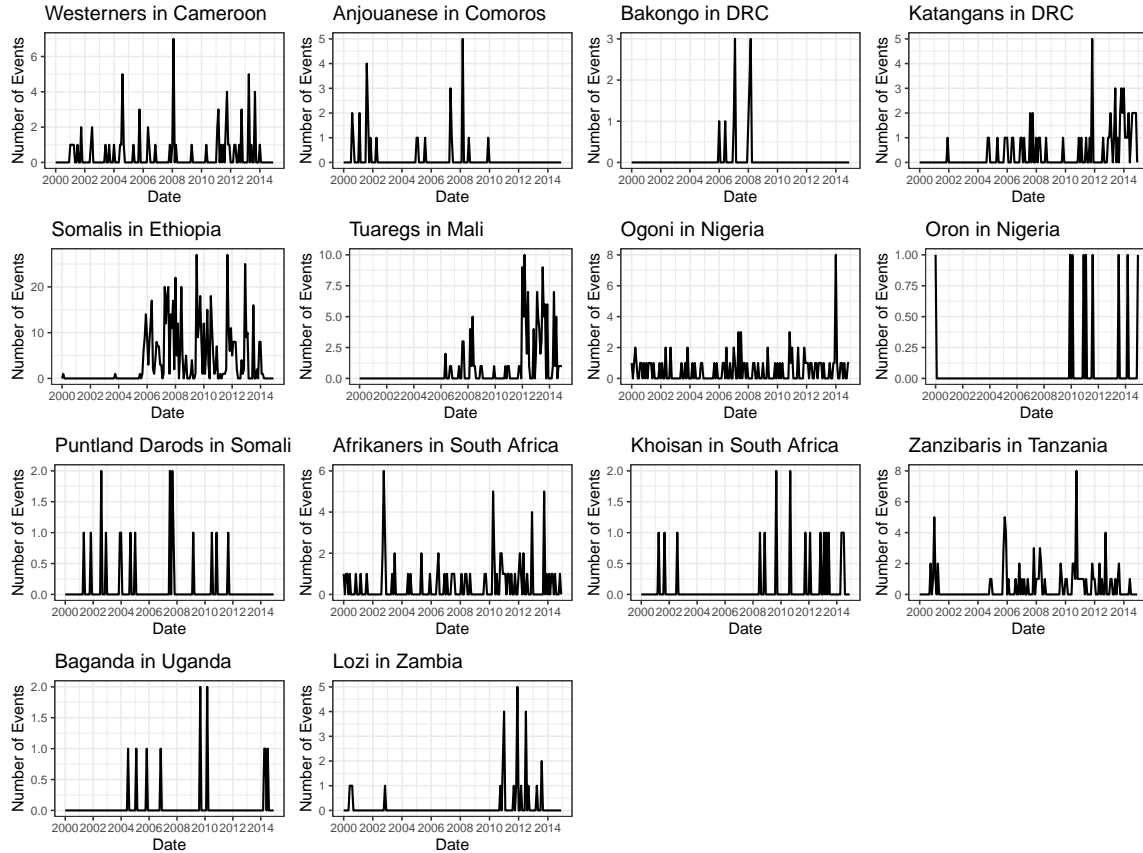


Figure A.1: Number of Events Over Time by Movement

I also code for whether or not the event was organized or spontaneous. Here, I code an event as organized if there is evidence that the event was planned in advance or if it was undertaken by a named organization. Additionally, I code for the size of an event in terms of the number of participants and the fatalities caused by a movement and the government in a given event. These variables are very difficult to capture from documents, and there are often contradictory reports of the actual number. In any case where outlets provide competing estimates, I take the smallest value as a conservative estimate. Finally, I include two textual variables that code the stated motivation of a given event. While I do not make use of these categories in this dissertation, I plan to explore the differences in events with disparate motivations in future work.

Variables: SDM Characteristics

I include SDM characteristics in addition to event-level features in my dataset. Specifically, I code for whether a political party is associated with a SDM in a given year. A party must make an explicit

