



The effect of progovernmental pre-electoral violence upon electoral outcome

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Abstract

Electoral violence can have dire consequences for a society, but remains a strategy employed by incumbents to secure electoral victory. This paper explores if electoral violence instigated by progovernment side actually does increase the incumbent's probability of electoral victory. The novelty of the question derives from taking into account a differentiation between the instigating side as progovernment or anti-government, which previous studies have not done. The argument is that as the opposition is likely to have other motives and resources available than the incumbent, anti-government violence should target other spectrums of the population and thus have a different effect on the electoral outcome than progovernment violence.

The findings give consistent statistical significance to a positive relationship between progovernment instigated violence and probability of incumbent electoral victory when controlling for electoral fraud and anti-government violence. This supports the hypothesis and suggests that incumbents do benefit, at least in the short term, from applying electoral violence. However, long-term backlash may still occur and the consequences for the society are dire. The relationship between anti-government violence and electoral outcome did not achieve statistical significance. Further research are needed to improve the nuance of the findings in this paper and better understand electoral violence from different actors' perspectives.

Keywords

Election; incumbent violence; opposition



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1. *Introduction*

Electoral violence is a continuing phenomenon affecting the development of many democratizing countries. Consequences can be dire. Not only does it cause harm to those directly victimized by these forms of events, it can also spread fearfulness through population segments, reduce trust between individuals and groups, polarize societies along ethnic lines and decrease democratic prospects (Birch, Daxecker and Höglund 2020; Höglund 2009).

In order to minimise electoral violence in practice it is necessary to gain knowledge of how the phenomena functions theoretically, how it is used as a strategy, when it is applied, and which societal circumstances are at the root of the problem. The academic sub-field of electoral violence is quickly developing and researchers are untangling these questions bit by bit (Birch, Daxecker and Höglund 2020).

For example, Hafner-Burton, Hyde and Jablonski (2016) investigated the fundamental question of the effect that electoral violence has upon electoral outcome. As the incumbent is generally the greatest instigator of violence (Straus and Taylor 2012) and acts rationally, they argued that it should be an effective strategy for the incumbent to win the election. The study's findings reinforce the author's argument in the context of pre-election. However, incumbents tended to underestimate the risk of protests by the opposition after a violent electoral victory and thus in some cases be toppled in the post-election phase (Hafner-Burton, Hyde and Jablonski 2016). Hafner-Burton, Hyde and Jablonski (2016) used the National Elections across Democracy and Autocracy (NELDA) dataset (Hyde and Marinov 2012; 2021) to reach their conclusions. The dataset captures all national and popular elections globally from 1945 until 2020, but in the version used by Hafner-Burton, Hyde and Jablonski (2016) it ended in 2012. NELDA let them capture if violence had occurred but they could not control for if it was actually the incumbent, or progovernment groups, that instigated the violence.

This paper argues that controlling for opposition or anti-government violence is necessary. The opposition may be constituted by several different actors but as they are all different from the incumbent in respect of available means, supporter segment and motives, violence instigated by anti-government actors may have other targets and methods than progovernment instigated violence. Thus, it should also affect the electoral outcome differently and not in the favour of the incumbent. Therefore, this paper explores a similar research question to Hafner-Burton, Hyde and Jablonski (2016), but with a differentiation of the instigating side;

Does progovernment instigated electoral violence lead to increased probability of incumbent electoral victory?

The main contribution of the paper is to add a nuance of differentiation between instigating sides to the debate of the effect of electoral violence upon electoral outcome. If the findings suggest a positive answer to the research question it would be necessary in future research to create and test data upon how different types of actors use electoral violence and their motives thereof. That would enable the development of targeted and flexible tools or methods to mitigate both the use of violence and its effect on elections in practice, thus maybe end the continuation of the phenomenon of electoral violence.

The differentiation of instigating sides is possible thanks to the use of the Electoral Contention and Violence (ECAV) dataset (Daxecker, Amicarelli and Jung 2019; 2021). ECAV collects data of contentious and violent events related to elections globally, describing the involved actors, type of event, deaths and more, everything geocoded. For each election it uses the same identification code as does NELDA, making the datasets combinable and enabling their usage in this paper.

To answer the research question, the paper proceeds as follows. Firstly, the findings of previous studies are presented and discussed, before their conclusions are used to develop the theoretical argument. The argument is summarized in the main claim, that progovernment instigated electoral violence should increase the probability of incumbent electoral victory. Secondly, the research design to solve the question is disentangled. A quantitative cross-sectional analysis is used with the combination of NELDA and ECAV datasets. All events of violence, with known sides of instigation, are aggregated upon each election that they are associated with, whereby the level of violence rather than mere occurrence is taken into account. Thirdly, 1302 elections that did or did not contain electoral violence are used in the Results and Analysis chapter and are the subject for both descriptive statistics and a logistic regression as well as two robustness checks. The findings are then discussed previous to the Summary and Conclusion chapter which finalises the paper with practical implications and suggestions for further research.

2. Theory

2.1. Previous Research

Electoral violence has been established as a distinct form of political action in contemporary research, stimulating a quickly developing field with present focus on issues such as institutional causes, altered voting behaviour, electoral outcomes and conditions leading to high-stake elections. It is structurally caused by ethnically polarized politics and majoritarian institutions, perpetrated as a strategic method by political actors. While studies on macro-level consequences specifically are few so far, scholars have found, for example, that incumbent perpetrators can win elections even if the violence they instigate are condemned by voters, and that free speech, among other democratic rights, is endangered by the phenomena (Birch, Daxecker and Höglund 2020).

2.1.1. Electoral violence as a strategy

Perpetrators, both incumbents and opposition, use electoral violence in relation to other available strategies to manipulate the electoral outcome and gain victory, such as institutional manipulation or vote buying (van Ham and Lindberg 2015). Which strategies are used is assumed to depend upon the estimated costs and effects in each situation, as different strategies are useful for different targets and at different stages of the electoral process. Targets can be both institutions and voters, and the costs of the strategy can be disaggregated to implementation, legitimacy if discovered, and risk of repercussions, for example by increased risk for *coups d'état*. Institutional manipulation should, according to a study, be the cheapest technique for incumbents and intimidation by electoral violence second best for use, with vote buying the most expensive (van Ham and Lindberg 2015). However, institutional manipulation, which is suggested to include tactics such as distorting the registration process, vote counting or election timing, functions only when the targeted institutions, often the electoral bodies, are weak and democratisation level is low (Hafner-Burton, Hyde and Jablonski 2016; van Ham and Lindberg 2015). Institutional manipulation decreases when the institutions get stronger and is replaced as a favourable strategy by vote buying and intimidation, both of which increase simultaneously with each other (van Ham and Lindberg 2015). These methods are often used upon different segments of the population. In Kenya, for example, vote-buying tactics are divided along the ethnic lines on which the political parties base their support in the purpose of mobilizing voters. The parties use violence as intimidation

mainly to target other segments than those selected for vote-buying in the purpose of demobilization (van Ham and Lindberg 2015; Gutiérrez-Romero 2014).

