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(NON-)VIOLENT MASS MOBILIZATION, REPRESSION, AND THE SURVIVAL
OF AUTHORITARIAN REGIMES

By

JONAS STENGER

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ABSTRACT OF THE THESIS

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by JONAS STENGER

Thesis Director:

Roy Licklider

This thesis analyzes the question whether violent or nonviolent protest is more threatening for the survival of authoritarian regimes. Based on previous literature, I argue that protest in general and violent protest in countries with low state capacity should make regime collapse more likely. Furthermore, I take the repressive nature of autocratic regimes into account and argue that violent repression against peaceful protesters makes regime collapse more likely, while regimes employing violence against violent protest become more stable. I employ Cox Proportional Hazard Models and Conditional Gap Time Models to analyze the effect of protest and repression on the survival of authoritarian regimes and find support for my theory that protest makes regimes more prone to collapse in general, and that countries with low state capacity are more vulnerable to violent protest. I cannot find support for the hypothesis that violent repression against peaceful protest destabilizes a country, but I find that regimes using coercive measures against violent protest become more stable. However, this is only true when violent protest causes harm and death to others people.

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1 Introduction

Kathmandu, Tbilisi, and Tunis - three locations where massive nonviolent protest occurred and authoritarian leaders were removed (BBC 2006, HumanRightsWatch 2007, Randeree 2010). Lomé, Bangkok, and Beyida (Libya) however, are locations where violent mass mobilization reached the same goal (AlJazeera 2011, BBC 2010, CNN 2005). The well-known events of the Arab Spring are showing similar patterns: while some of the protests remained largely peaceful and reached their goal to remove an autocratic leader, others used violence to get rid of their despots. In other countries however, violent and nonviolent protests were largely unsuccessful.

Beside this anecdotal evidence, there is an ongoing debate in political science whether nonviolent or violent strategies are more successful in reaching political goals. The seminal article and the following book by Erica Chenoweth and Maria Stephan, arguing that nonviolent political campaigns are superior to violent means, for example armed insurgency, and more effective in reaching policy goals, has set a new milestone in that debate (Chenoweth and Stephan 2008, 2014). Also, scholars have shown that mass protest can effectively destabilize regimes (Gandhi 2008, Svolik 2012, Wintrobe 1998, Hollyer et al. 2015). However, much work needs to be done to develop a clearer picture of how nonviolent and violent mass mobilization has the potential to eventually destabilize and change regimes, and which of the two tactics poses the greater threat to regime survival. The work of Chenoweth and Stephan (2011, 2008) and their dataset on Nonviolent and Violent Campaigns and Outcomes (NAVCO) can

be criticized for being too aggregated and eventually overlapping single violent and nonviolent events in either violent or nonviolent campaigns. Therefore, it has little explanatory power for the differences between violent and nonviolent street protest.

Based on the previous literature, I develop mechanisms that support the argument that protest in general destabilizes regimes, while violent protest should be more successful in states with low state capacity. Furthermore, I will consider the repressive nature of authoritarian regimes and develop two mechanisms arguing that violence against peaceful protesters increases the risk for regime collapse, while violent repression against violent protesters makes regimes more stable due to violence of the state being legitimized in some way.

I therefore propose a survival analysis model, focusing on the hazard rates of authoritarian regimes when facing violent and nonviolent protest cycles. Next to conventional Cox Proportional Hazard Models, I employ conditional gap time models that consider previous instances of instability in countries and their influence on today's regime survival. In the analysis of the proposed mechanisms I find empirical support for the claim that protest in general makes regime collapse more likely. Moreover, I can support the hypothesis that violence is more dangerous to states with low state capacity than nonviolence. Finally, I also find support for the hypothesis that violent repression against violent protesters actually decreases the risk of regime collapse. However, this is only valid for violent protesters who direct violence against people and not things. Unfortunately, I cannot find support for the hypothesis claiming that repression against nonviolent protesters increases the hazard ratio for regime

collapse.

The remainder of this thesis proceeds as follows: The second sections briefly reviews the literature on mass protest in authoritarian countries and its impact on regime destabilization. The third section develops a theoretical framework and elaborates causal mechanisms that help to explain the different risks of removal for authoritarian leaders when facing and reacting to violent and nonviolent mass mobilization. The fourth section describes the variables, data, and method employed in this study. In the sixth section I present results of the survival analysis and in the final section summarize I the thesis, explain potential caveats and give an outlook on future research.

2 Literature Review

The Literature on protest and mass mobilization has an important starting point with Kuran's (1991) work on the collective action problem, that people have to overcome in mass mobilization. In order to overcome the collective action problem, Lohmann (1993, 1994) emphasizes the significance of information in interactions and the role of costly signaling.

The previous work on the stability of political regimes incorporates the relevance of threats emerging from the population. Especially the literature on democratization puts an emphasis on these threats and argues that subversive activities or threats by the population potentially result in the seizure of an authoritarian regime or in the

extension of suffrage and democratic rights (Acemoglu and Robinson 2005, Boix 2003, Rosendorff 2001, Przeworski 2009).

However, mass mobilization and its impact on democratization and especially autocratic stability has received relatively little attention (Celestino and Gleditsch 2013). Most previous work has focused on macro-level factors, such as wealth or education, that influence the probabilities of regime change and the collapse of authoritarian regimes (see e.g. Vanhanen 1990). In contrast to that, micro-level factors for regime collapse emphasize more the role of actors, without regard to their macro-level pre-conditions (Celestino and Gleditsch 2013). Early academic work focusing on micro-level factors for regime collapse rather analyzes the impacts of elites on regime collapse, relying on evidence and experiences from the Latin American autocracies of the sixties, seventies, and eighties (O'Donnell and Schmitter 1986, Przeworski 1991).

This approach purely focusing on the elites and their impact on regime stability has been challenged and the perspective has been changed towards non-elite actors, as for example in Collier's (1999) work on labor unions and their role for transitions to democracy. This work shows the possibility for non-elite actors to overthrow an authoritarian regime through mass collective action. Thus, scholars argue that democratization is a response from autocratic leaders to threats emerging from mass collective action. This is because autocrats are afraid of being completely removed from power or are not able to exercise power over rebellious groups (Acemoglu and Robinson 2005, Gleditsch and Ward 2006, Olson 1993, Przeworski 1988, Wantchekon 2004, Wood 2001).

This is especially emphasized in the literature on power-sharing agreements, which presents democratization as a potential method to end civil conflicts. Wucherpfennig (2013) finds that such power sharing agreements have a higher acceptance rate among fighting groups if no side of the conflict is can prevail militarily.

Previous work on the reasons for the onset of social conflict and mass mobilization provides plenty of theoretical explanations and empirical evidence on how social conflicts emerge. Here, especially theories about grievances put an emphasis on how (relative) deprivation can give incentives for mobilization. Several studies identify, for example, ethnic discrimination and political exclusion as triggers for social conflict in autocracies (Gurr 1970, Horowitz 1985, Opp 1988, Tucker 2007). Opportunity structures and resources are analyzed in the social movements literature, as for example in Tilly (1978), McAdam (1982), and Tarrow (1994). These papers and books however emphasize more the origins and reasons for social conflict and mass mobilization and not the outcomes, such as regime collapse.

It has been argued that mass mobilization and direct (street) action can have different forms and types, which implies that different strategies of mass mobilization might have different outcomes. For instance, civil war can lead to democracy. Ce-lestino and Gleditsch (2013) show the example of Costa Rica, where democracy was the result of violence and civil war. In contrast to that, various scholars argue that the overthrow of an authoritarian regime through violence might lead to the next autocratic regime. But nevertheless, these new potential despots are the biggest threat to incumbents because of their resources for violent mass mobilization (Bormann and

Gleditsch 2012). Thus, previous work shows that violence might not be the best solution in order to obtain democracy in a country and that previous instances of violence can heavily influence the relationship of direct action strategies and outcomes (Gibler 2012, Gleditsch 2002, Gleditsch and Ward 2006). Nevertheless, these pieces show that violence is a useful tool to get rid of an authoritarian leader and to cause regime collapse.

Besides violence, previous work has identified a wide range of tactics and strategies for mass mobilization and direct action. Nonviolent direct action is connected to the ouster of autocrats through two different mechanisms. Either, an authoritarian regime is directly removed through mass protest, or the mass mobilization incentivizes others to stage coups and remove a regime. For example, Casper and Tyson (2014) emphasize that mass protest can help to find solutions for information problems among members of the elite and therefore facilitate coups. Wig and Rød (2014) actually find that coups of the elites against incumbent leaders are more successful if they are supported by large mass protest activities. Several scholars have outlined and analyzed individual cases in which nonviolent action has removed autocracies (e.g. Bermeo 1997, Bratton and Van de Walle 1992, Collier and Mahoney 1997, Schock 2005, Slater 2009, Wood 2001).

In a comparison of violence and nonviolent action in over 67 countries that evolved into democracies from 1973 to 2004, Karatnycky and Ackerman (2005) find that non-violence had an impact in many transitions. They find that democracies which evolved through nonviolent action were more stable in the aftermath of transitions. Never-

theless, this study only focuses on countries that actually experienced transitions and therefore do not take into account violent and nonviolent action in cases where no transition happened.

Using data from the Cross-National Time-Series (CNTS) Data Archive, other scholars analyzed the effect of violent and nonviolent action on transitions to democracy and on regime survival (Banks 1979). Ulfelder (2005) for example shows that single-party and military regimes are more vulnerable to strikes and antigovernment protests and therefore more likely to collapse than other regime types. Teorell (2010) finds that nonviolent events of mass mobilization have a larger effect on democratization, while violent events like riots and strikes do not have a positive effect on democratization in autocracies. Nevertheless, the CNTS data used in these studies is not optimal for the analysis of violence and nonviolence. The CNTS data is only available as yearly counts and do not give information about specific events or actors involved. Also, the coding rules are not very transparent and classification as a violent or nonviolent event remains unclear.

Trying to address this problem Chenoweth and Stephan (2008, 2011) compiled a new dataset (NAVCO) on violent and nonviolent campaigns. In their work they analyze whether violent or nonviolent strategies are more successful in achieving their goals, such as regime change, secession etc. In their paper as well as in their book, they find that that nonviolent resistance campaigns are more successful. They argue that nonviolent campaigns cause loyalty shifts among the elites and security forces. Furthermore, they argue that repression against nonviolent campaigns is not as easy to

justify as crackdowns on violent campaigns or insurgencies. Thus, the authors argue that repression against nonviolent campaigns raises the domestic and international costs for the regime. Accordingly, the international community imposes sanctions against a regime and therefore facilitates the success of nonviolent campaigns. However, Chenoweth and Stephan (2008, 2011) only consider cases in which there were actual political campaigns. Thus, it is not possible to compare cases with campaigns to cases without political campaigns and their likelihood for regime collapse and democratization. Furthermore, the NAVCO dataset aggregates several single events into political campaigns. Here, as in the CNTS dataset, coding rules are not entirely clear. It is hard to determine when one campaign starts and the other ends, or what the determinants are that make a campaign violent or completely nonviolent.

In the literature on mass mobilization destabilizing authoritarian regimes, the scholarly work assumes that autocratic rule is restrained by mass protest endangering it. Therefore, leaders and autocratic rulers have to co-opt and repress opposition movements and protest to avoid this threat (Gandhi 2008, Svolik 2012, Wintrobe 1998). Regarding the literature on reaching the goal of regime change, several scholars have emphasized that violence is the most effective measure to achieve it (Pape 2005, Stoker 2007). Using the NAVCO dataset Celestino and Gleditsch (2013) uncover that nonviolent protest increases the likelihood for authoritarian regimes to transition into democracies, conditional on the number of democracies in the region. They also find out that violent protest increases the chance for countries to stay an autocracy after a regime collapses.

Others argued that mass mobilization does not directly threaten authoritarian leaders, but through different mechanisms. Current strands of the scholarly work on mass protest acknowledged the challenges regarding informational processes in the coordination of protest (Shadmehr and Bernhardt 2011). The literature has focused on the distribution of information to facilitate the organization and coordination of protest. People on the forefront of revolutionary activity are supposed to serve as a multiplier in order to inform and educate the ordinary people about the downsides and misbehavior of the current regime (Bueno De Mesquita 2010, Shadmehr and Bernhardt 2013). Furthermore, some previous work has made conditional statements in which mass mobilization, violent or not, have an impact on the survival of authoritarian regimes. Hollyer et al. (2015) find that transparent autocracies, in an economic sense, are more vulnerable to mass protest. Other scholars focus on situations in which the elites influence and withhold information in order to prevent mass protest (Edmond 2013, Hollyer et al. 2014, Lorentzen 2014, Shadmehr and Bernhardt 2015).

Concluding on the literature presented above, previous work strongly suggests that protest in general can destabilize authoritarian countries, and moreover, that there might be different outcomes for violent and nonviolent protest. However, this literature has numerous limitations. Most of the literature presented above has focused on the study of authoritarian regimes that experienced transitions to democracy. Thus, scholars were only looking at the successful cases of mass mobilization, in which an autocratic regime was replaced by a democratic government. Previous work has con-

sidered the transition into the next authoritarian regime only in a few cases, as for example in Celestino and Gleditsch (2013) and Hollyer et al. (2015). While these studies have taken into account the possibility of transition into another autocratic regime, they either lack good data sources and/or do not consider the repressive nature of authoritarian regimes.