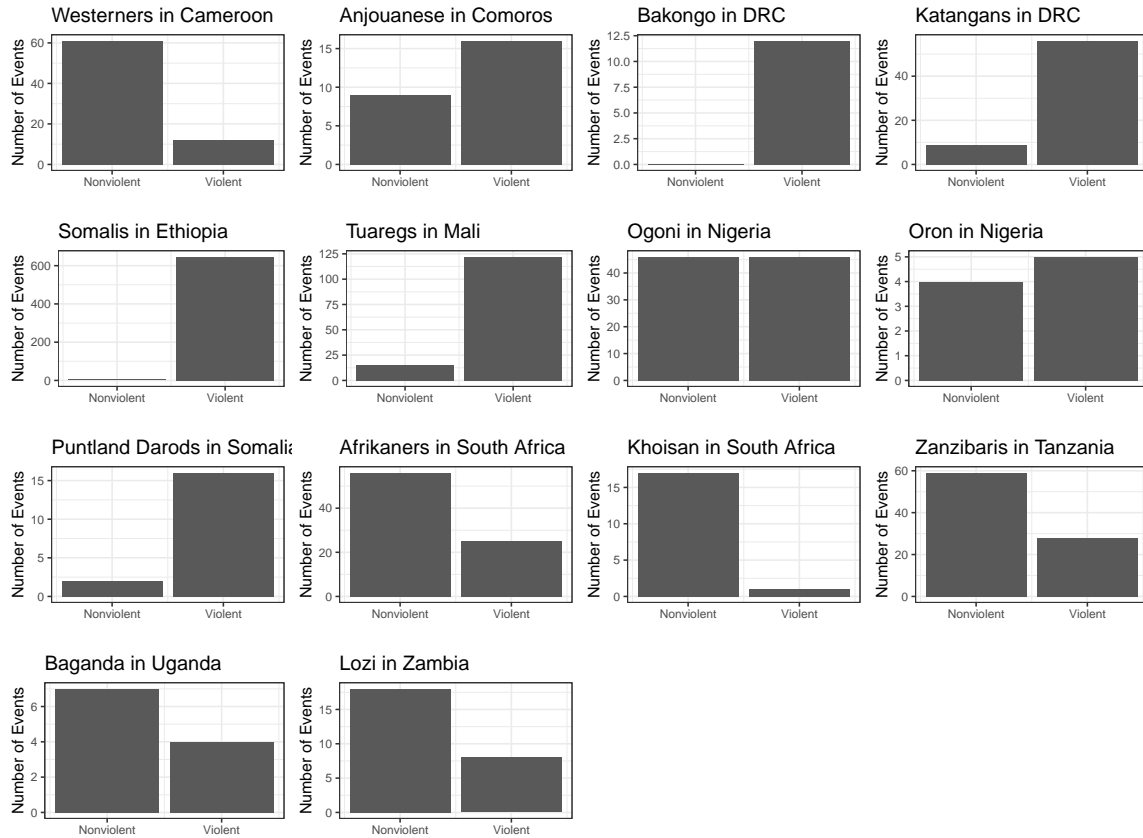


Figure A.2: Distribution of Violent and Nonviolent Events by Movement

claim for self-determination on behalf of the movement in order to be coded as associated. While the relationship between some movements and parties is clear, I plan to seek out country experts to substantiate the coding for this variable. Next, I code for whether movements have clear militant wings. This variable takes a value of one if movements are associated with militant organizations that can or do stage attacks on behalf of the movement. Similarly, I code for whether or not movements are engaged in active civil wars with a 1,000 battle death threshold as determined by the UCDP. Finally, I code for the presence of government concessions to a movement including the date of the provision and the type of concession. While I do not use this variable in the dissertation, I plan to analyze how tactics affect the likelihood of receiving concessions in future research.

Search Terms

For all movements, I included the movement-specific search terms along with: “AND (protest OR attack OR clash OR demonstration OR strike OR riot OR violence OR violent OR fighting).” The

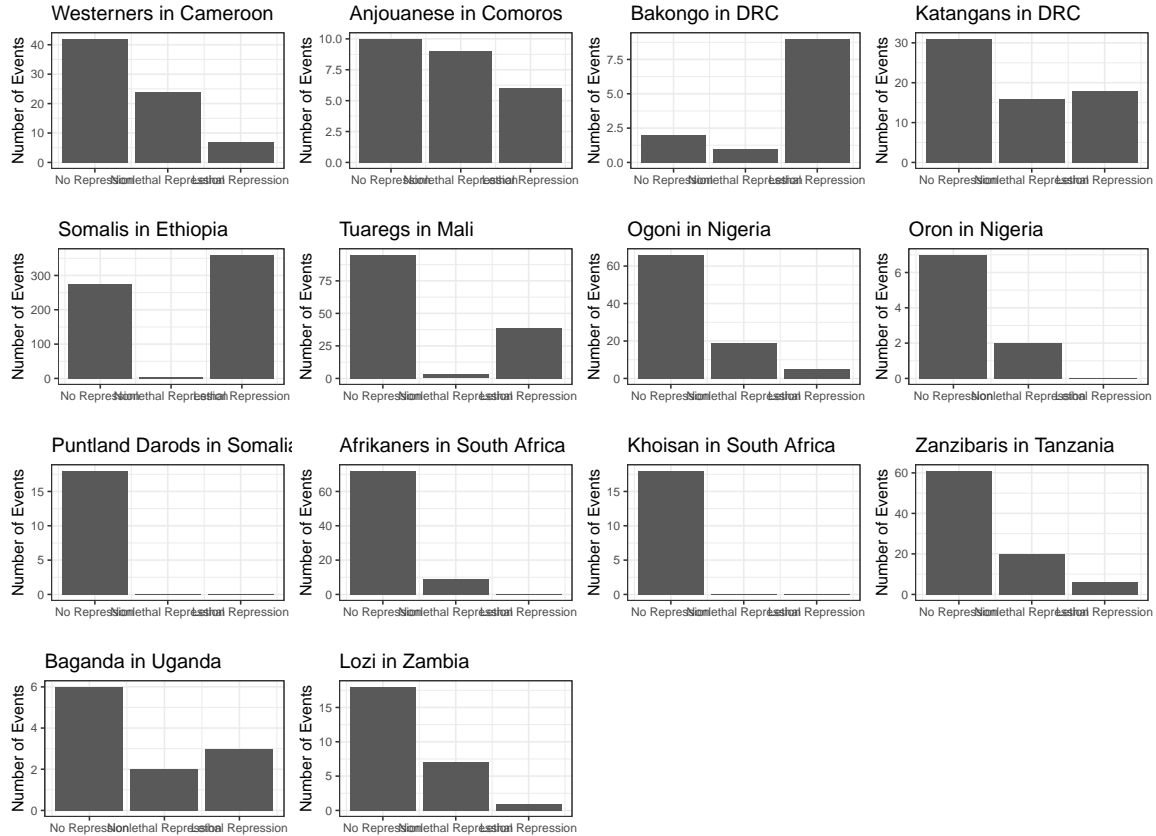


Figure A.3: Distribution of Repression Experienced by Movement

following represents the search terms used to generate the list of documents considered in the data collection:

- **Westerners in Cameroon:** (((Anglophone AND Cameroon) OR (Westerner AND Cameroon) OR (Anglophone AND Cameroonian) OR (Southern Cameroons National Council) OR SCNC OR (Southern Cameroons) OR (Justice and Development Party) OR JDP OR SDF OR (Social Democratic Front) OR (Fru Ndi)) and ((#GC386#)) and Date (geq(01/01/2000) and leq(12/31/2014)))
- **Anjouanese in Comoros:** (Anjouan OR Anjouanese)
- **Katangans in DRC:** ((Lunda OR Yeke OR Katangans OR Conakat OR (Union of Federalists and Independent Republicans) OR UFERI OR Mai Mai Kata Katanga OR Bakata Katanga OR Gedeon Kyungu Mutanga AND NOT Germain) and ((#GC394#)) and Date(geq(1/1/2000) and leq(12/31/2014)))

- **Bakongo in DRC:** Bakongo OR Kongo OR BDK
- **Somalis in Ethiopia:** “Somalis OR Somali OR ONLF OR Ogaden National Liberation Front OR Ogaden OR ONLA or Ogaden National Liberation Army OR Soomaali Galbeed OR Western Somalia” (Added OR Itihaad for 2004 on; dropped Somalis OR Somali for 2006 on; dropped Western Somalia starting in 2009)
- **Tuaregs in Mali:** [(((Tuareg OR Tuaregs OR Twareg OR Twaregs OR Touareg OR Touaregs OR (Democratic Alliance for Change) OR ADC OR ATNMC OR (National Movement for the Liberation of Azawad) OR MNLA OR MNA OR (Ansar Dine) OR (Ansar al-Din) OR AAD OR (Movement for Oneness and Jihad in West Africa) OR MOJWA OR MUJWA OR MUJAO) and ((#GC543#)) and Date(geq(1/1/2006) and leq(12/31/2010))))] (848); Note: MOJWA and Ansar Dine are Islamist groups that are not interested in self-determination. Therefore, I remove them for 2012-2014.
- **Ogoni in Nigeria:** (Ogoni OR Ogonis OR MOSOP OR (Movement for the Survival of the Ogoni People))
- **Oron in Nigeria:** Nigeria AND (Oron OR Orons OR OAF OR (Oron National Forum))
- **Afrikaners in South Africa:** (Afrikaner OR Afrikaners OR Volkstaat OR (Freedom Front) OR (Freedom Front Plus) OR Orania)
- **Khoisan in South Africa:** [(((Khoisan OR Khoesan OR Khoesaaan OR Khoe-San) and ((#GC336#)) and Date(geq(1/1/2000) and leq(12/31/2014))))] (1085)
- **Zanzibaris in Tanzania:** “Zanzibari OR Zanzibaris OR Civic United Front OR CUF”
- **Puntland Darods in Somalia:** (Darod OR Darood OR Daarood) AND (Puntland)
- **Baganda in Uganda:** (Baganda OR Ganda OR Buganda Youth Movement OR Ugandan National Democratic Alliance OR Federo)
- **Lozi in Zambia:** (Lozi OR Barotse OR Malozi OR MOREBA OR BPF OR Linyunga Ndambo)