A study by Rauschenbach and Paula (2019) follows this suggestion of different strategies used upon different voter population segments. Incumbent's vote buying as a part of clientelism was found to be used to mobilize supporters, rather than swing-voters as previously believed, as swing-voters would be more expensive to mobilize for the instigators cause than those already sympathizing. Incumbents' intimidation by electoral violence, however, targeted both opposition strongholds and swing-voters, which suggests that the vote-share of the incumbent is calculated to increase if both the clear opposition and potential opposition voters are too afraid to vote. Furthermore, the authors also found *fearfulness*, a proxy for intimidation by violence, in the strongholds of the incumbent, which can suggest that electoral violence was also conducted by the opposition (Rauschenbach and Paula 2019). This would support the previously mentioned study where it was proposed that incumbents and oppositions engage in electoral violence reciprocally (van Ham and Lindberg 2015). However, no assumption of perpetrator can be easily made, as Wahman and Goldring (2020) have presented that the incumbent too has strategic reasons to commit violence in progovernment strongholds. This is explained as a tactic to reduce the oppositions possibilities to establish themselves in that area by suppressing political competitiveness, and is particularly noticeable in sub-nationally polarized constituencies (Wahman and Goldring 2020)

2.1.2. Consequences of electoral violence

Several other studies have begun to distinguish the effects of electoral violence upon electoral outcomes. Alesina, Piccolo and Pinotti (2019) could demonstrate how the Sicilian Mafia used pre-electoral violence to intimidate voters successfully. For example, after a massacre on Labour Day in 1947, the vote share for leftist anti-Mafia parties declined drastically, with the largest decrease in the municipalities near to where the massacre had been (Alesina, Piccolo and Pinotti 2019, p. 451). The pattern is general, electoral violence instigated by incumbent should, just as fraud, increase the probability of incumbent electoral victory. The success of violence can be admitted to either the causal mechanisms of opposition boycott or intimidation. The latter can in turn be divided into three sub-mechanisms; reducing probability of opposition supporters to vote, mobilize supporters or mobilize/demobilize swing-voters (Hafner-Burton, Hyde and Jablonski 2013; 2016).

However, the consequences of electoral violence go beyond electoral outcomes. Firstly, in Sicily, the politicians focused more on the problems of organized crime when homicide rates increased. But when the level of *political* homicides specifically increased, the attention declined, as measured by speeches in legislative assemblies by elected politicians. This relation was especially true for those typically holding stronger anti-Mafia views, such as those from left-leaning parties (Alesina, Piccolo and Pinotti 2019). Secondly, in areas of political violence in Africa, it has been demonstrated that political knowledge among the electorate declines due to fear, which in turn may contribute to less informed voting in the future (Söderström 2018). Thirdly, the violence used to alter the electoral results can also cause backlash for an instigating incumbent by generating risky post-election dynamics, such as further violence, often expressed in protests challenging the official results. This risk is often underestimated by incumbents who wish to use electoral violence and can force the incumbent to concessions, such as leaving office, holding new elections or similar measures (Hafner-Burton, Hyde and Jablonski 2016). Not only direct protest is a risk for incumbents choosing to apply violence as an electoral strategy. As political elites and leaders are significantly more prone to justify electoral violence than the general public they misperceive the effectiveness of the strategy, underestimating the cost of voter-backlash. This can be partly due to lack of information of voter's preferences, but confirmation bias and over-confidence may also be involved (Rosenzweig 2021).

2.1.3. When and where electoral violence is used

Not all elections are marked with electoral violence or fraud despite assuming that it will increase probability of electoral success. The risk of backlash consisting of post-election protest and violence may be intimidating, as well as institutional constraints. These constraints can, firstly, be in terms of direct inability to execute certain powers, such as implementing a state of emergency, mobilizing the police or military or issuing special directives. Secondly, they can reduce the incumbent's will by the risk of being held legally and politically accountable in a later stage, for example by legislators or courts (Hafner-Burton, Hyde and Jablonski 2013). As previously mentioned, when institutions are weak, incumbents are more prone to use the strategy of institutional manipulation than electoral violence. With stronger institutions, manipulation becomes more difficult and thus violence, together with vote buying, are the preferred strategies (van Ham and Lindberg 2015). With these complementary findings

in mind, it is possible to assume that electoral violence is not needed where the incumbent has enough control of the institutions to artificially produce an electoral outcome. It is needed where institutions are stronger and more independent, but when these institutions gain the possibility to constrain or intimidate the incumbent from using violence, the risk can be mitigated. Thereby, electoral violence is a risk factor during democratization but should not be a threat in consolidated democracies.

Those incumbents that choose to use electoral violence as a method despite the risks it can have may mostly be the ones assuming they will have an uncertain or unfavourable result in the election. They may gain this information from pre-election polls or similar, but it makes the phenomena of electoral violence not necessarily being a symptom of non functional democracy, but rather that the democracy has allowed a potentially strong opposition to threaten the incumbents' rule (Hafner-Burton, Hyde and Jablonski 2013). At the same time, however, strong political parties have been found to reduce electoral violence. Much like institutions, political parties can constrain the actions of leaders, as well as providing the tools needed to focus on persuading tactics rather than violence (Fjelde 2020). To find the balance between when the strength of political parties reduces violence and when incumbents perceive a threat large enough to employ violence must, however, be awaited in future research and is beyond the scope of this paper.

2.1.4. Identifying research gaps

All of the studies discussed above pinpoint different aspects of electoral violence in general and the use and consequences of the phenomena specifically. While some of the studies are not directly generalizable due to methods used, such as Alesina, Piccolo and Pinotti (2019) who concentrate on the case of Italy, the patterns found are relatively consistent across the field. Electoral violence is a successful strategy to win an election during specific circumstances and phases of democratization, but risks causing political and legal consequences as well as post-election protests, which in turn might be violent or met by violence.

At the same time, the presented articles do leave gaps of knowledge that open up for further studies. Firstly, Rauschenbach and Paula (2019) did find *fearfulness* in the incumbents' strongholds, a phenomenon that their theoretical argument could not fully address. The fearfulness in opposition strongholds and among swing-voters was explained by violence

instigated by the incumbent with the aim to intimidate them from voting. If fearfulness in incumbent strongholds is caused by direct violence for intimidation the question remains if it was the opposition that was the perpetrator (Rauschenbach and Paula, 2019). As Wahman and Goldring (2020) pinpointed, some incumbents may use violence also in their own strongholds. It is also a possibility that fearfulness as a proxy for intimidation is unsuitable and that the fearfulness also can be caused by news reports or rumours of how other voter segments have been treated.

Hafner-Burton, Hyde and Jablonski (2013; 2016) similarly assume that most of the electoral violence is perpetrated by the incumbent rather than the opposition. They therefore investigate their research questions without controlling for the acts of the opposition. While an incumbent may gain electoral success by using violence, as their results suggest, their theoretical argument is based on that it is the incumbent that strategically chose to perpetrate the violence upon specific segments of the population. Furthermore, the authors conclude that an incumbent is more likely to use electoral violence when threatened by a strong opposition (Hafner-Burton, Hyde and Jablonski 2013; 2016). However, as strong political parties reduce electoral violence, it is not clear under what circumstances an incumbent believes electoral violence would be effective (Fjelde 2020). While a strong opposition should have more power to use electoral violence reciprocally, a weak opposition may have more motives as electoral violence might be perceived as one of few options to gain influence. Any such a relation between incumbent and opposition would still fit well with the findings that the opposition and the incumbent can engage in violence reciprocally, that *violence feeds violence* (van Ham and Lindberg 2015). However, an incumbent may not necessarily benefit from a generally violent situation throughout a society. Using violence to target specific segments of the voters, the effectiveness should decline if other segments are targeted by the opposition. As Hafner-Burton, Hyde and Jablonski (2013; 2016) assumed the violence is instigated by the incumbent, a gap has been left where differentiating for incumbent and opposition electoral violence could be fruitful.

As a final point, Hafner-Burton, Hyde and Jablonski (2016), who investigates the relation between incumbents' electoral violence and success on election as well as political survival in the post-election dynamics, do only include elections in which the incumbent won the election. To increase the nuance of their results, even elections that the incumbent lost can be investigated.

2.2. Central Concepts

Before continuing to the theoretical argument, it is useful to describe the definitions of the key concepts. Firstly, the dependent variable is *probability of incumbent electoral victory*. The concept of *electoral victory* means to gain more votes in an election than other candidates and/or parties. The other side of *electoral victory* is *electoral defeat* and is thus a dichotomous concept. The *electoral victory* does not imply which measures were taken to win. However, a victory claimed without electoral process, such as military takeover, is not included.