Therefore, I develop mechanisms that show how authoritarian regimes might respond to violent and nonviolent direct action in the street and argue how these mechanisms might influence the survival of regimes. Also, by relying on a new dataset that presents single events and not aggregated annual counts or arbitrary campaigns, I will clarify in which specific event the interaction of violence and repression has an impact on regime survival. According to the literature, there is good reason to believe that ongoing, nonviolent protest cycles should lead to the extinction of the regime, when the regime employs coercive measures on nonviolent protest. Notwithstanding, there is also a strand in the literature that would favor violence to lead to regime change. Thus, the questions that emerges is how the degrees of violence used by protesters and the regime interact?

3 Causal Mechanisms

In this section I briefly outline the different mechanisms that lead to my hypotheses. I argue that protest in general is threatening the survival of authoritarian regimes, that weak states are more vulnerable to violent protest than to nonviolent protest, and

finally that violent and nonviolent protest interacts with repression. I argue that regime survival becomes more likely when regimes can legitimize violence by violent actions of protesters.

3.1 Protest, Direct Action, and the Collapse of Regimes

The following section outlines the theoretical considerations and mechanisms how protest and direct action may lead to regime breakdown and the undermining of authoritarian regimes. Furthermore, I will show that a distinction between violent and nonviolent protest is important to understand the patterns of authoritarian survival and collapse. Celestino and Gleditsch (2013) argue that protest makes autocratic regimes more prone to collapse in general.

Direct political "street action" can influence the hazard of collapse in two different ways. First, according to Celestino and Gleditsch (2013) demonstrations and street protests publicly shows the relative power of the different actors in a state. That means mass protest shows weaknesses of regimes and the potential that the autocracy is not long- or for-ever-lasting. This might become visible through the relative lack of support and the ability of opponents to organize large-scale demonstrations and direct action. Hence, as outlined in Celestino and Gleditsch (2013), the fact that actors excluded from the political process have the ability and the resources to organize protests, they are also capable of challenging the ruling elite directly, make them step down, and force the regime to collapse. Nevertheless, authoritarian regimes mostly have the advantage to have control over the security forces which makes a direct

takeover more complicated for the opposition.

An alternative way how protest and demonstrations foster regime collapse is the impact protests can have on a regime's support groups and power base (Celestino and Gleditsch 2013). Mostly regimes do not collapse because the opposition seizes power directly as outlined in the previous mechanism, but through defections of support group members. For example, members of the ruling elite can try to get rid of the leadership if they are convinced proposed measures to stay in power will not work in order to save their own reputation in the post-collapse period. Also, for example members of the security apparatus might refuse to execute orders of repression and eventually side with protesters to turn against the regime. Hence, mass protest not solely aims to defeat the regime directly, but to impose costs on the elites and to demand concessions which eventually lead to collapse (Lake 1999, Sharp and Finkelstein 1973).

Thus, protesters and opposition activists can rely on mass mobilization to destabilize authoritarian regimes in the two ways outlined above. In this case it does not matter if the protesters rely on violent or nonviolent means, because both have the impact on the regime I described. They either defeat the regime directly by massive street protest and seize power, or they impose high costs to the regime and cause defections among the members of a regime's support group. Following on that I formulate the hypothesis:

H₁: If an autocracy experiences more protest, mass mobilization and street action, regime collapse becomes more likely

3.2 Administrative State Capacity, Protest and Collapse

In this section I argue that bureaucratic and administrative capacity are the most important aspects of state capacity when analyzing its interaction with protest and mass mobilization. I provide a mechanism that show how state capacity influences the outcomes of mass mobilization in autocracies and how low state capacity increases the vulnerability to violent conflict. This is because low capacity states are lacking the pre-condition to govern and prevent disorder and because these states do not provide the determinants for ruling elites' security.

The literature defines bureaucratic and administrative capacity as the government's reach and permeation into the territory, and to provide goods and services. Various scholars have argued that states with a higher capacity are more capable to handle conflicts (Fearon and Laitin 2003, Goodwin and Skocpol 1989, Knack 2001, Schock 1996, Skocpol 1969)

Thus, the mechanism that leads to state collapse in authoritarian regimes acts through the emerging security and defense dilemma generated by states with low state capacity. Haggard and Kaufman (2016) argue that collective mass mobilization is able to achieve regime change and to force governments to leave office when protest movement's exceed the state's capacity to handle the movement and to react. This means, the government is not capable of imposing coercive measures on protest movements which leads to a higher risk of collapse. Since violent protest pose a more

serious threat to the state and is harder to handle when state capacity is low, I argue that there should be a substantial higher risk for weak states when facing violent protest than facing nonviolent protest:

H₂: If more violent protest events occur in countries with low state capacity, regime survival becomes less likely

3.3 Violent and Nonviolent Protest, Repression, and Regime Collapse

The previous section hints to the fact that there might be differences between violent and nonviolent mass mobilization, its confrontation with the state and the repressive apparatus, and its impact on the survival of authoritarian regimes. As Celestino and Gleditsch (2013) note, a conflict of interest between different actors can lead to nonviolent direct action such as demonstrations and protest events, but it is necessary to distinguish the direct action, like protests and disobedience from orders, from so called routine political behavior like voting (Bond 1988, Sharp and Finkelstein 1973). This is, because routine political action is severely limited in authoritarian countries, so that the expression of incompatibility does quasi necessarily include direct action (Tilly 2007). Direct action can be violent, as in civil wars, terrorism, and violent protest, but also peaceful as for example in nonviolent demonstrations, strikes, and boycotts (Celestino and Gleditsch 2013).

The literature suggests that nonviolent and violent protest are easily interchangeable and there are cases in which opposition groups have actively switched tactics from nonviolent to violent measure and vice versa, as for example the ANC in South Africa or the IRA in Northern Ireland (Dudouet 2013, Sandler et al. 1983, Shellman et al. 2013). One of the key features about the systematic variation of the impact of violent and nonviolent protest on regime survival is conditional on the ability of the state to repress (Celestino and Gleditsch 2013).

Repression is often the government's answer towards expressions of dissatisfaction and demands of concessions, but it is argued to have ambiguous effects on the protest itself and also on the survival of the regime ordering repressive measures. Instead of deterring protesters, fierce repression might rather lead to escalation of protests and demonstrations, help organizing movements, and finally bring down a regime, especially when repression is considered as excessive and not justified (Davenport 2007, Gartner and Regan 1996, Lichbach 1987, Martin 2007)

Therefore, remaining peaceful can raise the costs for autocratic regimes to repress protest for several reasons. First of all, it is a logistical challenge to effectively apply coercive measures on the masses of large demonstrations and protest events (Celestino and Gleditsch 2013). Furthermore, it is easier for governments to repress radical groups and to justify the repression externally, because remaining citizens and people, as well as security forces are less likely to identify themselves with radical demands or measures. Thus, violence as a radical measure in demonstrations should be easier to be repressed violently (Gartner and Regan 1996). The actual decision to

violently repress is dependent about the threat for the state (Poe 2004). Thus, if this thread is perceived differently by the outside world, security forces, the international community and so on, than by the regime itself and repression is considered excessive, the use of force can backfire. Chenoweth and Stephan (2011) argue that members of the support coalition of an incumbent regime as well as the security forces are more likely to side with nonviolent resistance groups than with violent resistance groups. They argue this is because the supporters of a regime anticipate personal costs of repressing nonviolent campaigns and therefore choose to switch sides. This is because the elites are not prepared to counter a nonviolent movement with violence (Zunes 1994). Furthermore, Chenoweth and Stephan (2011) argue that repression may actually increase the number of people willing to participate in protests. Hence, the use of coercive measures against peaceful protesters might be a destabilizing factor for an authoritarian regime and lead to a higher risk of regime collapse

On the other hand, the use of violence by protesters makes the justification of coercive repression easier for authoritarian leaders, in order to guarantee the security of the state and its citizens against potential violent perpetrators (Celestino and Gleditsch 2013). As Chenoweth and Stephan (2011) imply, a state can mark violent insurgents, rebels and opponents of the state for example as terrorists and enemies of the people (Binnendijk and Marovic 2006, Chenoweth and Stephan 2011). Therefore, the government may argue that violence is needed in order to protect the citizens from this threat. Hence, violence against violent protesters should in fact stabilize authoritarian regimes and decrease their risk of regime collapse. Thus, the mecha-

nisms in this section lead me to the following two hypotheses about the interaction of violence and violent repression, and nonviolence and violent repression respectively.

H_{3a}: If nonviolent protest is met by violent repression of the government, regime survival becomes less likely

H_{3b}: If violent protest is met by violent repression of the government, regime survival becomes more likely

4 Research Design

In this section I will outline the research design. First, I will explain my data sources and the operationalization of variables. Then I will explain the model of survival analysis I will use for this paper.

4.1 Data Sources

4.1.1 Violent and Nonviolent Protest Events

In order to get information about violent and non violent protest events I will rely on the recently collected Mass Mobilization in Autocracies Database (MMAD) provided by the Communications, Networks and Contention research group of the University of Konstanz (Rød and Weidmann 2014). The database is an event database cover-

ing mass protest in all authoritarian countries according to Geddes et al. (2012^{a,b}) from 2003 to 2012. It is based on news reports from the three major news networks Associated Press (AP), Agence France Presse (AFP), and British Broadcasting Corporation (BBC). MMAD provides point data on protest events. An event, hence a mass protest, is defined as a public gathering of 25 or more people with an explicit political motivation, either against or in favor of the local, regional or national government. A protest can also be directed against private companies or non-state actors if it is politically motivated (Rød and Weidmann 2014). The dataset contains information about the date of the event, the location, the actor(s), and the issue(s) of protest. Furthermore it contains variables containing information about the direction of protest (pro-government or anti-government), and the scale (national, regional, local).

Most important for my analysis are the variables that provide information about the degree of violence used in a protest, either by the protesters, the security forces, or both. The categories for violence used by the protesters are "no violence", "clashes/property damage", "people injured", "lethal intervention". From that basis, I code a binary variable indicating whether a protest was violent or not, collapsing the three forms of violence into one category. I proceed similarly with the information about the security forces engagement. No presence or the presence of security forces during a protest are coded as nonviolent security forces engagement, while physical and lethal intervention are coded as violent intervention. Since a lot of protest event reports do not have information about the violent engagement of protesters I consider event

reports that do not explicitly mention violent acts by protesters as peaceful, while events are coded as violent events when it is mentioned in the original source. Based on this aggregation, I count the number of protests and repression events in each given regime-year.

4.1.2 State Capacity

Relying on Thies (2010), I use a fiscal sociology approach for the measurement of state capacity, that has been used by a wide range of other scholars of political science (e.g. Campbell 1993, Cheibub 1998, Fauvelle-Aymar 1999, Lieberman 2002, Timmons 2005, Hendrix 2010). This approach relying on an administrative or bureaucratic approach towards state capacity is more suitable for the analysis of social protest, since measures of for example, military capacity do not capture the aspects that make people decide whether they should start oppositional behavior at all (Hendrix 2010). Accordingly, it is not pure military or repressive capacity that deters social protest, but a state's resources and capabilities of monitoring, control, and identification of potential anti-regime protesters. Thus, this approach rather captures a regime's capabilities to collect information rather to repress (Hendrix 2010).

Thus, I employ a measure that is comparably directly based on tax revenue and therefore displays the state's strength (Thies 2010). I use a tax ratio as percentage of GDP measurement, which represents the state's extractive capacities and therefore its ability to control people and extract resources from them. According to Thies (2010), states with higher extractive capacities should be better able to deter social

conflict.

Data for this variable is obtained from the World Bank (2017a). To make the interpretation of the interaction effect hypothesized in the section above easier to interpret, I reverse the tax revenue/GDP measurement so that high values represent low levels of state capacity. For missing data, I employ linear interpolation using Zeileis et al.'s (2015) *zoo* package for R.

4.1.3 Destabilization and Collapse of Regimes

In order to get information about the collapse and destabilization of authoritarian regimes or the ruling clique, I will rely on Geddes et al. (2012a,b) dataset on autocratic regime breakdown. Following on Geddes et al. (2012a,b) definition, I consider the endpoint of regime destabilization as the removal of an authoritarian leader from office by a new leader or ruling coalition that has not had relations with the ruling elite before the ouster, or does not belong to the inner ruling circle. In contrast to Hollyer et al. (2015), I do not solely focus on regime collapses that were caused by popular uprising, but include every regime collapse in the given time frame. The rationality behind that is the potential of mass protest leading to for example, formal democratic transitions, or also to escalation into civil war as shown by many authors (Acemoglu and Robinson 2005, Boix 2003, Przeworski 2009, Rosendorff 2001). Also, this captures the nature of the focus of this thesis, analyzing the different degrees of violence used in mass protest. Since data from Geddes et al. (2012a,b) is only available until 2010, I updated the data according to their codebook until the end of my analyzed

time frame in 2012. The data identifies 74 different autocratic regimes, of which 17 collapsed in the given time frame. The regimes that collapse were in Bangladesh (2008), Egypt (2012), Georgia (2004), Guinea (2008, 2010), Haiti (2004), Cote d'Ivoire (2011), Kyrgyzstan (2005, 2010), Liberia (2003), Libya (2011), Mauritania (2011), Myanmar (2011), Nepal (2006), Pakistan (2008), Thailand (2007), and Tunisia (2011).

4.1.4 Control Variables

I will include several variables to control for alternative explanations that may drive the relationship between violent and nonviolent protest, repression and regime destabilization. First of all, I include binary control variables indicating the regime type of the given authoritarian country. Therefore I will rely on the extensive work of Geddes (2003, 2004), who defined different types of authoritarian regimes. The binary variable will indicate whether the country is a single-party, personalist, or military regime, or whether it is a monarchy. Different regime types face different challenges to satisfy support groups and to keep themselves in power. Furthermore, they have different channels in which political opposition can be expressed without taking to the streets or without facing repression (e.g. Hollyer et al. 2015, Weeks 2008, 2012). Therefore, I expect different results for different regime types.