APPENDIX B: SUPPORTING INFORMATION FOR CHAPTER 2

	<i>N</i>	Min.	Max.	Mean	Median
Violence	1,282	0	1	0.73	1
Food Price Increase _{<i>t</i>-1}	962	-1.65	6.81	0.00	-0.23
Unemployment Rate	1,282	-0.91	3.83	-0.01	-0.29
Previous Repression	1,282	0	2	1.43	2
GDP Growth	1,187	-2.46	6.39	0.01	0.24
Polyarchy	1,142	-1.18	2.07	-0.02	-0.70
ln(GDP _{<i>pc</i>})	1,187	-1.68	2.86	0.00	-0.20

Table B.1: Descriptive Statistics for Chapter 2

	FE	FE & MI
Food Price Increase_{<i>t</i>-1}	0.15 (0.28)	0.36 [†] (0.21)
Unemployment Rate	2.87 [†] (1.50)	1.67* (0.66)
Food Price Increase_{<i>t</i>-1} × Unemployment Rate	1.04* (0.34)	0.91* (0.30)
Non-Lethal Repression	-0.20 (0.58)	0.12 (0.28)
Lethal Repression	-0.76 (0.77)	0.19 (0.31)
GDP Growth	0.40 (0.72)	-0.04 (0.14)
Polyarchy	-1.51 (1.32)	-0.21 (0.31)
ln(GDP_{<i>pc</i>})	-0.26 (0.84)	0.02 (0.26)
Constant	-5.97 (6.20)	-5.66* (2.55)
<i>N</i>	864	1,282

**p* < 0.05, [†]*p* < 0.1

Table B.2: Logistic Regressions of Violence with Fixed Effects by Movement

	FE	FE & MI
Anjouanese		6.27* (2.85)
Baganda		5.73 [†] (3.11)
Bakongo		7.23* (2.94)
Katangans		8.00* (2.93)
Khoisan	-17.64 (1357.16)	-15.54 (518.13)
Lozi	5.67 (5.36)	4.26* (2.09)
Ogoni	9.01 (6.12)	6.24* (2.75)
Oron	9.22 (6.11)	6.55* (2.78)
Puntland Darods		7.73* (2.83)
Somalis	10.72 (7.29)	10.50* (2.93)
Tuaregs	14.10* (6.61)	7.78* (2.51)
Westerners	-10.73 (1579.07)	3.65 (2.73)
Zanzibaris		4.94 [†] (2.92)
N_{Groups}	8	14

* $p < 0.05$, [†] $p < 0.1$

Table B.3: Fixed Effects Estimates for Chapter 2

APPENDIX C: SUPPORTING INFORMATION FOR CHAPTER 3

	<i>N</i>	Min.	Max.	Mean	Median
Repression	1,272	0	1	0.44	0
Food Price Increase _{<i>t</i>-1}	962	-1.65	6.81	0.00	-0.23
Consumer Price Increase _{<i>t</i>-1}	1,062	-2.06	7.09	0.00	-0.13
GDP Growth Increase _{<i>t</i>-1}	1,187	-2.32	6.29	-0.00	0.21
ln(GDP _{<i>pc</i>})	1,187	-1.68	2.86	0.00	-0.20
Polyarchy	1,142	-1.18	2.07	-0.02	-0.70

Table C.1: Descriptive Statistics for Chapter 3

	FPI	CPI	GDPG
Food Price Increase_{<i>t</i>-1}	-0.39*		
	(.12)		
Food Price Increase_{<i>t</i>-1}²	0.11*		
	(0.03)		
Consumer Price Increase_{<i>t</i>-1}		-0.33*	
		(0.12)	
Consumer Price Increase_{<i>t</i>-1}²		0.09*	
		(0.03)	
GDP Growth_{<i>t</i>-1}			-0.19
			(0.18)
GDP Growth_{<i>t</i>-1}²			0.05
			(0.05)
Violent Event	1.56*	1.30*	0.93*
	(0.45)	(0.32)	(0.26)
Civil War	0.49	0.39	0.39
	(0.81)	(0.52)	(0.53)
ln(GDP Per Capita)	0.04	-0.31	-0.42
	(0.62)	(0.26)	(0.25)
Polyarchy	-0.09	-0.04	-0.23
	(0.21)	(0.18)	(0.16)
Constant	-1.98*	-1.59*	-0.94*
	(1.02)	(0.42)	(0.33)
<i>N</i>	854	954	1,114

* 0 outside the 95% credible interval

Table C.2: Bayesian Logistic Regressions of Repression with Random Intercepts by Movement

Table C.2 shows the summary of coefficient posterior distributions for a group of Bayesian specifications with random intercepts by SDM. The model is:

$$\begin{aligned}y_{i,j} &\sim \text{Bernoulli}(p_{i,j}) \\ \text{logit}(p_{i,j}) &= \alpha + \beta X_{i,j} + u_j \\ \alpha &\sim \text{Cauchy}(0, 10) \\ \beta &\sim \text{Cauchy}(0, 2.5) \\ u_j &\sim N(0, \sigma_u) \\ \sigma_u &\sim N(0, 10)\end{aligned}$$

for event i by movement j . X is a matrix of predictors. The coefficient parameters β are drawn from a Cauchy distribution centered at zero with scale parameter equal to 2.5, and the intercept α is distributed Cauchy with mean 0 and scale parameter 10 (Gelman *et al.* 2008). The movement random intercepts are distributed normally with a common standard deviation σ_u , and this standard deviation is drawn from a diffuse normal distribution. The results of this Bayesian model are similar to the model presented in the main text.