Secondly, the independent variable is *progovernment instigated electoral violence*. The independent variable includes three important terms in need of explanation. Firstly, while several scholars prefer to use the term “incumbent” when discussing the perpetrator of electoral violence (Hafner-Burton, Hyde and Jablonski 2013; 2016; Straus and Taylor 2012), there remains uncertainty of the incumbent’s direct involvement. An incumbent can on the one hand give orders or directives directly influencing the behaviour of military, police or supporters. On the other hand, the incumbent can incite unrest or action indirectly through speeches or similar communication, with or without violent intent. For example, the incumbent may need covert action not to be blamed for unpopular violence (Birch, Daxecker and Höglund 2020). Therefore, the incumbent and government still share responsibility for the actions of their supporters regardless of level of independence, as the incumbent either perpetrates or allows the violence to continue (Wilkinson 2004, p. 4 - 11).

However, in this paper the term *progovernment* is used, as it allows for the second term *instigated* to be used without causing conceptual misinterpretations. To *instigate* is to be the actor who initiates a violent event, for example by attacking a demonstration. While it is not always possible to trace instigation to the incumbent, despite Wilkinson’s (2004, p. 4-11) argument that they share responsibility, it is still possible to state that the side of the violent instigator was *progovernment*.

The third term, *electoral violence*, is a well-used concept that has sparked its own research field. While the field has yet to settle on a common definition, it is by several scholars described as all types of acts or threats that involve physical or psychological harm and intimidation, in the purpose of altering the outcome or process of the election (Schneider and Carroll 2020, p. 174). This can be complemented with the description of Höglund (2009) where electoral violence is a sub-category of political violence mainly distinguished by four dimensions; actor, target, motive and timing. The actor ranges from militias to political parties

that may participate in the election and use the violence to increase their chance to win the election. However, there may also be groups seeking to disrupt the election, deeming it illegitimate. Targets range from other political groups and specific individuals, such as the incumbent leader challenged in the election, to non-bodily-harming violence directed at institutions or ballot boxes. The motivation is often to alter the electoral outcome to one's own advantage but can also be to discourage the usage of elections as an institution. Electoral violence differs from political violence most clearly with its timing. While no exact date can be set for when electoral violence begins or ends, it is directly related to the issue of the election, either before or after (Höglund, 2009)

2.3. Theoretical Argument

2.3.1. Causal mechanism: From Violence to Victory

Electoral violence does not have a direct and immediate effect on the electoral outcome. To start a violent scene, even in the midst of voting, does not change systematically which votes are casted. Rather, violence only has an effect on an election through a process of events, a causal mechanism. Several scholars describe violence to be an effective strategy to intimidate segments of the electorate from voting by fear of repercussions, and it can also cause the opposition party to boycott the election all together, both working in the incumbent's favour (Hafner-Burton, Hyde and Jablonski 2013, p. 150; Rauschenbach and Paula 2019). This form of demobilization of voters is the most typical use of electoral violence, and set free resources for the incumbent to use mobilizing strategies, such as vote-buying, for other segments of the electorate (Rauschenbach and Paula 2019; van Ham and Lindberg 2015; Gutiérrez-Romero 2014). Furthermore, violence may also cause displacement of people which in turn prevents them from voting. One such example exists from Kenya in 1997 where people were forced to leave their homes due to violence during the election period (Högberg 2009).

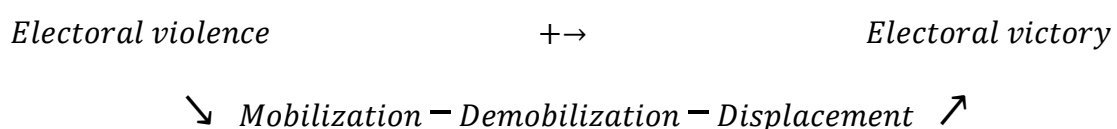


Figure 1: Causal mechanism

2.3.2. Incumbents and electoral violence

In several recent studies it is assumed that the most common perpetrator of electoral violence is the incumbent (Hafner-Burton, Hyde and Jablonski 2013; 2016). This is based on the finding by Straus and Taylor (2012, p. 28-31) that the great majority of electoral violence was indeed conducted by the progovernment side, especially in the case of pre-electoral violence. The reason for an incumbent to use violence as a strategy follows the rational assumption: Electoral victory is the prize for which parties in an election contend, the goal of contenders must be to win. To achieve this, their strategic acts should make them use methods that help them in their strife and avoid methods that cause backlash. As electoral violence continues to be a global issue, it follows that instigation of electoral violence should lead to electoral victory (Glaser 2019, p. 13-15). It may be argued that the risk of post-election protest and violence and other long-term consequences to society would be evidence for the irrationality of incumbents who instigate pre-electoral violence. However, this tendency is rather the opposite and fully rational in the short-term. If the incumbent perceives an immediate threat to the possession of his or her position, a long-term focus may be less prioritized than to solve the problem of the moment (Hafner-Burton, Hyde and Jablonski 2016).

While there may be several groups with various levels of independence from the incumbent acting for the incumbent's sake, the incumbent and the government still share responsibility for their actions. As Wilkinson (2004, p. 4-11) argue when it comes to ethnic violence, the incumbent either directly perpetrate the violence, such as by commanding military or police, or allows the progovernment violence by non-interference, support or incitement. Furthermore, the incumbent may have an interest to act covertly and not have direct ties to the violence perpetrated, and may therefore use a larger amount of indirectly associated groups, such as militias or criminal gangs to be the visible perpetrators (Birch, Daxecker and Höglund 2020).

2.3.3. Opposition violence and the necessity to control for perpetrator

Van Ham and Lindberg (2015) point out that incumbents and opposition engage in electoral violence reciprocally. Their conclusion is further supported, although as a side-effect, by Rauschenbach and Paula (2019) when finding *fearfulness* in the incumbents' stronghold and

by Hafner-Burton, Hyde and Jablonski (2013; 2016) who argue that incumbents' resort to electoral violence when facing a threat from a strong opposition. At the same time, Straus and Taylor (2012, p. 28-31) found that the great majority of electoral violence was conducted by the incumbent, Fjelde (2020) found that strong political parties reduce electoral violence, and Wahman and Goldring (2020) discovered that incumbents as well could target incumbent strongholds. While the debate is increasing in nuance and depth it is clear at least that the incumbent is not necessarily the sole perpetrator. Therefore, it is necessary to control for the opposition's violence. As tactics, methods, targets and motives probably differ between incumbent and opposition, the effects upon which segments of the population are reporting *fearfulness* or which party gains increased probability of election victory should also differ. Thereby, the incumbent should not necessarily benefit from the anti-governmental violence and thus must the instigator of violence be taken into account.

2.3.4. Main claim

The discussions in the sections above lead to the question if progovernment instigated electoral violence can lead to increased probability of incumbent electoral victory. Hafner-Burton, Hyde and Jablonski tried a similar question in their paper "Surviving Elections: Election Violence, Incumbent Victory and Post-Election Repercussions" (2016). They found that incumbents may use pre-electoral violence to demobilize opposition supporters by preventing them from voting or provoke a boycott of the election, thus increasing the probability of electoral victory. However, they simultaneously risk their long-term manipulative strength as well increasing the probability of post-election protests. Rosenzweig (2021) in turn found that incumbents often miscalculate the effectiveness of their pre-electoral violence and the cost it brings in form of voter backlash. These findings are intriguing, but they do not take into account the pre-electoral violence perpetrated by the opposition. As Hafner-Burton, Hyde and Jablonski (2016) only include incumbent violence in their study, it remains possible that opposition violence mitigates the effect incumbent violence has on the electoral outcome, and must thus be taken into account. To account for the violence of the opposition whilst testing a similar question as Hafner-Burton, Hyde and Jablonski (2016) is thereby the purpose of this paper.

The proposed theoretical argument gives that progovernment instigated electoral violence should increase the incumbent's probability of winning the election. That means that

the independent variable of instigating electoral violence has a positive relationship with the dependent variable of electoral victory. However, the sole presence of electoral violence is not enough to contribute to manipulation of the electoral outcome. A single event may not be enough to discourage opposition supporters from voting throughout a country. Therefore, the level of electoral violence is of importance to count. The higher level of progovernment violence should give higher probability of incumbent electoral victory.