Furthermore, I will include two control variables relying on the Democracy and Development Dataset by Cheibub et al. (2010). One is a categorical indicator that implies whether the members of the legislature of a country are nonpartisan, members form just one party, or from different parties. The second is a binary indicator

giving information about whether the nominal head of state has or had some type of affiliation with the military. These indicators are included because they have slightly different implications than the regime type dummies. For example, Venezuela under Hugo Chávez is not considered a military regime, however Chávez was part of the military as an Officer. This may change the command structure for security forces and their willingness to repress, even though the government is civilian (e.g. Gandhi 2008, Gandhi and Przeworski 2006, 2007, Hollyer et al. 2015, Svobik 2012)

Moreover, I will include a control variable for economic factors. Thus, I control for the percentage change in real GDP per capita. The literature suggests to include this control variable due to the role that economic development might play for democratization and political liberalization (Acemoglu et al. 2009, Ansell and Samuels 2010, Boix 2003, Przeworski and Limongi 1997, Przeworski et al. 2001). Data is obtained from the World Bank (2017b).

Finally, to account for previous instances of instability, I rely on Hollyer et al. (2015) to employ a control variable that indicates previous regime collapse in the countries. This is further explained below.

4.2 Empirical Strategy

To test my propositions that (a) protest in general, (b) violent protest in weak states, and (c) nonviolent protest in a repressive environment destabilize authoritarian regimes and increase the probability of regime collapse, and that (d) violent protest in repressive environment actually stabilizes the regime, I will outline a model

on the survival of regimes in this section. Since violent and nonviolent protest can occur simultaneously in a repressive regime I will employ Cox proportional hazard models of regime removal. I will estimate the probability of destabilization and eventual regime removal in a given year t , conditional on not already having done so.

I will use the authoritarian country-year as unit of analysis, with all authoritarian countries included in MMAD and Geddes et al. (2012*a,b*) dataset.

For the first hypothesis I fit the following model:

$$h_i(t) = h_0(t) \exp(yProtest_{l,t-1} + \mathbf{X}_{l,t-1}\beta) \quad (1)$$

Here, l describes the autocratic regime, t denotes the time, $h_0(t)$ is the baseline hazard function, and $\mathbf{X}_{l,t}\beta$ is the vector of covariates. Time is defined as the number of days a regime is in office. I cluster standard errors by the different authoritarian regimes and not by countries in all models.

For hypothesis 2 I add a term for the interaction between state capacity and protest into the model. Note that the variable for state capacity has been recoded so that high values of that variable actually mean low state capacity. Thus, the model

for hypothesis 2 looks as follows:

$$h_i(t) = h_0(t) \exp(y \text{Protest}_{i,t-1} + \delta \text{State Capacity}_{i,t-1} + \mu \text{Protest}_{i,t-1} \times \text{State Capacity}_{i,t-1} + \mathbf{X}_{i,t-1} \beta) \quad (2)$$

All parameters have the same meaning as in equation 1, however the term for state capacity is included. Following this equation, I fit the models for hypothesis 3a and 3b:

$$h_i(t) = h_0(t) \exp(y \text{Nonviolent Protest}_{i,t-1} + \delta \text{Violent Repression}_{i,t-1} + \mu \text{Nonviolent Protest}_{i,t-1} \times \text{Violent Repression}_{i,t-1} + \mathbf{X}_{i,t-1} \beta) \quad (3)$$

$$h_i(t) = h_0(t) \exp(y \text{Violent Protest}_{i,t-1} + \delta \text{Violent Repression}_{i,t-1} + \mu \text{Violent Protest}_{i,t-1} \times \text{Violent Repression}_{i,t-1} + \mathbf{X}_{i,t-1} \beta) \quad (4)$$

As Hollyer et al. (2015) suggest, this analysis gets more complicated since regimes may have experienced protest and instability in the past, prior to the timespan of the data. These prior events may have an impact on the stability during the timespan under analysis. As recommended by Hollyer et al. (2015), the best solution for this problem is to use conditional gap time models. Here, for regimes that faced collapse and stability in the past and for those who have not, the baseline hazard is calculated

separately (Box-Steffensmeier and Zorn 2002). According to Hollyer et al. (2015), this allows the shape and the level of baseline hazard to vary regarding to prior instances of instability.

Table 1 provides summary statistics about the variables used in the estimation framework.

Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Protest	24.18	60.681	0	670	601
State Capacity	14.039	6.247	0.323	45.253	590
GDP Growth	5.462	6.193	-62.076	34.5	591
Parties in Legislature	1.511	0.79	0	2	601
Military Leader	0.351	0.478	0	1	601
Single Party Regime	0.418	0.494	0	1	601
Personalist Regime	0.406	0.491	0	1	601
Military Regime	0.055	0.228	0	1	601
Nonviolent Protest	19.01	51.577	0	628	601
Violent Protest	5.17	13.638	0	156	601
Violent Repression	8.569	21.548	0	256	601
Violent Protest against People	1.468	3.635	0	44	601

5 Results

In this section I present the results of the different survival models I employ to identify the effect of mass protest on the survival of authoritarian regimes. All the tables showing results of survival models provide hazard rates, which are interpreted differently from usual coefficients in linear or nonlinear regression models. Hazard ratios are interpreted relative to 1, which means a hazard ratio larger than 1 means that higher values of the independent variable are correlated with a higher risk of regime collapse. In contrast, hazard ratios with values lower than 1 indicate that the independent variable decreases the risk for regime collapse.

In order to analyze the theoretical implications of the first hypothesis, I ran different Cox Proportional Hazard models to show the effects of the variables on the regime survival of authoritarian countries. Table 2 shows the results for the basic survival model explaining the overall effect of protest on the survival of authoritarian regimes. Looking at Table 2, there is clear evidence that protest and mass mobilization increases the risk of authoritarian regimes to collapse and to be removed. In the three different models I first estimate the effect of all 13.734 protest events in the data. The results imply that regimes experiencing more protest events in a given year have a higher risk of facing collapse. Thus, for every protest a regime faces, the risk of collapsing increases by roughly 1.2 percent, which is quite substantial. When looking at the covariates, the impact of a state's capacity is not distinguishable from 1, which means that we cannot say that the risk in- or decreases. Neither the GDP growth

variable has a statistically significant impact on the risk of collapse that authoritarian regimes face. In Model 1, the only two statistical significant control variables are the Parties in Legislature variable that indicates if there is no legislature, a one-party legislature, or several parties in the legislature. Having more parties in the legislature decreases a regime's risk of collapse by almost 50 percent. This might be an indicator of more democratic, or pseudo-democratic structures for decision-making which makes active street protest obsolete. For the different regime types, note that monarchies are the baseline categories for each regime variable so that the displayed risks are relative to regimes being a monarchy. As one can infer, monarchies seem to be the most stable regimes, since military regimes in all models and personalist regimes in the third model face substantially higher risks of regime collapse.

Since this paper's goal is to analyze differences between the impact of violent and nonviolent protest, I recalculated the first basic model, but differentiated between violent and nonviolent protest. The results remain in the theoretical expectations: Violent and nonviolent protest both increase a regime's risk to collapse significantly. However, violent protest seems to have a slightly higher risk for autocratic regimes.

One of the main assumptions of the Cox proportional hazard model is proportionality. To test for the proportionality assumption I use Schoenfeld and scaled Schoenfeld residuals. This gives me the possibility to test the proportionality assumption for each predictor and covariate. If the tests remain statistically insignificant (thus $p > 0.05$), I cannot reject the proportionality and I can assume that the proportionality assumption is not violated (Allison 2014). Here, I present the results for the

Schoenfeld residuals for Model 1 as well as the graphed scaled Schoenfeld residuals. All other tables can be found in the respective Stata do-file.

Table 3 show the results for the Schoenfeld residuals. All variables used in Model 1 are not statistically significant which supports the proportionality assumption for the Cox proportional hazard model. Figure 1 - Figure 8 show the scaled Schoenfeld residuals. Here, I provide log-log plots to test the proportionality. Since these plots are roughly parallel, I have further indication that the predictors do not violate the proportionality assumption (Allison 2014). For some of the following models the proportionality assumption is violated. However, this is only the case for the models that do not take into account historical instability. Thus, the results of these models should have less explanatory power. Nevertheless, these are also the models with the least fitting results according to my theory. In all other models, the proportionality assumption holds true.

Table 2: Cox PH Model: Protest and Regime Survival

	Model 1	Model 2	Model 3
Protest	1.012*** [1.003,1.022]		
Nonviolent Protest		1.011** [1.001,1.021]	
Violent Protest			1.115*** [1.065,1.166]
State Capacity	1.014 [0.931,1.105]	1.006 [0.926,1.093]	1.046 [0.953,1.148]
GDP Growth	1.024 [0.982,1.068]	1.018 [0.979,1.060]	1.034 [0.980,1.090]
Parties in Legislature	0.504** [0.273,0.930]	0.553* [0.300,1.019]	0.410*** [0.224,0.752]
Military Leader	0.870 [0.228,3.323]	0.784 [0.223,2.759]	1.093 [0.207,5.776]
Single Party Regime	1.194 [0.044,32.210]	1.677 [0.060,46.998]	0.202 [0.024,1.724]
Personalist Regime	22.695 [0.203,2533.823]	29.925 [0.206,4340.130]	14.806*** [2.090,104.896]
Military Regime	55.925* [0.490,6378.715]	78.295* [0.575,10660.298]	39.735*** [2.858,552.387]
# of Subjects	73	73	73
# of Failures	17	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Scaled Schoenfeld Residuals for Model 1

	Rho	(Chi²)	df	Prob>Chi²
Protest	0.05654	0.40	1	0.5281
State Capacity	-0.20439	1.79	1	0.1814
GDP Growth	0.07635	0.09	1	0.7694
Parties in Legislature	-0.11944	0.62	1	0.4303
Military Leader	0.11754	1.20	1	0.2728
Single Party Regime	0.14331	2.88	1	0.0898
Personalist Regime	0.12345	2.34	1	0.1261
Military Regime	0.09323	1.29	1	0.2567
Global Test		12.52	8	0.1295