	FE 1	FE 2	FE 3
Food Price Increase $_{t-1}$	-0.35*		
	(0.12)		
Food Price Increase $^2_{t-1}$	0.10*		
	(0.03)		
Consumer Price Increase $_{t-1}$		-0.32*	
		(0.12)	
Consumer Price Increase $^2_{t-1}$		0.08*	
		(0.03)	
GDP Growth $_{t-1}$			-0.05
			(0.20)
GDP Growth $^2_{t-1}$			0.03
			(0.05)
Violent Event	2.02*	1.46*	1.01*
	(0.49)	(0.34)	(0.26)
Civil War	1.56	1.31	1.90 [†]
	(1.18)	(1.17)	(1.10)
ln(GDP_{pc})	0.08	0.03	-0.09
	(0.23)	(0.21)	(0.18)
Polyarchy	3.34*	1.03	-0.07
	(1.41)	(0.82)	(0.48)
Constant	-9.35*	-4.69*	-2.11*
	(2.90)	(1.61)	(0.92)
<i>N</i>	854	954	1,114

* $p < 0.05$, [†] $p < 0.1$

Table C.3: Logistic Regressions of Repression with Fixed Effects by Movement

	FPI	CPI	GDPG
Anjouanese			1.87* (0.80)
Baganda		2.83 (1.99)	1.60 (1.16)
Khoisan	-13.73 (562.09)	-13.04 (341.97)	-13.21 (342.88)
Lozi	5.47* (1.52)	2.16* (0.87)	1.38* (0.69)
Ogoni	4.04* (1.48)	2.21* (1.06)	0.71 (0.69)
Oron	4.44* (1.80)	1.86 (1.30)	0.62 (1.04)
Somalis	8.50* (3.84)	2.98 (2.33)	-0.60 (1.60)
Tuaregs	-1.20 (1.32)	-0.50 (1.30)	-0.87 (1.23)
Westerners	8.37* (2.91)	3.65* (1.63)	1.69† (1.01)
Zanzibaris		2.04† (1.10)	1.04 (0.74)
N_{Groups}	8	10	11

* $p < 0.05$, † $p < 0.1$

Table C.4: Fixed Effect Estimates for Chapter 3

	MI 1	MI 2	MI 3
Food Price Increase $_{t-1}$	-0.22*		
	(0.10)		
Food Price Increase $^2_{t-1}$	0.07*		
	(0.03)		
Consumer Price Increase $_{t-1}$		-0.13	
		(0.10)	
Consumer Price Increase $^2_{t-1}$		0.04 [†]	
		(0.03)	
GDP Growth $_{t-1}$			0.01
			(0.12)
GDP Growth $^2_{t-1}$			-0.03
			(0.04)
Violent Event	0.72*	0.69*	0.70*
	(0.19)	(0.19)	(0.19)
Civil War	-0.18	-0.06	-0.10
	(0.19)	(0.19)	(0.19)
ln(GDP_{pc})	-0.35*	-0.30*	-0.30*
	(0.12)	(0.11)	(0.12)
Polyarchy	-0.23*	-0.24*	-0.21 [†]
	(0.08)	(0.08)	(0.12)
Constant	-0.71*	-0.74*	-0.66*
	(0.15)	(0.15)	(0.15)
<i>N</i>	1, 282	1, 282	1, 282

* $p < 0.05$, [†] $p < 0.1$

Table C.5: Logistic Regressions of Repression on Multiply Imputed Sample

APPENDIX D: SUPPORTING INFORMATION FOR CHAPTER 4

	<i>N</i>	Min.	Max.	Mean	Median
Support for Violence	35,191	1	5	2.18	2
Food Insecurity	36,154	0	4	1.02	1
Repression _{SDM}	36,226	0	1	0.14	0
Repression _{SCAD}	36,226	0	0.86	0.19	0.18
Movement Violence _{SDM}	36,226	0	1	0.16	0
Antigovernment Violence _{SCAD}	36,226	0	1	0.33	0.25
Num. Events _{SDM}	36,226	0	15	1.75	1
Num. Events _{SCAD}	36,226	0	109	13.04	4
ln(GDP) _{pc}	36,226	5.50	8.84	6.89	6.54
Polyarchy	36,226	0.30	0.71	0.53	0.52
Female	36,226	0	1	0.50	0
Age	35,855	18	115	35.57	32

Table D.1: Descriptive Statistics for Chapter 4

	FE 1	FE 2
Mali	0.73* (0.17)	1.06* (0.21)
Namibia	0.25 [†] (0.13)	0.39* (0.13)
Nigeria	0.27* (0.07)	0.33* (0.07)
South Africa	0.02 (0.14)	0.12 (0.15)
Tanzania	0.42* (0.08)	0.57* (0.10)
Uganda	0.30* (0.06)	0.38* (0.07)
Zambia	0.37* (0.10)	0.58* (0.12)
<i>N</i> _{Groups}	8	8

* $p < 0.05$, [†] $p < 0.1$

Table D.2: Fixed Effects Estimates from Chapter 4 (SDM Sample)

	FE 5	FE 6
Mali	0.97* (0.15)	0.70* (0.17)
Namibia	1.05* (0.13)	0.98* (0.13)
Nigeria	0.63* (0.06)	0.56* (0.06)
South Africa	0.83* (0.14)	0.77* (0.14)
Tanzania	0.54* (0.07)	0.45* (0.08)
Uganda	0.46* (0.06)	0.31* (0.06)
Zambia	0.76* (0.09)	0.62* (0.10)
N_{Groups}	8	8

* $p < 0.05$, † $p < 0.1$

Table D.3: Fixed Effects Estimates from Chapter 4 (SCAD Sample)