Progovernment Instigated Electoral Violence → *Probability of Incumbent Electoral Victory*

Figure 2: Proposed relation of the variables

2.4. Hypothesis

From the theoretical considerations above the following hypothesis is generated. It implies a positive relationship between progovernment instigated electoral violence and electoral victory for the incumbent.

H1: “*If progovernment actor or party instigate electoral violence, the probability of incumbent actor or party electoral victory increases.*”

2.5. Scope condition

The theoretical argument only applies to countries with national popular elections that are competitive between at least an incumbent and an opposition. Without competition there is no need for manipulative strategies as the outcome of the election is given beforehand. Neither is manipulative strategies such as electoral violence needed if the public does not take part in the vote, for example if the vote is held only within a committee. The theory is also only applicable to countries that are not consolidated democracies as these only have marginal risk of electoral violence that may alter the electoral outcome (Daxecker et. al. 2019; 2021). The remaining applicable countries are those in the spectrum of democratization that have national popular elections with a genuine opposition but yet have a risk of violence being committed in such a way that it may alter the electoral outcome.

3. Research Design

3.1. Methods

To investigate the question and find if the hypotheses hold, a quantitative cross-sectional statistical analysis will be used. A quantitative method is most suitable as the question stimulates to find a generalizable pattern rather than disentangle the causal mechanism. Cross-sectional method contributes to this generalizability by studying each election's characteristics separately, but it does not control for pattern-changes in individual countries over time as a time-series method would. To do a time-series investigation would contribute to our understanding of how previous electoral violence affects the present situation and if or when electoral violence becomes a political norm. However, that goes beyond the scope and resources available for this study.

The unit-of-analysis is *election* as based on the implications of the dependent variable, the outcome of the election. This follows the units used in the NELDA dataset, wherefrom the data for the dependent and control variables are found. Herein is included only all national and popular votes, giving that the election must be to select an individual or a party by a country-wide vote that the people participate in. This excludes, for example, cases where a closed group or party cast the vote. It does not matter, however, whether the election is deemed free and fair (Hyde and Marinov, 2012; 2021). The data of events from the ECAV dataset is aggregated upon each election.

The data is used to present descriptive statistics for the independent and dependent variables, as well as to evaluate the reasonability in separating progovernment and anti-government violence. Thereafter a logistic regression upon the dependent variable is performed, in order to test the theoretical argument. This is both sufficient to draw conclusions about the relationship of the variables and a statistically correct method as the dependent variable is dichotomous (Kellstedt and Whitten 2018, p. 277-280). In the main regression, as well as in the regressions of the robustness checks, the variables concerning progovernment violence, anti-government violence and electoral fraud are gradually introduced in order to more clearly evaluate the effect of the variables. The dependent variable, probability of electoral victory, is expressed as *incumbent party lose* in the regression tables, due to the definition of the *nelda24* variable in the NELDA dataset, "*did the incumbent party lose?*". Due

to this, a positive sign on the coefficients, a value above 1, should be interpreted as a negative relationship with probability of electoral victory. For example, should the independent variable Progov achieve a coefficient larger than 1, this should be interpreted as progovernment instigated violence does not increase incumbents' probability of electoral victory.

Hafner-Burton, Hyde and Jablonski (2016) investigated a similar question as is made in this thesis, the relation between incumbents' electoral violence and success on election, but they also looked into the incumbents' political survival in the post-election dynamics. The method of this paper to some degree resembles how Hafner-Burton, Hyde and Jablonski proceeded with their data with some important exemptions. Firstly, Hafner-Burton, Hyde and Jablonski only relied on the NELDA dataset. In this paper the data they had is complemented with ECAV which enables controlling for which side instigated the violence. Secondly, Hafner-Burton, Hyde and Jablonski did only include elections in which the incumbent won the elections, wherefore this study can increase the nuance of knowledge by also testing elections where the incumbent lost (Hafner-Burton, Hyde and Jablonski 2016). Thirdly, in this paper no societal measures such as GDP or population size is used as control variables which may be a weakness as it could influence an incumbents' choice of electoral strategies (Hafner-Burton, Hyde and Jablonski 2016, p. 471).

3.2. Materials

To be able to conduct a quantitative analysis upon the research question two intertwined datasets are to be used. The National Elections across Democracy and Autocracy (NELDA) dataset gives information on all popular national elections held globally in recognized states, capturing issues such as if the incumbent won, if it was competitive or not, and if there were allegations of fraud. With over 4000 elections covered by 58 different variables it includes an election no matter how democratic it may be described as, in order to ensure that all forms of popular national elections can be researched. It is only cases that are not national, or were for example an unelected committee formed base of voters, that the election is not included. (Hyde & Marinov 2012; 2021).

The Electoral Contention and Violence (ECAV) dataset records all events of electoral violence and non-violent contention globally as reported by news agencies. It codes geographic location, the actor and target, as well as if the actor or target is pro- or anti-government. It

separates initiator of event from initiator of violence and if the action was directed or undirected. With over 18000 events recorded ECAV offers possibilities and coverage other datasets, such as SCAD, does not allow (Daxecker, Amicarelli and Jung 2019; 2021). However, just as other similar datasets, ECAV remains vulnerable to reporting bias. The completely true picture of what has occurred cannot be guaranteed if the sources under- or over-reported certain types of events, and the scale of the issue is difficult to assess. However, international news agencies' tendency to give attention to elections may help reduce the bias (Daxecker, Amicarelli and Jung 2019, p. 718).

While news reports are the main source of ECAV event-related data, the NELDA dataset forms the basis for the election-specific data, such as dates and types of elections. The datasets therefore share common identification variables for each election, making them easily combined and stimulating the usage of both of them. However, ECAV only holds data between the years 1990 and 2012, creating a limitation which this paper must follow (Daxecker, Amicarelli and Jung 2019; 2021).

3.3. Case selection

Not all elections and events in the NELDA and ECAV datasets are applicable to the question researched and have therefore not been included in this paper. In the following section is outlined the motivations of case selection.

Firstly, the theoretical argument only includes competitive national and popular elections. As all elections in the NELDA dataset are both national and popular, a selection had to be made only based on competitiveness, using the *nelda3* variable "*was opposition allowed?*". All elections with a negative answer were dropped (Hyde and Marinov 2012; 2021). Furthermore, countries that have been consolidated democracies throughout the time period are not covered by the argument as the risk of electoral violence impacting the electoral result is marginal. They are not included in the ECAV dataset and have thereby also been dropped from the NELDA dataset. This includes the countries of Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the United States, which all have been dropped using their country code (Daxecker, Amicarelli and Jung 2019, p. 3). As the paper researches the relationship between

electoral violence and the outcome of the election, post-electoral violent events as well as non-violent events have been excluded. The first because they cannot affect the results of the election and the latter because they do not fulfil the purpose of the paper.

Secondly, the dependent and independent variables have to be known for any relationship to be detectable. Therefore, all cases without a clear winner of the election according to the operationalisation of variable nelda 24 *“did incumbent party lose?”* as well as all cases without a clear side of violent instigator have been excluded. As it is known in the great majority of elections if the incumbent won or not the first is not a problem. However, identifying the side of violence instigator presents several difficulties, which are discussed in detail in the Limitations section.

Thirdly, the data from ECAV only covers cases from 1990 to 2012. If there was violence in any elections in the NELDA dataset from before or after this period it will not be detected. Thereby, all elections covered in NELDA before 1990 or after 2012 have been dropped.

3.4. Control variables

Scholars have found that electoral violence is often used in combination with other types of electoral manipulation or fraud. One example is vote buying that may be used as a complement to violence targeting different segments of the population. Institutional manipulation is another example. In other words, the readiness to use electoral violence may be accompanied by a readiness to use other forms of fraud (van Ham and Lindberg 2015; Rauschenbach and Paula 2019). Therefore, to measure the effect that electoral violence singularly has upon electoral victory, fraud has to be controlled for. But to uncover different forms of fraud, especially institutional manipulation, can be difficult and therefore not always visible in the statistics (Hafner-Burton, Hyde and Jablonski 2016, p. 481). However, the NELDA dataset offers two variables that allow controlling for fraud as much as possible. These are nelda11 *“before elections, are there significant concerns that elections will not be free and fair?”* and nelda49 *“did any monitors refuse to go to an election because they believed that it would not be free and fair?”*. The nelda11 variable is coded Yes if there was concern, domestic or international, that the election was not to be free and fair, or that the election did not fulfil the basic criterias of being competitive. The nelda49 variable more closely captures

international concern, asking if election monitors explicitly refused to observe the election due to pre-election concerns. None of these variables can capture if electoral fraud actually occurred, but gets close enough by focusing on the concerns, international and domestic, that fraud would occur (Hyde & Marinov 2021).