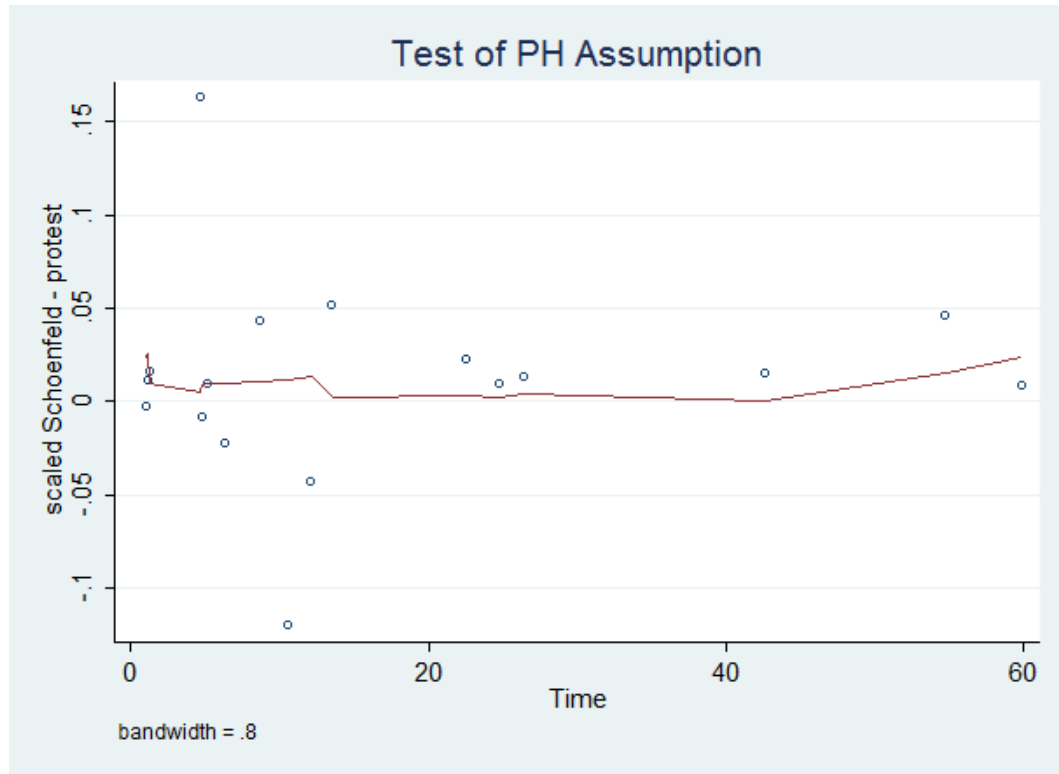


Figure 1: Scaled Schoenfeld Residuals: Protest

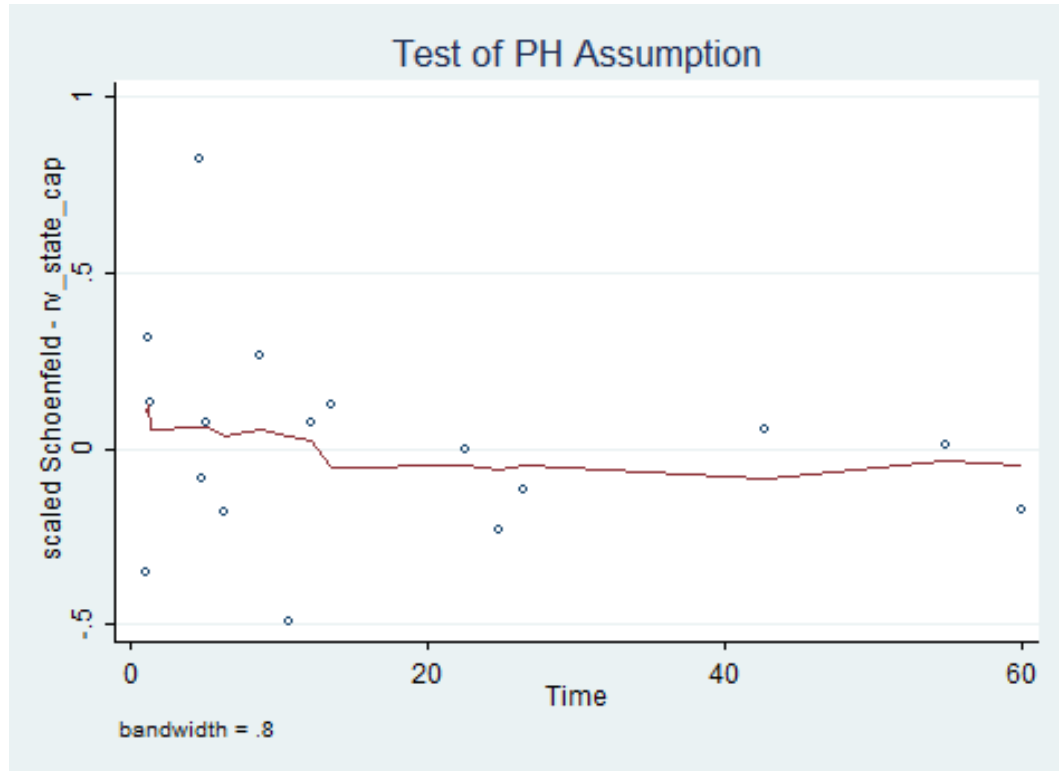


Figure 2: Scaled Schoenfeld Residuals: State Capacity

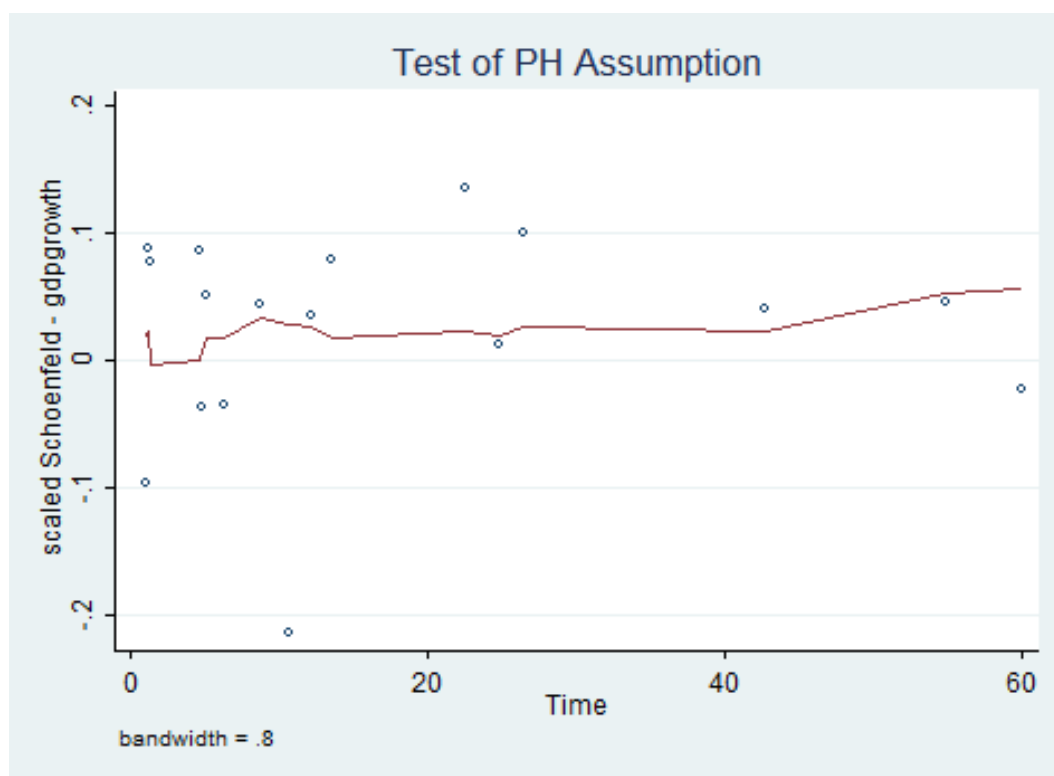


Figure 3: Scaled Schoenfeld Residuals: GDP Growth

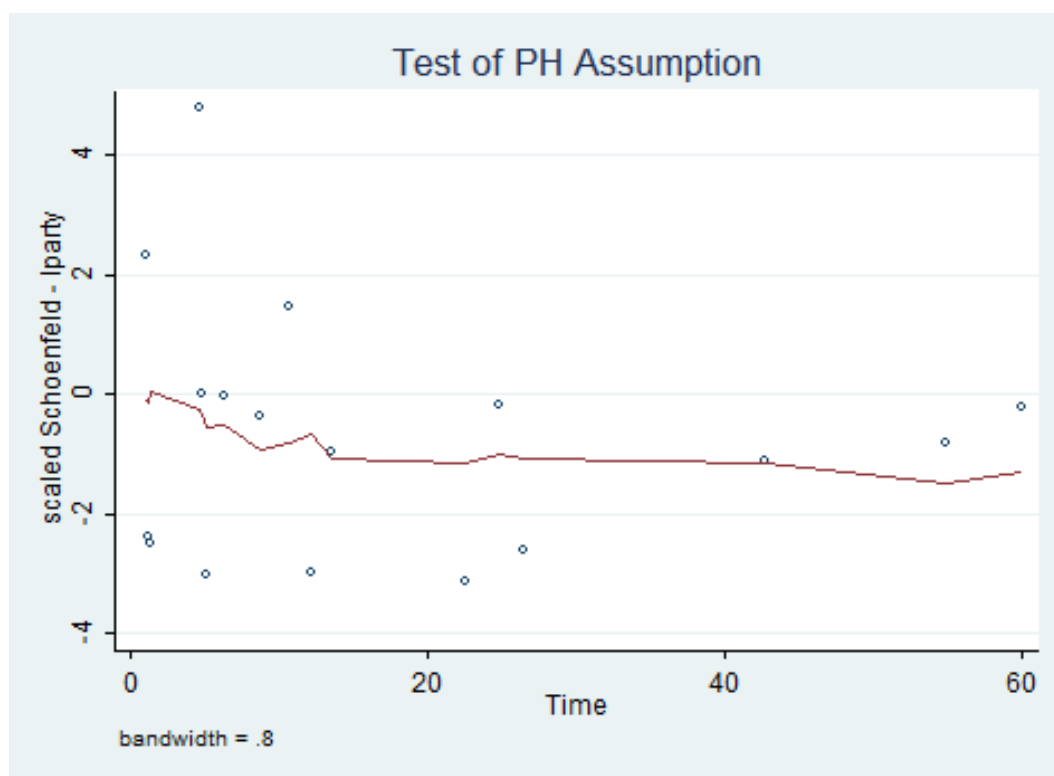


Figure 4: Scaled Schoenfeld Residuals: Parties in Legislature

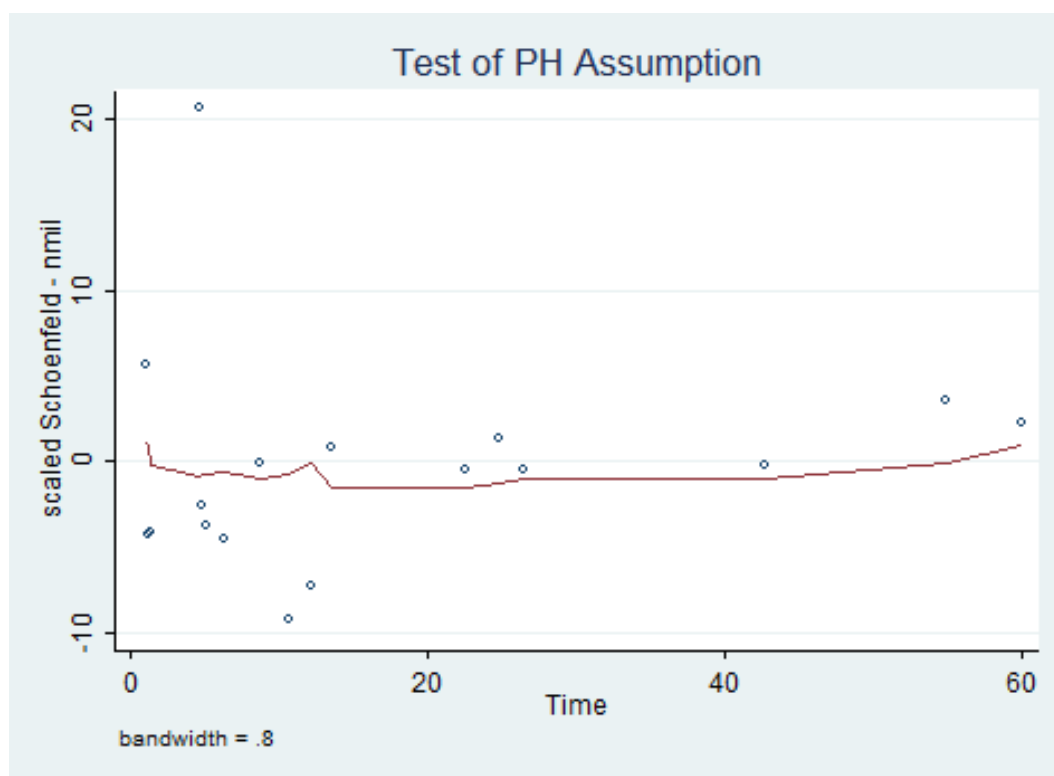


Figure 5: Scaled Schoenfeld Residuals: Military Leader

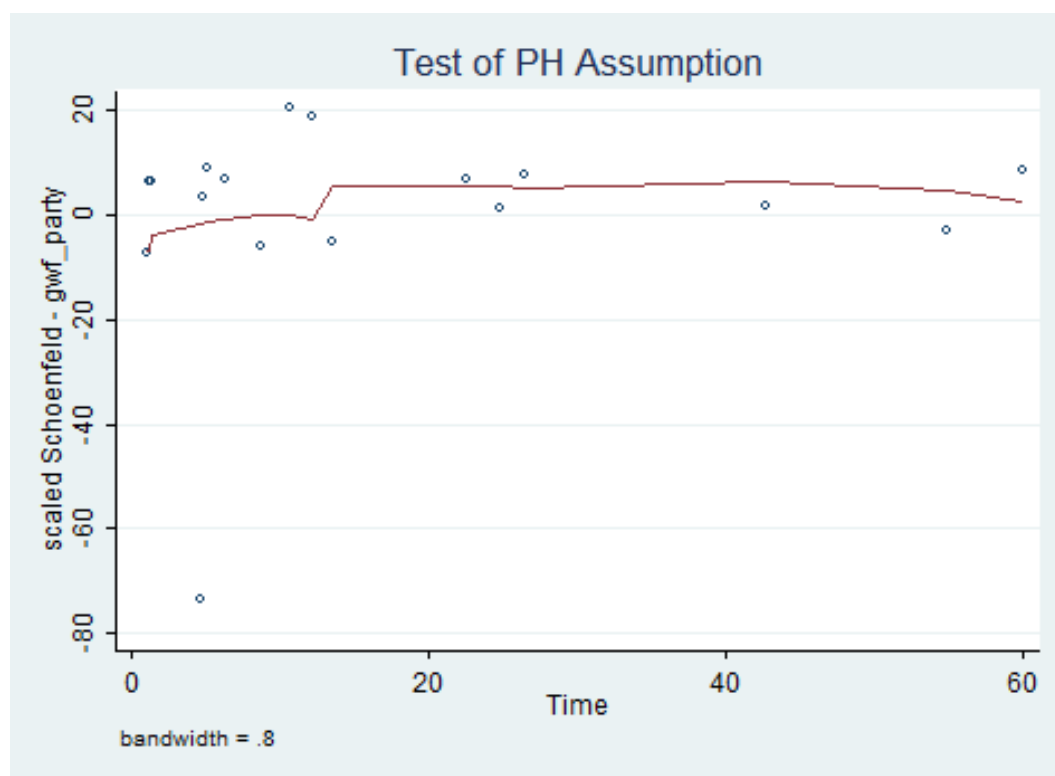


Figure 6: Scaled Schoenfeld Residuals: Single Party Regime

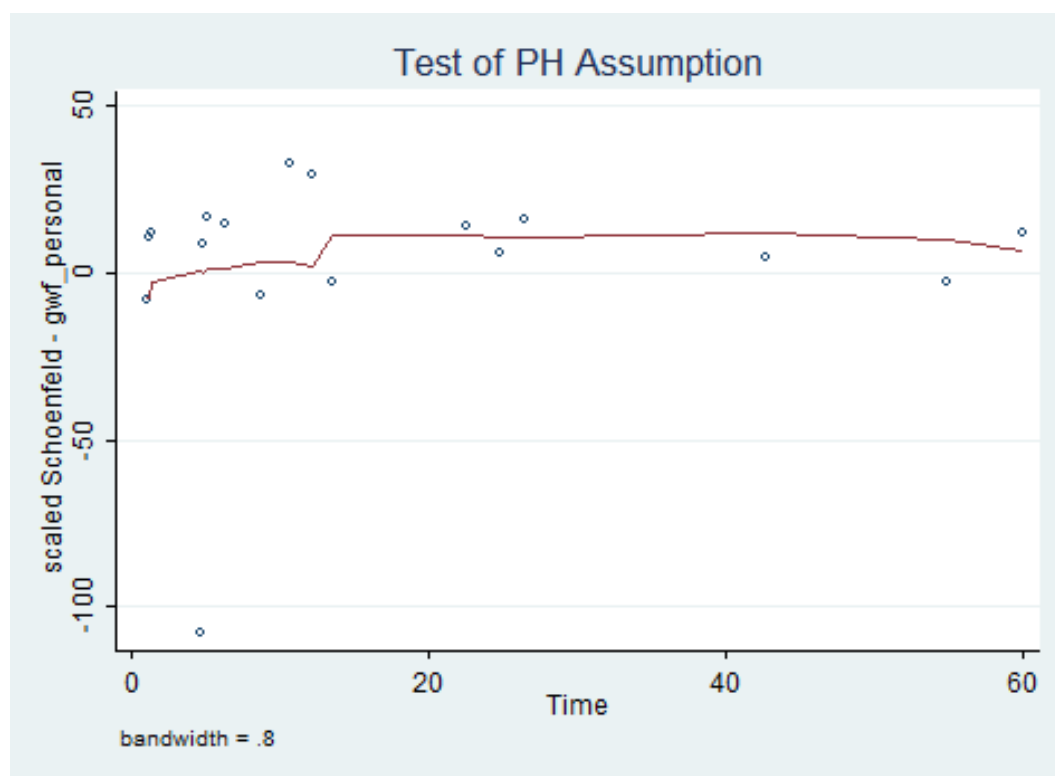


Figure 7: Scaled Schoenfeld Residuals: Personalist Regime

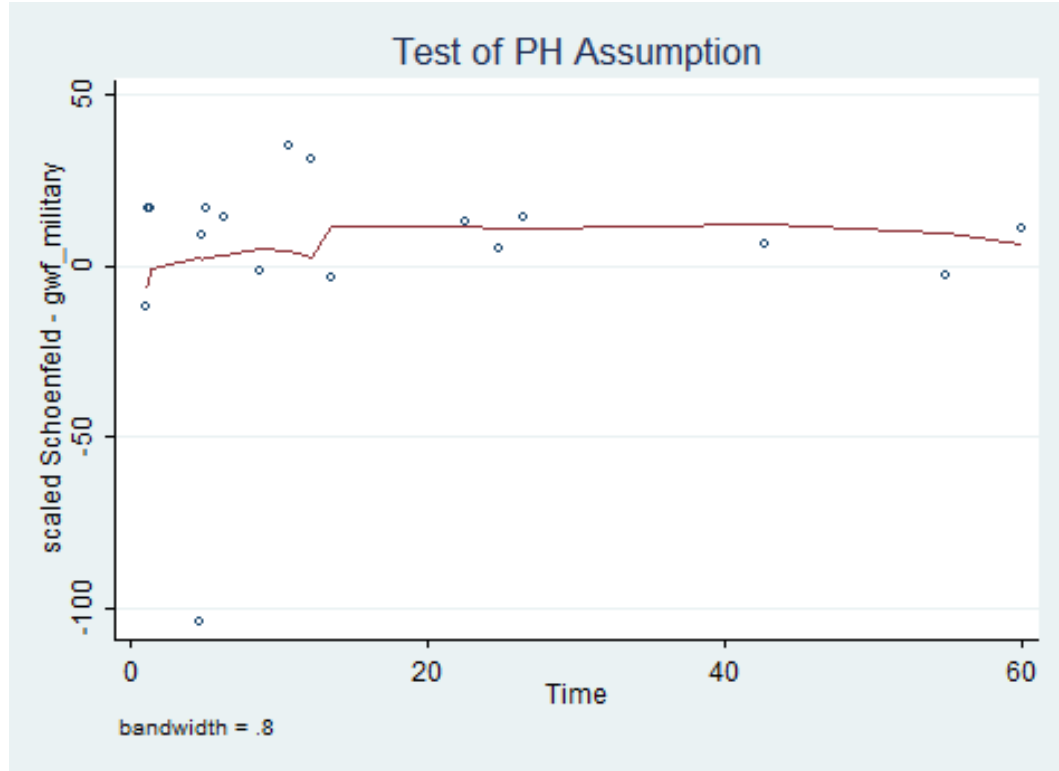


Figure 8: Scaled Schoenfeld Residuals: Military Regime

The analysis of autocratic regimes facing the threat of protest events is complicated by the presence of regimes that have experienced moments of instability and collapse in the past, because historical instability might influence present stability. To account for this I employ conditional gap time models that calculate the baseline hazard separately for regimes in countries that have experienced regime collapse and for those that have not (Box-Steffensmeier and Zorn 2002). Based on this historical experience with collapse, the baseline hazard is allowed to vary. Thus, relying on data about historic instability from Hollyer et al. (2015), I estimate the baseline hazard conditional on whether there has been prior instances of regime collapse separately in

one set of models ¹, in a second set of models I calculate the baseline hazard based on the number of previous collapses and in the third and last model I simply control for prior collapses with a binary indicator. Data is obtained from Hollyer et al. (2015)

Table 4 shows the results of the models taking into account previous instability in countries. The first three columns display the results for the baseline hazard calculated based on whether there was a previous collapse or not in the country. The results of the first three models confirm the results of Table 2, but the risk ratios change. Overall, protest increases the risk of regime collapse. However, if I control for previous collapse, nonviolent protest seems to produce a slightly higher risk for regimes than violent protest. Regarding the control variables, State Capacity does not have a significant impact on a regime's risk of collapse and also GDP growth does not increase or decrease the risk. Again, the number of parties in the legislature significantly decreases the risk of regime collapse for authoritarian regimes, while a leader having some type of affiliation with the military does not have an effect on regime stability. The regime type control variables reveal that single party regimes have a substantial and significant lower risk of facing regime collapse, while personalist and military regime face higher risk. Again, all this is compared to monarchies as the baseline model.

The other two models considering previous instances of instability confirm these results, only with slightly different risk ratios. However, the binary indicator as a control variable in the last three models is statistically not significant.

¹I rely on (Hollyer et al. 2015) and employ their categorical variable on previous regime collapse