BIBLIOGRAPHY

- Africa News. 2007. "Nigeria; Gas Flaring Wrecking Delta Communities." *Africa News* .
- Afrobarometer Data. 2014. "Afrobarometer Rounds 2, 3, and 5." <http://www.afrobarometer.org>.
- Agence France Presse. 2005. "Ten years on, Nigeria's Ogoni minority mark activist's death." *Agence France Presse* .
- Arezki, Rabah and Markus Bruckner. 2011. *Food prices and political instability*. Number 11-62 International Monetary Fund.
- Asal, Victor, Amy Pate and Jonathan Wilkenfeld. 2008. "Minorities at Risk Organizational Behavior Data and Codebook."
URL: <http://www.cidcm.umd.edu/mar/data.asp>
- Asal, Victor, Daniel Gustafson and Peter Krause. 2019. "It Comes with the Territory: Why States Negotiate with Ethno-Political Organizations." *Studies in Conflict & Terrorism* 42(4):363–382.
- Asal, Victor, Richard Legault, Ora Szekely and Jonathan Wilkenfeld. 2013. "Gender Ideologies and Forms of Contentious Mobilization in the Middle East." *Journal of Peace Research* 50(3):305–318.
- Balcells, Laia and Patricia Justino. 2014. "Bridging micro and macro approaches on civil wars and political violence: Issues, challenges, and the way forward." *Journal of Conflict Resolution* 58(8):1343–1359.
- Bapat, Navin A. 2005. "Insurgency and the Opening of Peace Processes." *Journal of Peace Research* 42(6):699–717.
- Bapat, Navin A. 2006. "State Bargaining with Transnational Terrorist Groups." *International Studies Quarterly* 50(1):213–230.
- Bapat, Navin A. 2011. "Transnational terrorism, US military aid, and the incentive to misrepresent." *Journal of Peace Research* 48(3):303–318.
- Bapat, Navin A, Luis De la Calle, Kaisa H Hinkkainen and Elena V McLean. 2016. "Economic sanctions, transnational terrorism, and the incentive to misrepresent." *The Journal of Politics* 78(1):249–264.
- BBC. 2005. "Nigeria: Community activist warns of fresh crisis in Niger Delta." *BBC Monitoring Africa* .
- Bell, Curtis and Scott Wolford. 2015. "Oil Discoveries, Shifting Power, and Civil Conflict." *International Studies Quarterly* 59(3):517–530.
- Bellemare, Marc F. 2015. "Rising food prices, food price volatility, and social unrest." *American Journal of Agricultural Economics* 97(1):1–21.
- Benmelech, Efraim, Claude Berrebi and Esteban F Klor. 2010. "The economic cost of harboring terrorism." *Journal of Conflict Resolution* 54(2):331–353.
- Benmelech, Efraim, Claude Berrebi and Esteban F Klor. 2015. "Counter-suicide-terrorism: Evidence from house demolitions." *The Journal of Politics* 77(1):27–43.

- Blair, Graeme, C Christine Fair, Neil Malhotra and Jacob N Shapiro. 2013. "Poverty and support for militant politics: Evidence from Pakistan." *American Journal of Political Science* 57(1):30–48.
- Blomberg, S Brock, Gregory D Hess and Athanasios Orphanides. 2004. "The macroeconomic consequences of terrorism." *Journal of monetary economics* 51(5):1007–1032.
- Brinkman, Henk-Jan and Cullen S. Hendrix. 2011. "Food Insecurity and Violent Conflict: Causes." *Consequences, and Addressing the Challenges, World Food Programme* .
- Brush, Stephen G. 1996. "Dynamics of theory change in the social sciences: Relative deprivation and collective violence." *Journal of Conflict Resolution* 40(4):523–545.
- Bueno De Mesquita, Bruce and Alastair Smith. 2010. "Leader survival, revolutions, and the nature of government finance." *American journal of political science* 54(4):936–950.
- Bueno de Mesquita, Ethan. 2005. "Conciliation, Counterterrorism, and Patterns of Terrorist Violence." *International Organization* 59(01):145–176.
- Byman, Daniel and Sarah E Kreps. 2010. "Agents of destruction? Applying principal-agent analysis to state-sponsored terrorism." *International Studies Perspectives* 11(1):1–18.
- Carey, Sabine C, Michael P Colaresi and Neil J Mitchell. 2015. "Governments, informal links to militias, and accountability." *Journal of Conflict Resolution* 59(5):850–876.
- Carr, Caleb. 2003. *The lessons of terror: A history of warfare against civilians*. Random House Incorporated.
- Cederman, Lars-Erik, Kristian Skrede Gleditsch and Halvard Buhaug. 2013. *Inequality, grievances, and civil war*. Cambridge University Press.
- Cederman, Lars-Erik, Nils B Weidmann and Kristian Skrede Gleditsch. 2011. "Horizontal inequalities and ethnonationalist civil war: A global comparison." *American Political Science Review* 105(3):478–495.
- Celestino, Mauricio Rivera and Kristian Skrede Gleditsch. 2013. "Fresh carnations or all thorn, no rose? Nonviolent campaigns and transitions in autocracies." *Journal of Peace Research* 50(3):385–400.
- Chenoweth, Erica and Maria J. Stephan. 2011. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. Columbia University Press.
- Chenoweth, Erica and Orion A. Lewis. 2013. "Unpacking nonviolent campaigns: Introducing the NAVCO 2.0 dataset." *Journal of Peace Research* 50(3):415–423.
- Christia, Fotini. 2012. *Alliance Formation in Civil Wars*. Cambridge: Cambridge University Press.
- Coggins, Bridget. 2011. "Friends in high places: International politics and the emergence of states from secessionism." *International Organization* 65(3):433–467.
- Collier, Paul. 2011. *Wars, guns and votes: Democracy in dangerous places*. Random House.
- Collier, Paul and Anke Hoeffler. 2004. "Greed and grievance in civil war." *Oxford Economic Papers* 56(4):563–595.

- Collier, Paul, Anke Hoeffler and Dominic Rohner. 2009. "Beyond greed and grievance: feasibility and civil war." *Oxford Economic Papers* 61(1):1–27.
- Condra, Luke N and Jacob N Shapiro. 2012. "Who takes the blame? The strategic effects of collateral damage." *American journal of political science* 56(1):167–187.
- Cook, Scott J, Betsabe Blas, Raymond J Carroll and Samiran Sinha. 2017. "Two wrongs make a right: Addressing underreporting in binary data from multiple sources." *Political Analysis* 25(2):223–240.
- Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Frida Andersson, Michael Bernhard, M. Steven Fish and Adam Glynn. 2017. "V-Dem Codebook V7."
- Costello, Matthew, J Craig Jenkins and Hassan Aly. 2015. "Bread, justice, or opportunity? The determinants of the Arab awakening protests." *World Development* 67:90–100.
- Cronin, Audrey Kurth. 2009. *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*. 1 ed. Oxfordshire, UK: Princeton University Press.
- Cunningham, Kathleen Gallagher. 2011. "Divide and Conquer or Divide and Concede: How Do States Respond to Internally Divided Separatists?" *American Political Science Review* 105(2):275–297.
- Cunningham, Kathleen Gallagher. 2013a. "Actor Fragmentation and Civil War Bargaining: How Internal Divisions Generate Civil Conflict." *American Journal of Political Science* 57(3):659–672.
- Cunningham, Kathleen Gallagher. 2013b. "Understanding Strategic Choice: The Determinants of Civil War and Nonviolent Campaign in Self-Determination Disputes." *Journal of Peace Research* 50(3):291–304.
- Cunningham, Kathleen Gallagher. 2014. *Inside the Politics of Self-determination*. Oxford University Press.
- Cunningham, Kathleen Gallagher, Marianne Dahl and Anne Frugé. 2017. "Strategies of Resistance: Diversification and Diffusion." *American Journal of Political Science* .
- Davenport, Christian. 2005. "Understanding covert repressive action: The case of the US government against the Republic of New Africa." *Journal of Conflict Resolution* 49(1):120–140.
- Davenport, Christian. 2007. "State Repression and Political Order." *Annual Review of Political Science* 10(1):1–23.
- Davenport, Christian and Cyanne Loyle. 2012. "The states must be crazy: Dissent and the puzzle of repressive persistence." *International Journal of Conflict and Violence (IJCV)* 6(1):75–95.
- Daxecker, Ursula E and Michael L Hess. 2013. "Repression hurts: coercive government responses and the demise of terrorist campaigns." *British Journal of Political Science* 43(3):559–577.
- Della Porta, Donatella. 2013. *Clandestine political violence*. Cambridge University Press.
- DeNardo, James. 1985. *Power in numbers: The political strategy of protest and rebellion*. Princeton University Press.