Furthermore, when studying the effects pre-electoral violence can have upon electoral outcome, previous scholars have not taken into account the effect of anti-governmental pre-electoral violence (Hafner-Burton, Hyde and Jablonski 2016). In the Theory chapter, it is argued that as anti-governmental groups are likely to target other segments of the population with violence than the progovernment side, the incumbent should not benefit from that violence. Therefore, it is necessary to control for the instigator of every violent event. This is done by separating pro-government and anti-government violence, counting the number of events related to each election, and thereafter using the anti-government violence variable as a control.

3.5. Operationalisation of variables

The datasets of NELDA and ECAV give good opportunities for answering the research question in this paper. However, their variables set limitations on which operationalisations of the variables that are possible to make. With the risk of missing some unique perspective on the situations of elections, the data is still comprehensive enough to conduct a quantitative study for investigation of the proposed research question.

The dependent variable, *probability of incumbent electoral victory*, is operationalised using the nelda24 variable “*Did the incumbent’s party lose?*” in the NELDA dataset. The variable has four possible answers in the dataset, “yes”, “no”, “N/A” or “unclear” (Hyde & Marinov 2012; 2021). In the purpose of having clear statistics, only cases with the answer “yes” or “no” will be included, thus being a dichotomous variable.

The independent variable, *progovernment instigated electoral violence*, is to be operationalised in two steps. Firstly, the variable Violence Initiator in combination with the variables of Actor1Side, Actor2Side, Target1Side or Target2Side of the ECAV dataset is used to determine which actor involved in the event actually initiated the violence, who is thereafter identified as *progovernment* or *anti-government* (Daxecker, Amicarelli and Jung 2019; 2021). Secondly, the number of events instigated by either side in relation to a specific election is

counted, allowing for control for levels of violence rather than occurrence. All details of coding can be found in Appendix 3: Script of code.

These operationalisations are reliable in the sense that by using the attached code and the combined NELDA and ECAV datasets, it will yield the same results. Similar data or alternative coding should also retrieve similar results. At the same time, there is a risk that the data is biased, as discussed in the following section 3.6. Limitations of the data (Kellstedt and Whitten 2018, p. 111-114).

Both of the operationalisations are also deemed to achieve validity. Firstly, the concepts concerning electoral victory and progovernment violence are closely related to the operationalisations of incumbents' victory or loss of the election and identified instigator of violence, respectively. Secondly, the operationalisations clearly exclude what is not meant to be included in the theoretical concepts. Thirdly, the concepts and operationalisations are not directly related to each other and therefore should not cause circular or spurious results (Kellstedt and Whitten 2018, p. 111-112, 114-116).

3.6. Limitations of the data

In the previous sections it was mentioned that all events without a known instigator of violence have been excluded. This step is necessary in this paper to answer the research question; if progovernment instigated electoral violence benefits the incumbent. As discussed in the Theory chapter, previous research (Hafner-Burton, Hyde and Jablonski 2016) has not controlled for the violence of the opposition that by differences in motives, targets and tactics should not increase the probability of incumbents' re-election. The ECAV dataset allows for this differentiation between progovernment and anti-government violence to be made as they separate the initiator of the violence from the initiator of the event, fulfilling the contribution and purpose of this paper (Daxecker, Amicarelli and Jung 2019; 2021). It must be noted that in the case selection process, 1543 events were excluded due to this lack of information. There still remains enough events and cases to draw statistical conclusions, however the dropped events might have had some impact on the end results.

Furthermore, the founders of ECAV do admit a risk for reporting bias due to the sources of information. International news agencies tend to focus on developed countries and those of strategic importance, democracies tend to have relatively high levels of reports concerning

progovernment violence and authoritarian regimes tend to underreport progovernment violence while overreporting anti-government violence. The ECAV founders suggest several statistical tools to be used to decrease impact of, and control for, reporting bias (Daxecker, Amicarelli and Jung 2019, p.718). However, it is beyond technical availability to use these tools in this paper wherefore eventual reporting bias remains uncontrolled.

4. Results and Analysis

4.1. Descriptive statistics

4.1.1. Summary of variables

In the combined dataset of NELDA and ECAV 1302 elections during the period from 1990 to 2012 are covered. This is made through the independent variable for pro-governmental violent events Progov, the control variable for anti-governmental violent events Antigov, control variables nelda11 and nelda49 for indications of fraud, and nelda24 for identifying electoral winner.

Variable	N	Mean	Sd	Min	Max
nelda24	1302				
... no	830	63.7%			
... yes	472	36.3%			
nelda11	1302				
... no	784	60.2%			
... unclear	35	2.7%			
... yes	483	37.1%			
nelda49	1302				
... N/A	37	2.8%			
... no	1173	90.1%			
... unclear	47	3.6%			
... yes	45	3.5%			
Progov	1302	1.077	6.629	0	149
Antigov	1302	1.825	15.366	0	481

Table 1: Summary of descriptive statistics

The distribution of the dependent variable gives that the incumbent party won in 830 elections, or 63,7 %, giving the opposition victory in 472 elections. In 60 % of the elections, there were no pre-election indications of electoral fraud and while 483 elections, or 37,1 %, had such concerns, in just 3,5 % of the elections, or 45 of them, it is clear that monitors refused to participate. The Progov and Antigov variables show firstly that there are elections without any sign of violence. Most of the elections that do see violence have a generally low number of events, therefore the mean number of events is below two and the median is zero for both instigating sides. However, it should be noted that there are elections with high elevations of violence, as the maximum number of events is 149 for Progov and 481 for Antigov.

At the same time, for Progov, there are only three notable elections with extreme amounts of events in comparison to most other elections. This makes the distribution of violence extremely skewed which motivates a log-transformation of the Progov and Antigov variables to be used in the regression analysis. As a robustness check, the outliers will be excluded to capture if these specific elections contribute to a notable change in the coefficients, driving the results differently than the general pattern.

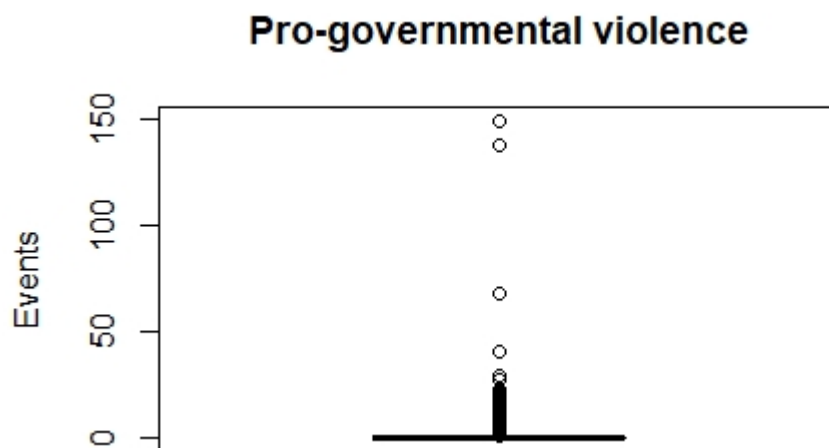


Figure 3: Boxplot of Progov variable

4.1.2. Progov variable covariation with control variable Antigov

Previous research has argued that progovernment groups as well as anti-government groups engage in electoral violence reciprocally (van Ham and Lindberg 2015). To some extent, there seems to be covariation between the variables. While most of the elections did not

see violence, those that did often had violence conducted by both sides. However, in those instances the anti-government side often instigated a larger number of events than the progovernment side. For example, in the most extreme outlier of the case selection on both variables, which was the election in Iraq in 2005, the anti-government side was attributed 481 events while the progovernment side was attributed 149. In 97 elections was the progovernment sole perpetrator against 107 where the anti-government side was the sole perpetrator. By conducting a Pearson's correlation test a statistically significant positive coefficient of 0,66 is given.