To illustrate the implications of the impact of protest on the survival of authoritarian regimes I plot the estimates of the survival function based on the Control Past Collapse Model in Table 4 for different values of protest occurrence in countries, holding all other variables at their means with the exception of Parties in Legislature (=1), Military Leader (=0) and the regime type variables, which indicate a single party regime. Figure 9 shows the survival estimates for a country experiencing higher and lower number of protests in a given year. The plot clearly shows the differences in the survival rate after about 50 to 60 days. Figure 10 shows the influence of violent protests on the survival rate.

Thus, based on the results of Table 2 and Table 4, I find support for my first hypothesis. Protest and mass mobilization in deed increase a regime's risk of collapse. This risk is further increased when the models are taking previous instances of regime instability into account. However, the impact of violent and nonviolent protest is not entirely clear. While both forms of protest have a positive impact on the risk for regime collapse, violent protest seems to have a slightly larger effect in the overall model, while nonviolent protest seems to be the more "appropriate" form when countries experienced instability in the past.

Table 4: Cox PH Model:Protest and Regime Survival Conditional on Previous Collapse

	Cond. Past Collapse			Cond. Hist Instability			Control Past Collapse		
Protest	1.027*** [1.017,1.038]			1.026*** [1.014,1.038]			1.016*** [1.007,1.026]		
Nonviolent Protest		1.035*** [1.021,1.049]			1.033*** [1.018,1.049]			1.016*** [1.004,1.028]	
Violent Protest			1.121*** [1.069,1.175]			1.113*** [1.058,1.171]			1.106*** [1.058,1.157]
State Capacity	1.002 [0.890,1.129]	0.982 [0.872,1.106]	1.063 [0.962,1.175]	0.942 [0.834,1.064]	0.926 [0.811,1.056]	1.009 [0.912,1.116]	1.000 [0.926,1.080]	0.995 [0.921,1.076]	1.039 [0.952,1.133]
GDP Growth	1.041 [0.977,1.110]	1.037 [0.975,1.104]	1.051 [0.982,1.125]	1.034 [0.975,1.096]	1.031 [0.974,1.092]	1.045 [0.976,1.119]	1.031 [0.982,1.083]	1.022 [0.976,1.071]	1.039 [0.983,1.098]
Parties in Legislature	0.439*** [0.249,0.774]	0.462*** [0.275,0.776]	0.412** [0.203,0.834]	0.447*** [0.248,0.803]	0.475*** [0.275,0.822]	0.427*** [0.224,0.814]	0.553** [0.319,0.958]	0.623* [0.372,1.044]	0.469** [0.258,0.852]
Military Leader	0.557 [0.106,2.923]	0.582 [0.123,2.753]	0.494 [0.098,2.481]	0.418 [0.072,2.433]	0.452 [0.084,2.442]	0.412 [0.078,2.163]	0.590 [0.148,2.345]	0.523 [0.138,1.987]	0.878 [0.148,5.218]
Single Party Regime	0.086*** [0.016,0.473]	0.192** [0.041,0.906]	0.006*** [0.000,0.086]	0.153** [0.034,0.686]	0.336 [0.085,1.317]	0.012*** [0.001,0.219]	0.254 [0.028,2.321]	0.329 [0.009,11.448]	0.144** [0.022,0.952]
Personalist Regime1	18.097*** [2.758,118.744]	20.758*** [3.064,140.619]	12.009*** [2.028,71.123]	53.415*** [7.823,364.699]	58.713*** [7.988,431.565]	33.022*** [6.466,168.644]	5.032 [0.478,52.930]	5.140 [0.087,304.114]	7.786** [1.218,49.777]
Military Regime	28.160** [1.968,403.028]	24.389** [1.975,301.230]	43.851** [2.374,810.064]	79.055*** [6.194,1008.939]	71.109*** [5.841,865.750]	95.003*** [9.689,931.538]	8.761* [0.737,104.142]	9.437 [0.150,595.260]	18.532** [1.835,187.177]
Hist. Collapse							14.773 [0.481,453.457]	13.550 [0.293,625.691]	3.551 [0.175,71.922]
# of Subjects	73	73	73	73	73	73	73	73	73
# of Failures	17	17	17	17	17	17	17	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

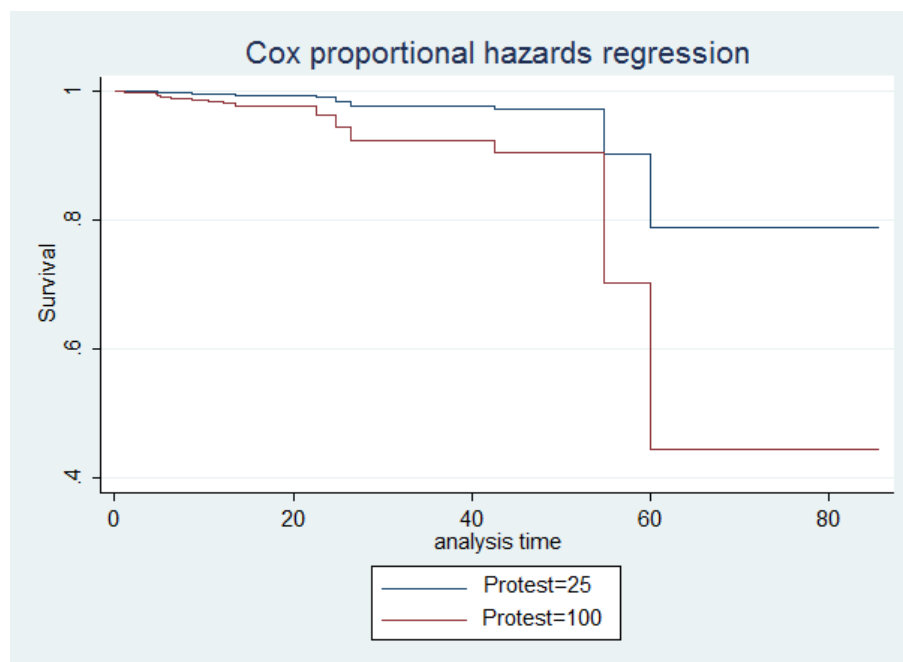


Figure 9: Survival Rates as Function of Protest

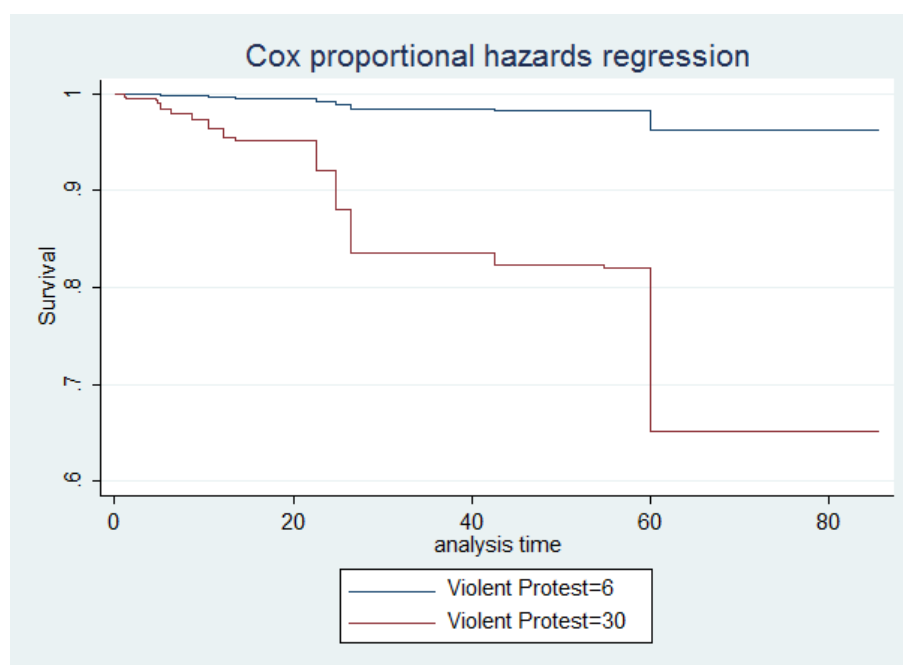


Figure 10: Survival Rates as Function of Violent Protest

Table 5 shows the results for the analysis of hypothesis 2, which states that regimes experiencing violent protest are more likely to collapse conditional on the state capacity of the regime. Again, Table 5 shows the results for the interaction of protest and state capacity overall and the results for violent and nonviolent protests, without considering previous instability.