- Detges, Adrien. 2017. "Droughts, state-citizen relations and support for political violence in Sub-Saharan Africa: A micro-level analysis." *Political Geography* 61:88–98.
- Donnay, Karsten, Eric T Dunford, Erin C McGrath, David Backer and David E Cunningham. 2019. "Integrating conflict event data." *Journal of Conflict Resolution* 63(5):1337–1364.
- Downes, Alexander B. 2007. "Draining the sea by filling the graves: Investigating the effectiveness of indiscriminate violence as a counterinsurgency strategy." *Civil Wars* 9(4):420–444.
- Dragu, Tiberiu. 2017. "On repression and its effectiveness." *Journal of Theoretical Politics* 29(4):599–622.
- Dugan, Laura and Erica Chenoweth. 2012. "Moving beyond deterrence: The effectiveness of raising the expected utility of abstaining from terrorism in Israel." *American Sociological Review* 77(4):597–624.
- Dyrstad, Karin and Solveig Hillesund. 2020. "Explaining Support for Political Violence: Grievance and Perceived Opportunity." *Journal of Conflict Resolution* p. 0022002720909886.
- Fair, C Christine, Rebecca Littman, Neil Malhotra and Jacob N Shapiro. 2018. "Relative poverty, perceived violence, and support for militant politics: Evidence from Pakistan." *Political Science Research and Methods* 6(1):57–81.
- Fearon, James D. 1995. "Rationalist explanations for war." *International Organization* 49(3):379–414.
- Fearon, James D. 2004. "Why Do Some Civil Wars Last So Much Longer than Others?" *Journal of Peace Research* 41(3):275–301.
- Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1):75–90.
- Francisco, Ronald. 2004. "After the massacre: Mobilization in the wake of harsh repression." *Mobilization: An International Quarterly* 9(2):107–126.
- Francisco, Ronald A. 1995. "The relationship between coercion and protest: An empirical evaluation in three coercive states." *Journal of Conflict Resolution* 39(2):263–282.
- Gaibullov, Khusrav and Todd Sandler. 2009. "The impact of terrorism and conflicts on growth in Asia." *Economics & Politics* 21(3):359–383.
- Gailus, Manfred. 1994. "Food riots in Germany in the late 1840s." *Past & Present* (145):157–193.
- Ghobarah, Hazem Adam, Paul Huth and Bruce Russett. 2003. "Civil wars kill and maim people long after the shooting stops." *American Political Science Review* 97(2):189–202.
- Gleditsch, Kristian S and Mauricio Rivera. 2017. "The diffusion of nonviolent campaigns." *Journal of Conflict Resolution* 61(5):1120–1145.
- Godinho, Thorne. 2014. "Front Nasionaal stokes the embers of the Afrikaner right." *Mail & Guardian*.
- Goodwin, Jeff. 2001. *No other way out: states and revolutionary movements, 1945-1991*. Cambridge University Press.

- Granovetter, Mark. 1978. "Threshold models of collective behavior." *American journal of sociology* 83(6):1420–1443.
- Gurr, T. R. 1993. "Why Minorities Rebel: A Global Analysis of Communal Mobilization and Conflict since 1945." *International Political Science Review* 14(2):161–201.
- Gurr, Ted Robert. 1970. *Why Men Rebel*. Routledge.
- Gustafson, Daniel. 2019. "Hunger to Violence: Explaining the Violent Escalation of Nonviolent Demonstrations." *Journal of Conflict Resolution* p. 0022002719890669.
- Hale, Henry E. 2013. "Regime change cascades: What we have learned from the 1848 revolutions to the 2011 Arab uprisings." *Annual Review of Political Science* 16:331–353.
- Hegghammer, Thomas. 2013. "The recruiters dilemma: Signalling and rebel recruitment tactics." *Journal of Peace Research* 50(1):3–16.
- Heider, Fritz. 1958. *The psychology of interpersonal relations*. Wiley New York.
- Hendrix, Cullen S and Stephan Haggard. 2015. "Global food prices, regime type, and urban unrest in the developing world." *Journal of Peace Research* 52(2):143–157.
- Hibbing, John R and John R Alford. 1981. "The electoral impact of economic conditions: who is held responsible?" *American Journal of Political Science* pp. 423–439.
- Hibbs, Douglas A. 1973. *Mass political violence: A cross-national causal analysis*. Vol. 253 Wiley New York.
- Hill, Daniel W and Zachary M Jones. 2014. "An empirical evaluation of explanations for state repression." *American Political Science Review* 108(3):661–687.
- Hillesund, Solveig. 2015. "A dangerous discrepancy: Testing the micro-dynamics of horizontal inequality on Palestinian support for armed resistance." *Journal of Peace Research* 52(1):76–90.
- Hirose, Kentaro, Kosuke Imai and Jason Lyall. 2017. "Can civilian attitudes predict insurgent violence? Ideology and insurgent tactical choice in civil war." *Journal of peace research* 54(1):47–63.
- Hirsch, Afua. 2012. "Sahel food crisis has been made worse by the widespread unrest in Africa." *The Guardian* .
- Horowitz, Donald L. 1981. "Patterns of ethnic separatism." *Comparative Studies in Society and History* 23(2):165–195.
- Huth, Paul K. 1996. "Enduring rivalries and territorial disputes, 1950-1990." *Conflict Management and Peace Science* 15(1):7–41.
- Jacobson, Colean. 2008. "ANC president visits poor whites, pledges they won't be forgotten." *Associated Press* .
- Jenkins, J Craig, David Jacobs and Jon Agnone. 2003. "Political opportunities and African-American protest, 1948–1997." *American Journal of Sociology* 109(2):277–303.
- Kaaya, Sadab Kitatta. 2014. "Mengo, Govt Quarrel Over Kabaka's Guards." *The Observer* .

- Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil War*. 1 edition ed. New York: Cambridge University Press.
- Karatnycky, Adrian and Peter Ackerman. 2005. "How freedom is won." *Washington DC: Freedom House* .
- Katulanda, Frederick. 2011. "Chadema's Defence." *The Citizen* .
- Kertzer, David I. 1989. *Ritual, politics, and power*. Yale University Press.
- Key, Valdimer Orlando et al. 1966. *The responsible electorate*. Harvard University Press Cambridge, MA.
- Kitschelt, Herbert P. 1986. "Political opportunity structures and political protest: Anti-nuclear movements in four democracies." *British journal of political science* 16(1):57–85.
- Kleinfeld, Rachel. 2019. *A Savage Order: How the World's Deadliest Countries Can Forge a Path to Security*. Vintage.
- Kleinfeld, Rachel and Elena Barham. 2018. "Complicit States and the Governing Strategy of Privilege Violence: When Weakness Is Not the Problem." *Annual Review of Political Science* .
- Koonings, Kees and Dirk Kruijt. 2007. "Introduction: the duality of Latin American cityscapes." *Fractured Spaces: social exclusion, urban violence, and contested spaces in Latin America* .
- Koos, Carlo. 2018. "Which grievances make people support violence against the state? Survey evidence from the Niger Delta." *International Interactions* 44(3):437–462.
- Kramer, Gerald H. 1971. "Short-term fluctuations in US voting behavior, 1896–1964." *American political science review* 65(1):131–143.
- Kuran, Timur. 1989. "Sparks and prairie fires: A theory of unanticipated political revolution." *Public choice* 61(1):41–74.
- Kuran, Timur. 1997. *Private truths, public lies: The social consequences of preference falsification*. Harvard University Press.
- Langer, Arnim and Kristien Smedts. 2013. "Seeing is not believing: perceptions of horizontal inequalities in Africa." *Centre for Research on Peace and Development (CRPD) Working Paper* 16.
- Langer, Arnim and Ukoha Ukiwo. 2008. Ethnicity, religion and the state in Ghana and Nigeria: perceptions from the street. In *Horizontal Inequalities and Conflict*. Springer pp. 205–226.
- Lederer, Edith M. 2014. "UN: 500,000 kids in Mali at risk of malnutrition." *Associated Press* .
- Lichbach, Mark Irving. 1987. "Deterrence or escalation? The puzzle of aggregate studies of repression and dissent." *Journal of Conflict Resolution* 31(2):266–297.
- Lichbach, Mark Irving. 1995. *The Rebel's Dilemma*. Ann Arbor, MI: University of Michigan Press.
- Linke, Andrew M, Sebastian Schutte and Halvard Buhaug. 2015. "Population Attitudes and the Spread of Political Violence in Sub-Saharan Africa." *International Studies Review* 17(1):26–45.

- Lyall, Jason. 2009. "Does indiscriminate violence incite insurgent attacks? Evidence from Chechnya." *Journal of Conflict Resolution* 53(3):331–362.
- Lyall, Jason, Graeme Blair and Kosuke Imai. 2013. "Explaining support for combatants during wartime: A survey experiment in Afghanistan." *American political science review* 107(4):679–705.
- Malhotra, Neil and Alexander G Kuo. 2008. "Attributing blame: The public's response to Hurricane Katrina." *The Journal of Politics* 70(1):120–135.
- Martin, Brian. 2007. *Justice Ignited: The Dynamics of Backfire*. Lanham, MD: Rowman & Littlefield.
- Marx, Gary T. 1988. *Undercover: police surveillance in America*. University of California Press.
- Mason, T David and Dale A Krane. 1989. "The political economy of death squads: Toward a theory of the impact of state-sanctioned terror." *International Studies Quarterly* 33(2):175–198.
- McAdam, Doug, Sidney Tarrow and Charles Tilly. 2003. "Dynamics of contention." *Social Movement Studies* 2(1):99–102.
- McCauley, Clark and Sophia Moskalenko. 2008. "Mechanisms of political radicalization: Pathways toward terrorism." *Terrorism and political violence* 20(3):415–433.
- McCormick, Gordon H and Frank Giordano. 2007. "Things come together: symbolic violence and guerrilla mobilisation." *Third World Quarterly* 28(2):295–320.
- McGraw, Kathleen M. 1990. "Avoiding blame: An experimental investigation of political excuses and justifications." *British Journal of Political Science* 20(1):119–131.
- Miodownik, Dan and Lilach Nir. 2016. "Receptivity to Violence in Ethnically Divided Societies: A Micro-Level Mechanism of Perceived Horizontal Inequalities." *Studies in Conflict & Terrorism* 39(1):22–45.
- Moore, Will H. 1998. "Repression and dissent: Substitution, context, and timing." *American Journal of Political Science* pp. 851–873.
- Moore, Will H. 2000. "The repression of dissent: A substitution model of government coercion." *Journal of conflict resolution* 44(1):107–127.
- Muller, Edward N. 1972. "A test of a partial theory of potential for political violence." *American Political Science Review* 66(3):928–959.
- Muller, Edward N and Erich Weede. 1990. "Cross-national variation in political violence: A rational action approach." *Journal of conflict resolution* 34(4):624–651.
- Muller, Edward N and Karl-Dieter Opp. 1986. "Rational choice and rebellious collective action." *American Political Science Review* 80(2):471–487.
- Nordås, Ragnhild and Christian Davenport. 2013. "Fight the youth: Youth bulges and state repression." *American Journal of Political Science* 57(4):926–940.
- Østby, Gudrun. 2008. "Polarization, horizontal inequalities and violent civil conflict." *Journal of Peace Research* 45(2):143–162.
- Oyefusi, Aderoju. 2008. "Oil and the probability of rebel participation among youths in the Niger Delta of Nigeria." *Journal of Peace Research* 45(4):539–555.