It is beyond the scope of the paper to enter a discussion of the implications of covariation between anti-government and progovernment violence. It is enough to state the necessity of controlling for instigator of violence as the variables may often be present simultaneously and have different effects on the electoral outcome.

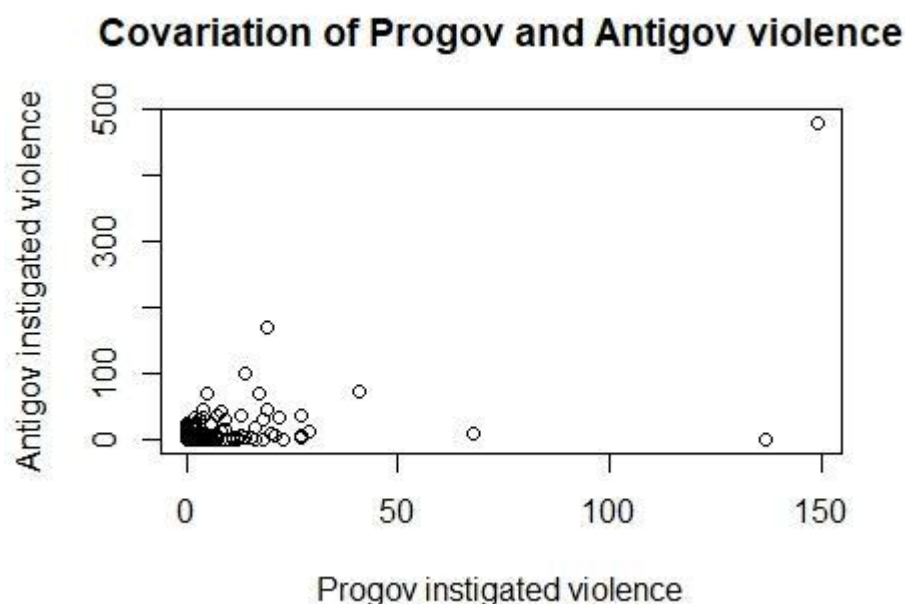


Figure 4: Scatterplot of Progov – Antigov covariation

4.2. Regression analysis

In the table below, the results from the logistic regression with log-transformed *Progov* and *Antigov* variables is presented in three models. In the first model, only the independent variable is included to demonstrate general connection with the dependent variable. The second

model introduces the control variable for anti-governmental violence to disentangle if it changes the effect of the progovernment violence. In the third model, electoral fraud is controlled for with two variables, if there was concern about the freedom and fairness of the election beforehand, and if monitors refused to participate in the election due to concerns of freedom and fairness.

The Progov variable has a consistent and strong statistical significance with a p-value of less than 0.01 throughout the models. The coefficients are odd-ratios and the Progov coefficient is below 1 in all models, thus suggesting that the independent variable has a positive relationship with the dependent variable. That would mean that when the progovernment side instigates electoral violence, the probability of incumbent electoral victory increases.

	Incumbent party lose		
	(1)	(2)	(3)
Intercept	0.630*** t = -7.495	0.617*** t = -7.674	1.592 t = 1.332
Progov	0.632*** t = -4.084	0.552*** t = -4.238	0.639*** t = -3.094
Antigov		1.196* t = 1.695	1.179 t = 1.491
Free/fair Concerns Unclear			1.359 t = 0.867
Free/fair Concerns Yes			0.405*** t = -6.592
Monitors refuse No			0.518* t = -1.874
Monitors refuse Unclear			0.274** t = -2.570
Monitors refuse Yes			0.156*** t = -2.916
Observations	1,302	1,302	1,302
Log Likelihood	-842.629	-841.206	-802.086
Akaike Inf. Crit.	1,689.258	1,688.411	1,620.171
Note:	* p<0.1; ** p<0.05; *** p<0.01 Coefficients are odds-ratios		

Table 2: Logistic regression

The first control variable, Antigov, does not reach a statistical significance within the common threshold of 0.05 and may therefore not contribute to conclusions about the effect on electoral outcome. It is at the same time notable that the coefficient is positive, thus suggesting a negative relationship between the occurrence of anti-government violence and probability of incumbent electoral victory, which follow the theoretical argument.

Concerns regarding freedom and fairness from before the election was the first control variable to take into account the potential effects of fraud as alternative manipulative strategies for the incumbent, while the second control variable for fraud was if monitors did refuse to participate in the election. Both of these have statistically significant results with coefficients

suggesting a positive relationship with the dependent variable, alas to use fraudulent strategies should increase an incumbents' probability of electoral victory.

4.3. Robustness checks

4.3.1. Regression without log-transformation

Without log-transformation of the continuous variables of Progov and Antigov the coefficients of the nominal or dichotomous variables also vary, however the sign of all the coefficients remains the same, above or below 1. It must be noted that several of the coefficients have a stronger statistical significance without log-transformation. Monitors refuse No and Monitors refuse Unclear achieves statistical significance within the 95 percent confidence. So do the Antigov variable, wherefore the anti-governmental violence remains an interesting concept to acknowledge.

4.3.2. Regression without outliers

Most of the elections have no or only a few violent events occurring, instigated by either progovernment or anti-government sides. At the same time, there are 8 elections that contains relatively extreme levels of violence, such as the election in Iraq 2005, where there was reported 481 events of anti-governmental violence and 149 events of progovernment violence. It is therefore of importance to make sure it is not these outliers that drove the result of the main regression. This is made by excluding all events containing more than 50 events instigated by either side.

The control variable Monitors refuse Unclear gain more prominent statistical significance and the values of the coefficients vary to a minor degree. Otherwise, to regress with excluded outliers did not affect the signs and significance of the coefficients, suggesting that the outliers are not driving the result.

4.4. Discussion

4.4.1. *Effects of progovernment violence and fraud*

The Progov variable achieved coefficients below 1 consistently within 99 percentage statistical significance, not only throughout the models of the logistical regression but also in both robustness checks. It is therefore clear to state, as does previous researchers (Hafner-Burton, Hyde and Jablonski 2016), that progovernment violence does favour the incumbents' probability of electoral victory. Thereby, the hypothesis is supported. Incumbents who use violence are generally rational and strategic when their goal is to win the election.

However, it must be noted that in the majority of elections there were no reported violence and still the incumbent parties won in 830 elections compared to 472 where they lost. Thus, the finding that violence helps the incumbent does not imply that incumbents should use violence in all circumstances or that it will always lead to their victory. As previous scholars have stated, to not use violence can be equally rational and strategic when the risk of backlash is too great (Rosenzweig 2021; Hafner-Burton, Hyde and Jablonski 2013)

When answered yes, both of the control variables for fraud, if monitors refused and if there were concerns beforehand, also received statistical significance with negative coefficients. This suggests that the phenomenon is similarly successful to alter electoral outcomes on the same basis as the argument above. This finding goes well into the work of current debate in which it has been argued that electoral violence and fraud in the form of vote buying can be used simultaneously and target different population spectrums (van Ham and Lindberg 2015; Rauschenbach and Paula 2019). This highlights the necessity to take both of these phenomena into account when researching one of them. They are dynamic with each other and may also be used in wider combinations with other tactics or strategies. At the same time, exactly how they are used together is not yet fully understood and may need further inquiry.

4.4.2. *Effects of anti-government violence*

In the main regression, the Antigov variable did not reach statistical significance within 95 percentage confidence, thus it cannot support the theoretical argument. However, the sign of the Antigov coefficient was positive, suggesting that if it had been significant, it would have had a negative impact on the incumbents' re-election, thus following the theoretical argument.