Model 4 shows, that the overall interaction effect of protest and state capacity is statistically not distinguishable from 1, which means regimes with low state capacity experiencing protest do not face higher risks of collapse than those with high state capacity. Model 5 shows, that also the interaction of nonviolent protest and state capacity has no significant influence on the risk of breakdown. This means, being peaceful poses not a higher threat to regimes than overall protest as a mixture of violent and nonviolent protest. However, as predicted by the theory and claimed in my second hypothesis, the interaction of violent protest and low state capacity has a significant impact on the risk of collapse as shown in Model 6. Thus, when a state is weak, violent protest is most effective in causing regime collapse.

Table 5: Cox PH Model: Protest, State Capacity and Regime Survival

	Model 4	Model 5	Model 6
Protest	0.990 [0.957,1.024]		
State Capacity	0.945 [0.825,1.082]	0.933 [0.796,1.093]	0.950 [0.837,1.078]
Protest \times State Capacity	1.002 [0.999,1.005]		
Nonviolent Protest		0.971 [0.881,1.070]	
Nonviolent Protest \times State Capacity		1.003 [0.996,1.010]	
Violent Protest			1.009 [0.920,1.106]
Violent Protest \times State Capacity			1.007** [1.001,1.014]
GDP Growth	1.017 [0.979,1.057]	1.014 [0.978,1.052]	1.016 [0.971,1.063]
Parties in Legislature	0.472** [0.265,0.840] [0.273,0.930]	0.522** [0.308,0.885] [0.300,1.019]	0.408*** [0.220,0.757] [0.224,0.752]
Military Leader	0.948 [0.254,3.537]	0.780 [0.203,2.999]	0.796 [0.135,4.702]
Single Party Regime	1.213 [0.185,7.949]	1.465 [0.131,16.396]	0.166** [0.031,0.890]
Personalist Regime	26.794*** [2.231,321.751]	33.034** [1.399,779.938]	27.618*** [4.935,154.550]
Military Regime	41.563** [2.198,786.053]	51.682** [1.312,2036.382]	54.520*** [4.726,628.977]
# of Subjects	73	73	73
# of Failures	17	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Regarding the control variables, again, more political parties in a legislature decrease the risk of collapse drastically in authoritarian regimes. This is strong, the risk is decreased by around 50 percent, and statistically significant across all models. Furthermore, personalist and military regimes face higher risks compared to monarchies

and single party regimes, while single party regimes face a lower risk of collapsing in the last model when interacting violent protest with state capacity. The economic control variable GDP growth has no statistically significant impact on the hazard ratios.

To take previous instances of instability into account I again employ conditional gap time models for the analysis of hypothesis 2. The results in Table 6 show how protest interacts with state capacity when controlling for this previous instability. The models are calculated as in Table 4. As we can see in the first set of models, all forms of protest, nonviolent, violent, and both together have significant effect on a regime's risk for collapse conditional on the state capacity when the country experienced instability in the past. Again, violent protest has the strongest effect on the hazard ratio. However, in the second set of models, when the baseline hazard is calculated based on the categorical variable that represents the number of collapses, the hazard ratios for overall protest and nonviolent protest are not statistically significant. Only the interaction effect of violent protest and low state capacity increase the risk for collapse significantly. Thus, conditional on the intensity of previous instability, violence and low state capacity are the greatest threat to authoritarian regimes. This is also the result in the last set of models when I simply control for previous instability. Though, results are the least strongest and only significant at the 10% level.

Regarding the controls, I find results similar to the previous tables across all models. In general, the number of parties in the legislature decrease the risk of collapse. Again, single party regimes face lower risks, while personalist and military

regimes face higher risks of collapse. This is statistically significant and strong across all models.

Table 6: Cox PH Model: Protest, State Capacity and Regime Survival Conditional on Previous Collapse

	Cond. Past Collapse			Cond. Hist Instability			Control Past Collapse		
Protest	0.996 [0.974,1.018]			1.002 [0.969,1.037]			1.003 [0.965,1.042]		
State Capacity	0.882 [0.739,1.053]	0.881 [0.736,1.055]	0.922 [0.813,1.046]	0.883 [0.723,1.077]	0.888 [0.732,1.078]	0.885 [0.743,1.054]	0.954 [0.825,1.103]	0.941 [0.800,1.108]	0.953 [0.843,1.077]
Protest \times State Capacity	1.003*** [1.001,1.004]			1.002 [0.999,1.004]			1.001 [0.998,1.004]		
Nonviolent Protest		0.998 [0.968,1.028]			1.010 [0.965,1.058]			0.989 [0.912,1.071]	
Nonviolent Protest \times State Capacity		1.003** [1.000,1.005]			1.002 [0.998,1.005]			1.002 [0.996,1.008]	
Violent Protest			0.967 [0.888,1.053]			0.944 [0.855,1.043]			1.012 [0.925,1.107]
Violent Protest \times State Capacity			1.012*** [1.005,1.020]			1.014*** [1.004,1.024]			1.007* [1.000,1.014]
GDP Growth	1.020 [0.967,1.075]	1.020 [0.968,1.075]	1.021 [0.966,1.080]	1.025 [0.969,1.086]	1.026 [0.970,1.085]	1.024 [0.959,1.094]	1.023 [0.977,1.072]	1.017 [0.975,1.061]	1.019 [0.971,1.070]
Parties in Legislature	0.376*** [0.209,0.677]	0.408*** [0.234,0.713]	0.345*** [0.167,0.713]	0.426*** [0.241,0.755]	0.460*** [0.267,0.792]	0.375*** [0.191,0.736]	0.527** [0.306,0.908]	0.588** [0.357,0.968]	0.455** [0.250,0.830]
Military Leader	0.410 [0.082,2.056]	0.469 [0.107,2.051]	0.320 [0.054,1.902]	0.411 [0.064,2.626]	0.459 [0.080,2.635]	0.372 [0.053,2.611]	0.571 [0.133,2.458]	0.503 [0.121,2.085]	0.700 [0.127,3.874]
Single Party Regime	0.810 [0.156,4.196]	0.963 [0.211,4.387]	0.294 [0.037,2.334]	0.965 [0.079,11.802]	0.964 [0.127,7.320]	1.396 [0.094,20.742]	0.433 [0.045,4.210]	0.559 [0.049,6.333]	0.153** [0.029,0.817]
Personalist Regime	156.804*** [17.761,1384.374]	126.268*** [12.875,1238.371]	148.319*** [20.787,1058.299]	219.373*** [12.143,3963.023]	144.616*** [10.104,2069.760]	1126.403*** [38.438,33008.867]	9.632* [0.863,107.536]	10.901 [0.551,215.622]	17.292*** [2.490,120.108]
Military Regime	141.608*** [9.791,2048.049]	90.720*** [7.283,1130.026]	327.551*** [25.193,4258.727]	212.238*** [20.910,2154.266]	127.662*** [13.569,1201.065]	1897.068*** [82.102,43833.989]	13.498** [1.527,119.293]	14.731* [0.927,234.070]	29.925*** [2.786,321.446]
Hist. Collapse							9.989 [0.240,415.542]	8.212 [0.249,270.278]	2.974 [0.111,80.052]
# of Subjects	73	73	73	73	73	73	73	73	73
# of Failures	17	17	17	17	17	17	17	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Concluding on the analysis of the interaction effect of violent and nonviolent protest with state capacity, I find that all forms of protest increase the risk of collapse for regimes when state capacity is low, conditional on previous instability. However, violent protest has the strongest effect. The reason for that is outlined in the theory section above. Thus, I also find support for the second hypothesis of this thesis. Violent protest indeed increases the risk of regime collapse conditional on a regime's capacity.

Hypothesis 3a and 3b make claims about the levels of violence used in mass protest and direct street action and their interaction effect with violent government repression. In hypothesis 3a I argue that an authoritarian regime faces a higher risk of collapse when it meets nonviolent protest with coercive measures. This is because it might lead to loyalty shifts and decline of international recognition and support through the legitimization problem governments face when cracking down on peaceful protesters. Table 7 shows the results for the simple interaction of nonviolent protest and violent repression, and violent protest and violent repression respectively.

Model 7 shows the results for the Cox Proportional Hazard Model when interacting nonviolent protest with violent repression. The single coefficients are positive and statistically significant, even though the coefficient for nonviolent protest only on the 10 percent level. The interaction effect is positive and statistically significant on the 5 percent significance level. However, the effect of increased risk is very small. It is so small, that the numbers actually do not show up in the table. Considering the control variables I find the same pattern as in all the models before. More parties

in the legislature decrease the risk of regime collapse, and military regimes face a higher risk of collapse. Interestingly, the hazard ratios for single party regimes and personalist regimes hint in the same direction as in the tables before, but are not statistically significant.

Model 8 shows the interaction effect for violent protest and violent repression. Against my theory presented in the sections above, regimes do not become more stable when answering violent protest with violence. Thus, this would be some type of evidence that authoritarian regimes cannot declare violent protesters as terrorist and fight them violently. All control variables behave again as in the previous models.

Table 7: Cox PH Model: Violent and Nonviolent Protest and Repression

	Model 7	Model 8
Nonviolent Protest	1.013* [0.999,1.027]	
Violent Repression	1.057*** [1.023,1.091]	0.940 [0.859,1.029]
Nonviolent Protest \times Violent Repression	1.000** [1.000,1.000] [0.999,1.005]	
Violent Protest		1.195*** [1.101,1.296]
Violent Protest \times Violent Repression		1.000 [0.999,1.002]
State Capacity	1.050 [0.948,1.163]	1.006 [0.917,1.104]
GDP Growth	1.029 [0.978,1.083]	1.024 [0.977,1.073]
Parties in Legislature	0.506** [0.282,0.907]	0.383*** [0.191,0.765]
Military Leader	1.195 [0.271,5.270]	0.890 [0.144,5.498]
Single Party Regime	0.512 [0.022,11.829]	0.102** [0.013,0.812]
Personalist Regime	15.833 [0.255,982.546]	12.633** [1.658,96.255]
Military Regime	47.299* [0.814,2747.986]	24.337** [1.408,420.498]
# of Subjects	73	73
# of Failures	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

As for the previous hypotheses, I will employ conditional gap time models for hypothesis 3a and 3b to account for previous instability. Because of estimation feasibility of the data structure I only estimate the baseline hazard based on the number

of previous instances of instability for hypothesis 3a and the baseline hazard on the occurrence of previous instability for hypothesis 3b. I employ the model including a control for previous instability for both hypotheses. Table 8 shows the results for hypothesis 3a. The results are as in Table 7 rather mixed and not as clear as for the other hypotheses. The interaction of nonviolent protest and violent repression is only statistically significant when simply controlling for previous instability. Moreover, the effect is very low, and risk of collapse is only slightly increased. Thus, I am not completely confident to confirm hypothesis 3a.

Table 9 shows the results for the interaction of violent protest and violent repression, which are expected to stabilize a regime and decrease its hazard ratio of regime collapse. As one can infer from the table, the interaction effect of violence and violent repression is not statistically distinguishable from 1, which means there is no increasing or decreasing effect on a regime's risk to collapse.

In the analyses described above I cannot find strong support for hypothesis 3a and 3b. There is some support for the hypothesis that violent repression against peaceful protesters might increase a regime's risk to collapse, but the effect is not very large. Violence against violent protesters seems not to influence the risk for regime collapse.

Table 8: Cox PH Model: Violent Protest and Repression Conditional on Previous Instability

	Cond. Hist. Instability	Control Past Collapse
Nonviolent Protest	1.027** [1.004,1.052]	1.016** [1.004,1.028]
Violent Repression	0.992 [0.917,1.074]	1.046*** [1.014,1.078]
Nonviolent Protest \times Violent Repression	1.000 [1.000,1.001]	1.000** [1.000,1.000]
State Capacity	0.945 [0.798,1.120]	1.035 [0.944,1.134]
GDP Growth	1.037 [0.976,1.103]	1.039 [0.980,1.103]
Parties in Legislature	0.463*** [0.265,0.810]	0.581** [0.342,0.988]
Military Leader	0.404 [0.073,2.239]	0.830 [0.169,4.071]
Single Party Regime	0.267* [0.065,1.091]	0.237 [0.018,3.110]
Personalist Regime	122.492*** [18.168,825.856]	5.947 [0.236,149.957]
Military Regime	174.768*** [10.701,2854.211]	12.956 [0.432,388.178]
Hist. Collapse		7.125 [0.370,137.282]
# of Subjects	73	73
# of Failures	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

From a theoretical perspective, this is an interesting observation that needs further discussion and testing. The variable representing violent protest includes all acts of violence of protesters and does not distinguish the degrees of violence used. Thus, violence against things and violence against people, eventually resulting in their death, are collapsed into one single category *violence*. It is plausible to assume that their

might be different effects when distinguishing between violence against things and simple clashes, and the cases where people injured or killed by protesters. I assume it is much easier for governments to justify violence against protesters that hurt or even killed other people, while legitimization is more complicated when they "just" destroy things, burn cars or throw stones at armored police vehicles. Therefore, I run the models for violent protest again, but this time I removed the observations from the violence variable that just represented clashes and violence against things.