- Pape, Robert. 2005. *Dying to Win: The Strategic Logic of Suicide Terrorism*. New York: Random House Publishing Group.
- Pape, Robert A. 1997. "Why economic sanctions do not work." *International Security* 22(2):90–136.
- Pearlman, Wendy and Kathleen Gallagher Cunningham. 2012. "Nonstate Actors, Fragmentation, and Conflict Processes." *Journal of Conflict Resolution* 56(1):3–15.
- Peffley, Mark. 1984. "The voter as juror: Attributing responsibility for economic conditions." *Political Behavior* 6(3):275–294.
- Petersen, Roger D. 2002. *Understanding ethnic violence: Fear, hatred, and resentment in twentieth-century Eastern Europe*. Cambridge University Press.
- Pigeaud, Fanny. 2008. "Cameroon clashes claim more lives." *Agence France Press* .
- PR Newswire. 2013. "FROM THE FIELD: UN FOOD RELIEF AGENCY STRUGGLES TO COPE WITH MALI'S 'LEAN SEASON'." *PR Newswire Africa* .
- Rasler, Karen. 1996. "Concessions, repression, and political protest in the Iranian revolution." *American Sociological Review* pp. 132–152.
- Regan, Patrick M. and Daniel Norton. 2005. "Greed, Grievance, and Mobilization in Civil Wars." *Journal of Conflict Resolution* 49(3):319–336.
- Ritter, Emily Hencken and Courtenay R Conrad. 2016. "Preventing and responding to dissent: The observational challenges of explaining strategic repression." *American Political Science Review* 110(1):85–99.
- Rudolph, Thomas J. 2003. "Who's responsible for the economy? The formation and consequences of responsibility attributions." *American Journal of Political Science* 47(4):698–713.
- Rustad, Siri A. 2016. "Socioeconomic inequalities and attitudes toward violence: A test with new survey data in the Niger delta." *International Interactions* 42(1):106–139.
- Salehyan, Idean, Cullen S. Hendrix, Jesse Hamner, Christina Case, Christopher Linebarger, Emily Stull and Jennifer Williams. 2012. "Social conflict in Africa: A new database." *International Interactions* 38(4):503–511.
- Sambanis, Nicholas. 2001. "Do Ethnic and Non-Ethnic Civil Wars Have the Same Causes? A Theoretical and Empirical Inquiry." *Journal of Conflict Resolution* 45(3):259–282.
- Sambanis, Nicholas and Branko Milanovic. 2014. "Explaining regional autonomy differences in decentralized countries." *Comparative Political Studies* 47(13):1830–1855.
- Sambanis, Nicolas and Annalisa Zinn. 2005. "From Protest to Violence: An Analysis of Conflict Escalation with an Application to Self-Determination Movements." *American Political Science Association Annual Conference* pp. 1–45.
- Schelling, Thomas C. 2006. *Micromotives and macrobehavior*. WW Norton & Company.
- Schlenker, Barry R, Thomas W Britt, John Pennington, Rodolfo Murphy and Kevin Doherty. 1994. "The triangle model of responsibility." *Psychological review* 101(4):632.

- Schuberth, Moritz. 2015. "The challenge of community-based armed groups: Towards a conceptualization of militias, gangs, and vigilantes." *Contemporary Security Policy* 36(2):296–320.
- Shaver, Kelly G. 2012. *The attribution of blame: Causality, responsibility, and blameworthiness*. Springer Science & Business Media.
- Siegel, David A. 2011. "When does repression work? collective action in social networks." *The Journal of Politics* 73(04):993–1010.
- Smith, Todd Graham. 2014. "Feeding unrest: disentangling the causal relationship between food price shocks and sociopolitical conflict in urban Africa." *Journal of Peace Research* 51(6):679–695.
- Snyder, David and Charles Tilly. 1972. "Hardship and collective violence in France, 1830 to 1960." *American Sociological Review* pp. 520–532.
- Sternberg, Troy. 2012. "Chinese drought, bread and the Arab Spring." *Applied Geography* 34:519–524.
- Stewart, Frances. 2002. "Horizontal inequalities as a source of conflict." *From Reaction to Prevention: Opportunities for the UN System* pp. 105–136.
- Sutton, Jonathan, Charles R. Butcher and Isak Svensson. 2014. "Explaining Political Jiu-Jitsu Institution-Building and the Outcomes of Regime Violence Against Unarmed Protests." *Journal of Peace Research* 51(5):559–573.
- Tarrow, Sidney. 1989. "Democracy and Disorder: Social Conflict, Political Protest and Democracy in Italy, 1965-1975."
- Tarrow, Sidney. 1994. *Power in movement: Social movements, collective action and politics*. Cambridge Univ Press.
- Tarrow, Sidney. 2011. *Power In Movement: Social Movements and Contentious Politics*. Cambridge: Cambridge University Press.
- The Daily Champion. 2005. "Nigeria; NANS Plans Nationwide Protest Over Fuel Price Hike." *The Daily Champion* .
- The Daily Monitor. 2013. "Buganda's future lies in its rich past." *The Daily Monitor* .
- The Mercury. 2013. "This is no time to misdiagnose the causes of crime." *The Mercury* .
- Thomas, Jakana. 2014. "Rewarding Bad Behavior: How Governments Respond to Terrorism in Civil War." *American Journal of Political Science* 58(4):804–818.
- Tilley, James and Sara B Hobolt. 2011. "Is the government to blame? An experimental test of how partisanship shapes perceptions of performance and responsibility." *The Journal of Politics* 73(2):316–330.
- Tilly, Charles. 1978. "From Mobilization to Revolution."
- Tilly, Louise A. 1971. "The food riot as a form of political conflict in France." *The Journal of Interdisciplinary History* 2(1):23–57.
- Tsebelis, George and John Sprague. 1989. "Coercion and revolution: Variations on a predator-prey model." *Mathematical and Computer Modelling* 12(4-5):547–559.

- Valentino, Benjamin, Paul Huth and Dylan Balch-Lindsay. 2004. "Draining the sea: mass killing and guerrilla warfare." *International Organization* 58(02):375–407.
- Vanguard. 2011. "Environmental Assessment of Ogoniland." *Vanguard* .
- Walter, Barbara F. 2006. "Building Reputation: Why Governments Fight Some Separatists but not Others." *American Journal of Political Science* 50(2):313–330.
- Walter, Barbara F. 2009. "Bargaining Failures and Civil War." *Annual Review of Political Science* 12(1):243–261.
- Webb, Boyd. 2008. "Malema still refuses to apologise: He was 'quoted out of context'." *Pretoria News* .
- Weidmann, Nils B. 2016. "A closer look at reporting bias in conflict event data." *American Journal of Political Science* 60(1):206–218.
- Weiner, Bernard. 2008. "Reflections on the history of attribution theory and research: People, personalities, publications, problems." *Social Psychology* 39(3):151–156.
- Weinstein, Jeremy M. 2005. "Resources and the Information Problem in Rebel Recruitment." *Journal of Conflict Resolution* 49(4):598–624.
- Wilkinson, Steven I. 2009. "Riots." *Annual Review of Political Science* 12:329–343.