In other words, while no conclusions can be drawn in this thesis, anti-government electoral violence could possibly be a method by opposition actors to gain influence in electoral outcomes. Despite lack of statistical significance, there are two reasons to not fully drop the discussion of the Antigov coefficients sign. To begin with, in the robustness check regression without log-transformation, the coefficient did achieve statistical significance. This indicates an insecurity of the true impact anti-government violence might have that can be cleared with further investigation, such as with more advanced statistical methods or a different approach to the problem. Furthermore, in the descriptive statistics it is clear that there is a covariation between progovernment and anti-government violence, which follows the argument of van Ham and Lindberg (2015) that incumbents and opposition engage in violence reciprocally. That anti-government electoral violence would not have any effect at all in such a dynamic setting does not seem probable. However, as mentioned, this discussion of the Antigov coefficient should as of now only be regarded as a side note until further inquiries have been made upon the subject.

5. Summary and Conclusions

5.1. Summarizing the thesis

The purpose of this study was to gain better understanding of the relationship between progovernment instigated electoral violence and electoral outcomes, specifically how the probability of incumbent electoral victory is altered, using the following research question as point of departure:

“Does progovernment instigated electoral violence lead to increased probability of incumbent electoral victory”.

Previous scholars have asked similar questions before and found positive relationships between electoral violence and electoral victory, but they have not controlled for the actors instigating the violence (Hafner-Burton, Hyde and Jablonski 2016). The necessity to differentiate between progovernment and anti-government violence was stated with the argument that due to their different sets of available methods and resources, if they used

violence as a strategy, they would likely target different segments of the population with different tactics, thus having different effects on the electoral outcome. Therefore, to control for anti-government electoral violence was the main contribution of this paper.

The theoretical argument presented claimed that as rational actors, incumbents would only use electoral violence if it worked strategically toward their goal. With the risk of backlash, such as voter condemnation or post-election protest, violence would still not be an entirely irrational strategy as losing the election could be perceived as a more immediate threat than post-election dynamics. The theoretical argument derived at the following hypothesis:

H1: *“If progovernment actor or party instigate electoral violence the probability of incumbent actor or party electoral victory increases.”*

A quantitative cross-sectional method was used to test the argument and hypothesis. With the combination of two datasets, NELDA and ECAV, it was possible to aggregate data on violent events upon each election, counting the amount of progovernment and anti-government violence associated with a singular election. Thereafter, the 1302 elections used could be presented in descriptive statistics and run through both a logistic regression and robustness checks.

The findings showed a consistent 99 percentage statistical significance for a positive effect of progovernment instigated electoral upon the incumbents' probability of electoral victory, thus supporting the hypothesis. A similar relationship was found for the control variables of fraud albeit without the same consistency. This follows the argument of previous researchers that violence as a method of intimidation can be used simultaneously with fraudulent methods such as vote-buying on different spectrums of the population, and they both generally work to increase the incumbents' chances of winning. It can therefore be concluded that violence instigated by progovernment side is strategically used to increase the incumbent's probability of electoral victory.

On the other hand, no statistical significance could be achieved for anti-government violence except for in one of the robustness checks. While there is covariation between the violence instigated by the two sides, suggesting reciprocal use (van Ham and Lindberg 2015), it would take more research to determine the actual effects of anti-government violence upon

electoral outcomes. Because of this, the purpose of the paper is fulfilled to a large degree, but not fully. The hypothesis has been confirmed with great certainty and anti-government violence controlled for, however understanding of the effect of violence from different actors has to await further studies.

5.2. Implications

The main conclusion of this paper is that incumbents can increase their probabilities of re-election by applying progovernment instigated electoral violence strategically, and also in combination with methods of fraud. It cannot be highlighted enough, though, that this does not imply that such strategies and methods will work in the incumbents' favour in all conditions or create foundations for a long-term success of either the incumbent or society. This thesis, in other words, does not recommend the usage of violence. To begin with, the case selection of this paper is relatively narrow. Consolidated democracies are excluded due to minimal chances both for electoral violence to have an effect and for electoral violence to occur in the first place. Consolidated autocracies can also be said to be excluded as only national and popular elections that had a legal opposition were included. Thereby, the findings can only apply to countries in the spectrum between, that witness some form of democratization process. According to arguments of previous researchers, incumbents use electoral violence when they no longer can use institutional manipulation (van Ham and Lindberg 2015). Therefore, the group of situations where the findings of this paper is applicable is even smaller. Furthermore, to use electoral violence to win an election is only a short-term strategy that does not account for long-term effects. Those incumbents that do apply violence often underestimate the risk of post-electoral protests as well as for the loss of support generally (Hafner-Burton, Hyde, Jablonski 2016; Rosenzweig 2021). As a final point against the use of electoral violence is the dire consequences it has on society. It does not only disturb the development of a functioning democracy. It also reduces trust in society, causing polarization between ethnic or political lines, creates fearfulness and of course causes bodily harm to those directly affected.

Straus and Taylor (2012) showed that the incumbents instigated most of the electoral violence. To differentiate between progovernment and anti-government violence and control for the latter is therefore not to relieve incumbents of their responsibility. As Wilkinson (2004) stated, the incumbent either perpetrates or allows violence to occur. The purpose of the thesis, as described above, was to contribute to one step into a deeper understanding of the phenomena

in order to find tools to mitigate electoral violence. To reach this, however, further studies are needed.

5.3. Further research

This paper has contributed one step towards greater understanding of the interaction between progovernment and anti-government electoral violence, but to improve the results, further studies could take several measures. Firstly, the sizes of the odd-ratios coefficients in the logistic regressions have not been interpreted due to limited knowledge and time-resources. To do so would give another perspective on the influence levels of the control- and independent variables upon electoral outcome. Secondly, in this paper the amount of violent events in each election was counted instead of using the mere presence of violence as independent and control variables. However, more dimensions of the events can be used and may contribute to different interpretations. For example, the amounts of deaths in relation to each event or election, or number of involved individuals on each side. Thirdly, the method used in this paper has been cross-sectional on singular elections. To use time-series and measure several consecutive elections in several countries would deepen our understanding of how previous electoral violence affects present situations and if or when electoral violence becomes a political norm. Fourthly, further studies are needed to understand the relationship between anti-government violence and the opposition's probability of electoral victory. As the opposition is generally weaker than the incumbent from the start, it is possible that the probability would increase at a slower pace. But it is also important to acknowledge that the opposition is most often not united. Thus, if measured as a collective, results could become spurious if one party's violence led to another party's increased electoral victory.

6. Bibliography

- Alesina, Alberto, Piccolo, Salvatore and Pinotti, Paolo (2019) Organized Crime, Violence, and Politics, *Review of Economic Studies*, 86, p. 457–499.
- Birch, Sarah, Daxecker, Ursula and Höglund, Kristine (2020) Electoral Violence: An Introduction, *Journal of Peace Research*, Vol. 57 (1), p. 3–14.
- Daxecker, Ursula, Amicarelli, Elio and Jung, Alexander (2019) Electoral contention and violence (ECAV): A new dataset, *Journal of Peace Research*, Vol. 56(5) p. 714–723.
- Daxecker, Ursula, Amicarelli, Elio and Jung, Alexander (2021) *Electoral Contention and Violence (ECAV) Codebook*, available at <https://ecavdata.org/> 29 Oct 2021.
- Glaser, Charles (2019) Realism, in: Collins, Allan (ed.) *Contemporary Security Studies*, Fifth Edition, Oxford University Press, Oxford, p. 13-29.
- Gutiérrez-Romero, Roxana (2014) An Inquiry into the Use of Illegal Electoral Practices and Effects of Political Violence and Vote-buying, *Journal of Conflict Resolution*, Vol. 58(8), p. 1500-1527.
- Hafner-Burton, Emilie, Hyde, Susan and Jablonski, Ryan (2013) When Do Governments Resort to Election Violence? *British Journal of Political Science*, 44, p. 149-179.
- Hafner-Burton, Emilie, Hyde, Susan and Jablonski, Ryan (2016) Surviving Elections: Election Violence, Incumbent Victory and Post-Election Repercussions, *British Journal of Political Science*, 48, p. 459-488.
- van Ham, Carolien and Lindberg, Staffan (2015) From Sticks to Carrots: Electoral manipulation in Africa 1986–2012, *Government and Opposition*, Vol. 50, (3), pp. 521–548.
- Hyde, Susan and Marinov, Nikolay (2012) “Which Elections can be Lost?”, *Political Analysis*, 20(2), p. 191-210.
- Hyde, Susan and Marinov, Nikolay (2021) *Codebook for National Elections Across Democracy and Autocracy Dataset*, 6.0, available at <https://nelda.co/> 29 Oct 2021.
- Höglund, Kristine (2009) Electoral Violence in Conflict-Ridden Societies: Concepts, Causes, and Consequences, *Terrorism and Political Violence*, 21:3, p. 412-427.