Table 9: Cox PH Model: Nonviolent Protest and Repression Conditional on Previous Instability

	Cond. Past Collapse	Control Past Collapse
Violent Protest	1.208*** [1.096,1.332]	1.190*** [1.085,1.304]
Violent Repression	0.939 [0.866,1.017]	0.954 [0.883,1.031]
Violent Protest \times Violent Repression	1.000 [0.999,1.002]	1.000 [0.999,1.002]
State Capacity	1.020 [0.923,1.127]	1.000 [0.914,1.094]
GDP Growth	1.039 [0.982,1.100]	1.028 [0.979,1.080]
Parties in Legislature	0.347** [0.152,0.792]	0.429*** [0.225,0.815]
Military Leader	0.374 [0.069,2.034]	0.815 [0.148,4.477]
Single Party Regime	0.000** [0.000,0.530]	0.068** [0.007,0.692]
Personalist Regime	11.010* [0.943,128.590]	4.647 [0.389,55.525]
Military Regimey	30.737* [0.582,1624.645]	7.780 [0.359,168.582]
Hist. Collapse		3.857 [0.185,80.554]
# of Subjects	73	73
# of Failures	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10 shows the results for the analysis only taking into account violent protest that were directed against humans and either injured or killed them. The single hazard ratios for violent protest and violent repression show that they increase a regime's likelihood of collapse, given the other variable equals zero. Thus, violent protest with-

out repression increases the risk of collapse, while violent repression without protest increases the risk of collapse.

Table 10: Cox PH Model: Violent Protest against People and Repression Conditional on Previous Instability

	Cond. Past Collapse	Hist. Instability	Control Past Collapse
Violent Protest	1.241*** [1.095,1.407]	1.355*** [1.158,1.585]	1.263** [1.050,1.521]
Violent Repression	1.136*** [1.050,1.230]	1.104*** [1.040,1.171]	1.064*** [1.027,1.102]
Violent Protest \times Violent Repression	0.993*** [0.989,0.997]	0.993*** [0.990,0.996]	0.996*** [0.993,0.999]
State Capacity	1.023 [0.940,1.114]	0.984 [0.872,1.111]	0.990 [0.897,1.093]
GDP Growth	1.025 [0.961,1.094]	1.032 [0.955,1.115]	1.027 [0.970,1.087]
Parties in Legislature	0.485* [0.227,1.036] [0.152,0.792]	0.533* [0.270,1.054] [0.225,0.815]	0.593* [0.340,1.034]
Military Leader	0.417 [0.067,2.576]	0.611 [0.103,3.619]	0.798 [0.152,4.198]
Single Party Regime	0.001*** [0.000,0.081]	0.010*** [0.000,0.252]	0.074** [0.006,0.839]
Personalist Regime	13.288** [1.088,162.289]	7.548* [0.815,69.895]	2.819 [0.337,23.584]
Military Regime	26.349* [0.986,704.115]	9.002 [0.456,177.669]	5.027 [0.463,54.560]
Hist. Collapse			12.606 [0.291,545.411]
# of Subjects	73	73	73
# of Failures	17	17	17

Intervals are presented in brackets. All standard errors have been clustered by autocratic regime

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This relationship becomes interesting when taking a look at the interaction of both terms. Across all three models taking the previous instances of instability into account, the interaction of violent protest against humans and violent repression actually decreases the risk of regime collapse. This is according to the theory, because it is easier to justify and legitimize violence against other violent actors. The effect

is fairly strong, which means that for every violent protest that is repressed violently, the risk of collapse is reduced by about 0.4 percent to 0.7 percent. Given the amount of protest a country might experience, this would add up significantly. As in the previous models, the state capacity variable and the GDP growth are statistically not distinguishable from 1. Also, as we have seen multiple times before, the number of parties in the legislature decreases the risk of state collapse. Note however, this effect is only significant at the 10 percent level in the models accounting for violence against people. Also, the regime type variables show the same patterns as in the previous models, single party regimes being the ones with the lowest risk of regime collapse, compared to monarchies as a baseline, and personalist and military regimes with an increases risk of collapse. Again, for reasons of better illustrations I plot the estimates of the survival function for given values. Figure 11 shows the estimates of the survival functions for the Control Past Collapse Model in Table 10. It shows the survival estimates when a low number of violent protest against people interacts with high numbers of violent repression and a more or less similar amount of violence and repression. Thus, when a regime represses violence with violence "just the right amount", regime collapse becomes less likely than when the regime is an extreme oppressor or does not repress at all.

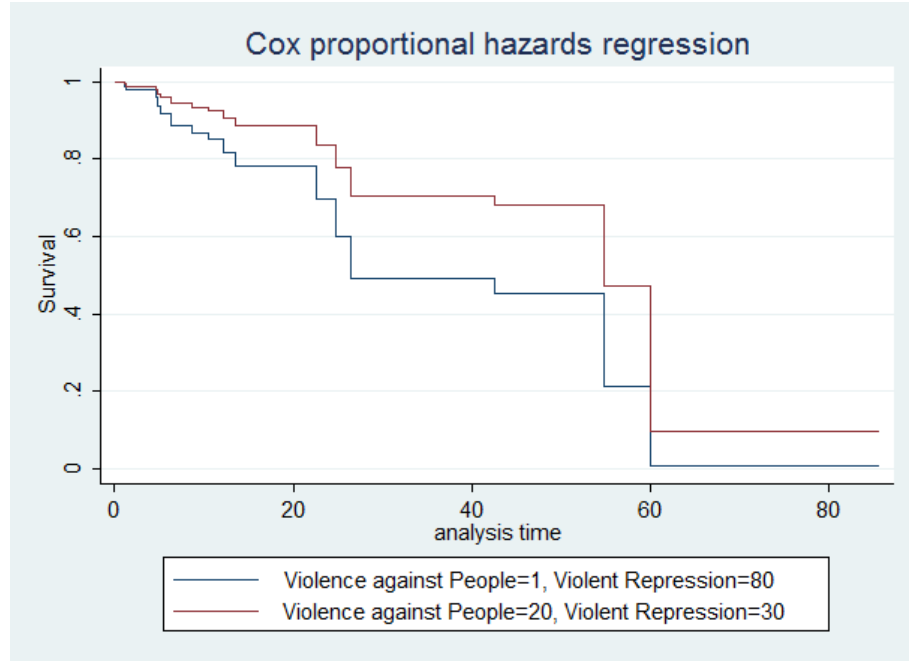


Figure 11: Survival Rates as Function of Violence against People and Repression

6 Limitations and Conclusion

Violent and nonviolent protest and street action is associated with the instability and collapse of authoritarian regimes. Previous research has tried to analyze which strategy is better for protesters in order to achieve their goal of regime removal and which impact it has on the following system. However, most of the previous research had several issues. A lot of work was only looking on success cases of either regime breakdown and/or successful democratization. Other scholars experienced constraints due to the data sources they chose for their analysis. Furthermore, most scholars do not consider the repressive nature of autocratic regimes in their analyses.

This thesis is addressing the question of violent and nonviolent protest, and its

impact on regime stability by relying on a new, daily event dataset that includes protests in every authoritarian regime in the world. Based on previous research, I develop mechanisms that show how protest in general leads to increased risks for regime collapse. I continue developing the theory and argue that regimes with low state capacity are especially susceptible to violent protest because they lack the capacity of surveillance, control, and eventually repression. Finally, I include the repressive nature of authoritarian regimes in my theory and argue that violent repression against peaceful protest should increase the risk of regime collapse due to legitimization problems. Furthermore, I argue that violent repression against violent protests is easier to justify, by for example declaring protesters as terrorists, and therefore it should actually make regimes more stable. I employ Cox Proportional Hazard Models and extensions as conditional gap time models to analyze the effect of violent and nonviolent protest, state capacity, and repression on the survival rates of autocratic regimes while also taking into account previous instances of instability.

The findings imply that protest in general makes regimes more likely to collapse and regimes with low state capacity are most vulnerable to violent protest. Furthermore, I find that violent and nonviolent protest has different effects on the regime survival if a regime represses violently. While repressing nonviolent protest violently has not a statistical significant effect on the regime survival, the repression on violent protest makes regimes more stable. However, this is only true for violent protest that is directed against people and causes harm and fatalities. Thus, I find support for the hypothesis that authoritarian regimes can legitimize repression.

However, this thesis is not free from potential problems. Even though MMAD is more suited for the duration analysis presented here than aggregated data as for example the NAVCO dataset, it is a potential source for problems. First of all, because it is based on media event reports it is not guaranteed that MMAD includes every protest event in the respective countries. It is more likely that protests in rural areas are underrepresented in the dataset, since it is based on news reports and are subject to some kind of reporting bias. Moreover, I consider event reports that do not mention violent acts committed by protesters explicitly as peaceful. This might not be the right approach to differentiate between violent and nonviolent protest events. The non-reporting of violence might not be driven by the actual absence of violence, but by, for example, censoring of the government.

Furthermore, endogeneity is an issue for this thesis. Even though I find strong empirical support for my proposed hypotheses, I cannot finally prove the causal chain that leads to the increased risk of regime collapse. The theory suggests quite logically and previous work has argued in the same direction that protest causes increased instability in authoritarian regimes. However, there is the possibility that instability increases the risk for protest in authoritarian regimes. This would imply that violent or non violent protest is driven by different patterns of regime instability. If this was true it would be a very interesting area for new research. Nevertheless, this thesis lacks the final proof of causality, which opens up space for future research. To finally proof the causal chain detailed case studies are suitable that employ process tracing to highlight every single step that leads from protest events to destabilization.

Nevertheless of these pitfalls, these findings have implications for the literature and future research. First of all, it shows that question if violence resistance works, as posed by Chenoweth and Stephan (2008), cannot be answered that easily by only looking at success cases and only looking on the activist's site. Interactions of government actions and activists action have to be considered to evaluate the success of street action. For future research it would be interesting to analyze the effect of these interaction not only on regime survival itself, but also on the regime type that follows after violent or nonviolent encounters of protesters and security forces.

Moreover, the findings have implications for the literature on the onset and organization of mass protest. Since it is plausible to assume that protesters can anticipate a regime's reaction to a certain extent, it would be extremely interesting to analyze how protesters come to the conclusion on which strategy they should chose, if there is any. Especially the impact of modern information and communication technologies, such as cell phones and social media platforms, is an interesting pattern for the choice of a violent or nonviolent strategy, since it provides the possibility to spread information about anticipated government reactions.

References

- Acemoglu, D., Johnson, S., Robinson, J. A. & Yared, P. (2009), 'Reevaluating the modernization hypothesis', *Journal of Monetary Economics* **56**(8), 1043–1058.
- Acemoglu, D. & Robinson, J. A. (2005), *Economic origins of dictatorship and democracy*, Cambridge University Press.
- AlJazeera (2011), 'Libyan police stations torched'.
URL: [http : //www.aljazeera.com/news/africa/2011/02/20112167051422444.html](http://www.aljazeera.com/news/africa/2011/02/20112167051422444.html)
- Allison, P. D. (2014), *Event history and survival analysis: Regression for longitudinal event data*, Vol. 46, SAGE publications.
- Ansell, B. & Samuels, D. (2010), 'Inequality and democratization: A contractarian approach', *Comparative Political Studies* .
- Bank, T. W. (2017a), 'International monetary fund, government finance statistics yearbook and data files, and world bank and oecd gdp estimates', retrieved from: <http://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS>.
- Bank, T. W. (2017b), 'World bank national accounts data, and oecd national accounts data files.', retrieved from: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>.
- Banks, A. (1979), 'Cross-national time-series data archive user's manual. state university of new york at binghamton.. 1971. cross-polity time-series data'.
- BBC (2006), 'Nepali king faces mass protests'.
URL: [http : //news.bbc.co.uk/2/hi/southasia/4929102.stm](http://news.bbc.co.uk/2/hi/southasia/4929102.stm)
- BBC (2010), 'Thai red-shirt supporter gen khattiya shot'.
URL: [http : //news.bbc.co.uk/2/hi/asia - pacific/8680455.stm](http://news.bbc.co.uk/2/hi/asia-pacific/8680455.stm)
- Bermeo, N. (1997), 'Myths of moderation: confrontation and conflict during democratic transitions', *Comparative Politics* pp. 305–322.
- Binnendijk, A. L. & Marovic, I. (2006), 'Power and persuasion: Nonviolent strategies to influence state security forces in serbia (2000) and ukraine (2004)', *Communist and Post-Communist Studies* **39**(3), 411–429.
- Boix, C. (2003), 'Democracy and redistribution (cambridge studies in comparative politics)'.
- Bond, D. G. (1988), 'The nature and meanings of nonviolent direct action: An exploratory study', *Journal of Peace Research* **25**(1), 81–89.

- Bormann, N.-C. & Gleditsch, K. S. (2012), 'Crises, transitions, and democratization.', *Typescript, University of Essex*.
- Box-Steffensmeier, J. M. & Zorn, C. (2002), 'Duration models for repeated events', *Journal of Politics* **64**(4), 1069–1094.
- Bratton, M. & Van de Walle, N. (1992), 'Popular protest and political reform in africa', *Comparative politics* pp. 419–442.
- Bueno De Mesquita, E. (2010), 'Regime change and revolutionary entrepreneurs', *American Political Science Review* **104**(3), 446–466.
- Campbell, J. L. (1993), 'The state and fiscal sociology', *Annual Review of Sociology* **19**(1), 163–185.
- Casper, B. A. & Tyson, S. A. (2014), 'Popular protest and elite coordination in a coup d'état', *The Journal of Politics* **76**(02), 548–564.
- Celestino, M. R. & Gleditsch, K. S. (2013), 'Fresh carnations or all thorn, no rose? nonviolent campaigns and transitions in autocracies', *Journal of Peace Research* **50**(3), 385–400.
- Cheibub, J. A. (1998), 'Political regimes and the extractive capacity of governments: Taxation in democracies and dictatorships', *World Politics* **50**(3), 349–376.
- Cheibub, J. A., Gandhi, J. & Vreeland, J. R. (2010), 'Democracy and dictatorship revisited', *Public choice* **143**(1-2), 67–101.
- Chenoweth, E. & Stephan, M. J. (2008), 'Why civil resistance works: The strategic logic of nonviolent resistance', *International Security* **33**.
- Chenoweth, E. & Stephan, M. J. (2011), *Why civil resistance works: The strategic logic of nonviolent conflict*, Columbia University Press.
- Chenoweth, E. & Stephan, M. J. (2014), 'Drop your weapons: When and why civil resistance works', *Foreign Aff.* **93**, 94.
- CNN (2005), 'Opposition clashes after togo poll'.
URL: [http : //edition.cnn.com/2005/WORLD/africa/04/26/togo.elex/index.html](http://edition.cnn.com/2005/WORLD/africa/04/26/togo.elex/index.html)
- Collier, R. B. (1999), *Paths toward democracy: The working class and elites in Western Europe and South America*, Cambridge University Press.
- Collier, R. B. & Mahoney, J. (1997), 'Adding collective actors to collective outcomes: Labor and recent democratization in south america and southern europe', *Comparative Politics* pp. 285–303.

- Davenport, C. (2007), 'State repression and political order', *Annu. Rev. Polit. Sci.* **10**, 1–23.
- Dudouet, V. (2013), 'Dynamics and factors of transition from armed struggle to nonviolent resistance', *Journal of Peace Research* **50**(3), 401–413.
- Edmond, C. (2013), 'Information manipulation, coordination, and regime change', *The Review of Economic Studies* p. rdt020.
- Fauvelle-Aymar, C. (1999), 'The political and tax capacity of government in developing countries', *Kyklos* **52**(3), 391–413.
- Fearon, J. D. & Laitin, D. D. (2003), 'Ethnicity, insurgency, and civil war', *American political science review* **97**(1), 75–90.
- Gandhi, J. (2008), *Political institutions under dictatorship*, Cambridge University Press Cambridge.
- Gandhi, J. & Przeworski, A. (2006), 'Cooperation, cooptation, and rebellion under dictatorships', *Economics & Politics* **18**(1), 1–26.
- Gandhi, J. & Przeworski, A. (2007), 'Authoritarian institutions and the survival of autocrats', *Comparative political studies* .
- Gartner, S. S. & Regan, P. M. (1996), 'Threat and repression: The non-linear relationship between government and opposition violence', *Journal of Peace Research* **33**(3), 273–287.
- Geddes, B. (2003), *Paradigms and sand castles: Theory building and research design in comparative politics*, University of Michigan Press.
- Geddes, B. (2004), 'Authoritarian breakdown', *Manuscript. Department of Political Science, UCLA* .
- Geddes, B., Wright, J. & Frantz, E. (2012a), 'Autocratic regimes codebook', *Available from dictators. la. psu. edu* .
- Geddes, B., Wright, J. & Frantz, E. (2012b), 'New data on autocratic regimes', *Manuscript, September* **10**.
- Gibler, D. M. (2012), *The territorial peace: Borders, state development, and international conflict*, Cambridge University Press.
- Gleditsch, K. S. (2002), *All Politics Is Local: The Diffusion of Conflict, Integration, and Democratization*, Ann Arbor, MI: University of Michigan Press.
- Gleditsch, K. S. & Ward, M. D. (2006), 'Diffusion and the international context of democratization', *International organization* **60**(4), 911–933.

- Goodwin, J. & Skocpol, T. (1989), 'Explaining revolutions in the contemporary third world', *Politics & Society* **17**(4), 489–509.
- Gurr, T. R. (1970), 'Why men rebel', *Princeton, NJ: Princeton University Press*.
- Haggard, S. & Kaufman, R. R. (2016), *Dictators and Democrats: Masses, Elites, and Regime Change*, Princeton University Press.
- Hendrix, C. S. (2010), 'Measuring state capacity: Theoretical and empirical implications for the study of civil conflict', *Journal of Peace Research* **47**(3), 273–285.
- Hollyer, J. R., Rosendorff, B. P. & Vreeland, J. R. (2014), 'Why do autocrats disclose?', in 'APSA 2014 Annual Meeting Paper'.
- Hollyer, J. R., Rosendorff, B. P. & Vreeland, J. R. (2015), 'Transparency, protest, and autocratic instability', *American Political Science Review* **109**(04), 764–784.
- Horowitz, D. L. (1985), *Ethnic groups in conflict*, Univ of California Press.
- HumanRightsWatch (2007), 'Georgia: Police beat peaceful protesters for second day'.
URL: <https://www.hrw.org/legacy/english/docs/2007/11/08/georgi17284.htm>
- Karatnycky, A. & Ackerman, P. (2005), 'How freedom is won: From civic resistance to durable democracy (new york: Freedom house)'.
- Knack, S. (2001), 'Aid dependence and the quality of governance: cross-country empirical tests', *Southern Economic Journal* pp. 310–329.
- Kuran, T. (1991), 'Now out of never: The element of surprise in the east european revolution of 1989', *World politics* **44**(01), 7–48.
- Lake, D. A. (1999), *Entangling relations: American foreign policy in its century*, Princeton University Press.
- Lichbach, M. I. (1987), 'Deterrence or escalation? the puzzle of aggregate studies of repression and dissent', *Journal of Conflict Resolution* **31**(2), 266–297.
- Lieberman, E. S. (2002), 'Taxation data as indicators of state-society relations: possibilities and pitfalls in cross-national research', *Studies in Comparative International Development (SCID)* **36**(4), 89–115.
- Lohmann, S. (1993), 'A signaling model of informative and manipulative political action.', *American Political Science Review* **87**(02), 319–333.
- Lohmann, S. (1994), 'The dynamics of informational cascades: The monday demonstrations in leipzig, east germany, 1989–91', *World politics* **47**(01), 42–101.

- Lorentzen, P. (2014), 'China's strategic censorship', *American Journal of Political Science* **58**(2), 402–414.
- Martin, B. (2007), *Justice ignited: The dynamics of backfire*, Rowman & Littlefield.
- McAdam, D. (1982), *Political process and the development of black insurgency, 1930-1970*, University of Chicago Press.
- O'Donnell, G. & Schmitter, P. C. (1986), 'Political life after authoritarian rule: tentative conclusions about uncertain transitions', *Transitions from authoritarian Rule. Prospects for Democracy (Baltimore & London: The John Hopkins University Press, 1986)*, **4**.
- Olson, M. (1993), 'Dictatorship, democracy, and development', *American political science review* **87**(3), 567–576.
- Opp, K.-D. (1988), 'Grievances and participation in social movements', *American sociological review* pp. 853–864.
- Pape, R. (2005), *Dying to win: The strategic logic of suicide terrorism*, Random House.
- Poe, S. C. (2004), 'The decision to repress', *Understanding human rights violations: new systematic studies. Aldershot: Ashgate* pp. 16–42.
- Przeworski, A. (1988), 'Democracy as a contingent outcome of conflicts', *Constitutionalism and democracy* **59**, 63–64.
- Przeworski, A. (1991), *Democracy and the market: Political and economic reforms in Eastern Europe and Latin America*, Cambridge University Press.
- Przeworski, A. (2009), 'Conquered or granted? a history of suffrage extensions', *British Journal of Political Science* **39**(02), 291–321.
- Przeworski, A., Alvarez, M. E., Cheibub, J. A. & Limongi, F. (2001), *Democracy and Development: Political Institutions and Well'Being in the World, 1950-1990*, Cambridge Univ Press.
- Przeworski, A. & Limongi, F. (1997), 'Modernization: Theories and facts', *World politics* **49**(02), 155–183.
- Randeree, B. (2010), 'Protests continue in tunisia', *Al Jazeera* .
URL: <http://www.aljazeera.com/news/africa/2010/12/2010122682433751904.html>
- Rød, E. G. & Weidmann, N. B. (2014), *Protesting dictatorship: The mass mobilization in autocracies database*, Technical report, Working Paper. University of Konstanz.

- Rosendorff, B. P. (2001), 'Choosing democracy', *Economics & Politics* **13**(1), 1–29.
- Sandler, T., Tschirhart, J. T. & Cauley, J. (1983), 'A theoretical analysis of transnational terrorism', *American Political Science Review* **77**(1), 36–54.
- Schock, K. (1996), 'A conjunctural model of political conflict: The impact of political opportunities on the relationship between economic inequality and violent political conflict', *Journal of Conflict Resolution* **40**(1), 98–133.
- Schock, K. (2005), *Unarmed insurrections: People power movements in nondemocracies*, Vol. 22, U of Minnesota Press.
- Shadmehr, M. & Bernhardt, D. (2011), 'Collective action with uncertain payoffs: Coordination, public signals, and punishment dilemmas', *American Political Science Review* **105**(04), 829–851.
- Shadmehr, M. & Bernhardt, D. (2013), 'Vanguards in revolution: Sacrifice, radicalism, and coercion', *University of Miami. Mimeo*.
- Shadmehr, M. & Bernhardt, D. (2015), 'State censorship', *American Economic Journal: Microeconomics* **7**(2), 280–307.
- Sharp, G. & Finkelstein, M. (1973), *The politics of nonviolent action*, Vol. 3, P. Sargent Publisher Boston.
- Shellman, S. M., Levey, B. P. & Young, J. K. (2013), 'Shifting sands: Explaining and predicting phase shifts by dissident organizations', *Journal of Peace Research* **50**(3), 319–336.
- Skocpol, T. (1969), 'States and social revolutions'.
- Slater, D. (2009), 'Revolutions, crackdowns, and quiescence: Communal elites and democratic mobilization in southeast asia', *American Journal of Sociology* **115**(1), 203–254.
- Stoker, D. (2007), 'Insurgents rarely win—and iraq won't be any different (maybe)', *Foreign Policy* **158**.
- Svolik, M. W. (2012), *The politics of authoritarian rule*, Cambridge University Press.
- Tarrow, S. (1994), 'Power in movement: Social movements, collective action and mass politics'.
- Teorell, J. (2010), *Determinants of democratization: Explaining regime change in the world, 1972–2006*, Cambridge University Press.
- Thies, C. G. (2010), 'Of rulers, rebels, and revenue: State capacity, civil war onset, and primary commodities', *Journal of peace research* **47**(3), 321–332.

- Tilly, C. (1978), 'From mobilization to revolution', *Reading, Mass* .
- Tilly, C. (2007), *Democracy*, Cambridge Univ. Press, Cambridge [u.a.].
- Timmons, J. F. (2005), 'The fiscal contract: States, taxes, and public services', *World Politics* **57**(4), 530–567.
- Tucker, J. A. (2007), 'Enough! electoral fraud, collective action problems, and post-communist colored revolutions', *Perspectives on Politics* **5**(3), 535–551.
- Ulfelder, J. (2005), 'Contentious collective action and the breakdown of authoritarian regimes', *International Political Science Review* **26**(3), 311–334.
- Vanhanen, T. (1990), 'The process of democratization: A comparative study of 147 states, 1980–88', *New York* **3**.
- Wantchekon, L. (2004), 'The paradox of “warlord” democracy: A theoretical investigation', *American political science review* **98**(1), 17–33.
- Weeks, J. L. (2008), 'Autocratic audience costs: Regime type and signaling resolve', *International Organization* **62**(01), 35–64.
- Weeks, J. L. (2012), 'Strongmen and straw men: Authoritarian regimes and the initiation of international conflict', *American Political Science Review* **106**(2), 326–347.
- Wig, T. & Rød, E. G. (2014), 'Cues to coup plotters elections as coup triggers in dictatorships', *Journal of Conflict Resolution* p. 0022002714553106.
- Wintrobe, R. (1998), *The political economy of dictatorship*, Vol. 6, Cambridge Univ Press.
- Wood, E. J. (2001), 'An insurgent path to democracy: popular mobilization, economic interests, and regime transition in south africa and el salvador', *Comparative Political Studies* **34**(8), 862–888.
- Wucherpfennig, J. (2013), The strategic logic of power-sharing after civil war, in 'Powersharing workshop in Lucerne, Switzerland'.
- Zeileis, A., Grothendieck, G., Ryan, J. & Andrews, F. (2015), 'S3 infrastructure for regular and irregular time series (z's ordered observations). r package version 1.7-11'.
- Zunes, S. (1994), 'Unarmed insurrections against authoritarian governments in the third world: a new kind of revolution', *Third World Quarterly* **15**(3), 403–426.