Kellstedt, Paul and Whitten, Guy (2018) *The Fundamentals of Political Science Research*, Cambridge University Press, New York.

Rauschenbach, Masha and Paula, Katrin (2019) Intimidating voters with violence and mobilizing them with clientelism, *Journal of Peace Research*, Vol. 56 (5) p. 682–696.

Rosenzweig, Steven (2021) Dangerous Disconnect: Voter Backlash, Elite Misperception, and the Costs of Violence as an Electoral Tactic, *Political Behavior*, 43, p. 1731–1754.

Paige Schneider, Paige and Carroll, David (2020) Conceptualizing more inclusive elections: violence against women in elections and gendered electoral violence, *Policy Studies*, 41:2-3, p. 172-189.

Straus, Scott and Taylor, Charles (2012) Democratization and electoral violence in sub-Saharan Africa, 1990–2008. In: Dorine A Bekoe (ed.) *Voting in Fear: Electoral Violence in Sub-Saharan Africa*. Washington, DC: USIP Press, p. 15–38.

Söderström, Johanna (2018) Fear of Electoral Violence and its Impact on Political Knowledge in Sub-Saharan Africa, *Political Studies*, Vol. 66(4), p. 869–886.

Wahman, Michael & Goldring, Edward (2020) Pre-election violence and territorial control: Political dominance and subnational election violence in polarized African electoral systems, *Journal of Peace Research*, Vol. 57(1), p. 93–110.

Wilkinson, Steven (2004) *Votes and Violence; Electoral Competition and Ethnic Riot in India*, Cambridge University Press, New York.

7. Appendix

7.1. Robustness checks – Regression without log-transformation

	Incumbent party lose		
	(1)	(2)	(3)
Intercept	0.602*** t = -8.491	0.598*** t = -8.560	1.625 t = 1.412
Progov	0.925*** t = -2.829	0.890*** t = -3.248	0.917*** t = -2.674
Antigov		1.021** t = 2.157	1.020** t = 2.096
Free/fair Concerns Unclear			1.355 t = 0.862
Free/fair Concerns Yes			0.395*** t = -6.822
Monitors refuse No			0.500** t = -1.988
Monitors refuse Unclear			0.269*** t = -2.617
Monitors refuse Yes			0.149*** t = -2.995
Observations	1,302	1,302	1,302
Log Likelihood	-845.900	-843.498	-802.237
Akaike Inf. Crit.	1,695.800	1,692.996	1,620.474
Note:	*p<0.1; **p<0.05; ***p<0.01 Coefficients are odds-ratios		

7.2. Robustness check – Regression without outliers

	Incumbent party lose		
	(1)	(2)	(3)
Intercept	0.630*** t = -7.478	0.619*** t = -7.586	1.619 t = 1.377
Progov	0.620*** t = -3.986	0.560*** t = -4.038	0.655*** t = -2.848
Antigov		1.158 t = 1.344	1.145 t = 1.179
Free/fair Concerns Unclear			1.359 t = 0.866
Free/fair Concerns Yes			0.403*** t = -6.589
Monitors refuse No			0.510* t = -1.915
Monitors refuse Unclear			0.271*** t = -2.592
Monitors refuse Yes			0.154*** t = -2.934
Observations	1,294	1,294	1,294
Log Likelihood	-838.593	-837.698	-798.498
Akaike Inf. Crit.	1,681.185	1,681.397	1,612.997
Note:	* p<0.1; ** p<0.05; *** p<0.01 Coefficients are odds-ratios		

7.3. *Script of code*

```
#+ opts, include=FALSE,eval=TRUE

knitr::opts_chunk$set(eval=TRUE,          echo=TRUE,          error=TRUE,message=FALSE,
warning=FALSE,comment = c(""))

# Basic set-up
set.seed(1237658) # set seed

setwd("C:/Users/Rallyrobban/Documents/02. Studier/09. Fred och konflikt C/03. Thesis/R-
data")

#Load packages
library(stargazer)
library(knitr)
library(haven)
library(readr)
library(readxl)
library(tidyverse)

##NELDA

#Import NELDA dataset from computer.

Alpha_nelda <- readxl::read_excel("C:/Users/Rallyrobban/Documents/02. Studier/09. Fred
och konflikt C/03. Thesis/R-data/NELDA 6.0/NELDA.xls")

#Drop variables that will not be used.

Beta_nelda <- Alpha_nelda %>% select("stateid","ccode","country", "electionid",
    "year", "nelda3", "nelda11","nelda24","nelda49")

#Exclude non-competitive elections and elections without clear winner.

Charlie_nelda <- subset(Beta_nelda, nelda3=="yes")

Delta_nelda <- subset(Charlie_nelda,nelda24!="N/A" & nelda24!="unclear")

#Exclude all elections before 1990 and after 2012, as they cannot be presented in ECAV.
```

```

Echo_nelda <- Delta_nelda %>% filter (year > 1989)
Foxtrot_nelda <- Echo_nelda %>% filter(year < 2013)

##'ECAV

#Import ECAV dataset from computer.

Alpha_ecav <- readxl::read_excel("C:/Users/Rallyrobban/Documents/02. Studier/09. Fred och
konflikt C/03. Thesis/R-data/ECAV/ECAV.xls")

#Drop variables that will not be used.

Beta_ecav <- Alpha_ecav %>% select("EventID","country", "ccode", "Electiondate",
"NeldaID", "Date",
"Actor1Side","Actor2Side","Target1Side","Target2Side","ViolenceInitiator")

#Exclude post-election events. Only include pre-electoral events and events on election-day.
Charlie_ecav <- Beta_ecav %>% filter (Electiondate+1 > Date)

#Exlude all non-violent events, and cases with unknown Initiator.
Delta_ecav <- drop_na(Charlie_ecav,"ViolenceInitiator")
Echo_ecav <- subset(Delta_ecav, ViolenceInitiator!="99" & ViolenceInitiator!="-99")

#Indicate Side of the Violence-Initiator as Progov or Antigov.
GiveSide <- function(Side){
  return(ifelse(Side==0,"Progov",
               ifelse(Side==1,"Antigov",NA)))
}

Echo_ecav$InitiatorSide <-
  ifelse(as.numeric(Echo_ecav$ViolenceInitiator)==0.1, GiveSide(Echo_ecav$Actor1Side),
  ifelse(as.numeric(Echo_ecav$ViolenceInitiator)==0.2, GiveSide(Echo_ecav$Actor2Side),
  ifelse(as.numeric(Echo_ecav$ViolenceInitiator)==1.1, GiveSide(Echo_ecav$Target1Side),
  ifelse(as.numeric(Echo_ecav$ViolenceInitiator)==1.2,
  GiveSide(Echo_ecav$Target2Side),NA))))

```

```

#Drop cases without known Side of Violence-Initiator.
Foxtrot_ecav <- drop_na(Echo_ecav,"InitiatorSide")

#Rename variable NeldaID to electionid to prepare for merge.
Golf_ecav <- rename(Foxtrot_ecav, "electionid"="NeldaID")

#Count number of events per election initiated by Progov and Antigov respectively.
Hotel_ecav <- Golf_ecav %>% filter (InitiatorSide=="Progov")
Progov_Init <- count(Hotel_ecav, electionid, wt=NULL, sort=FALSE, name = "Progov")

India_ecav <- Golf_ecav %>% filter (InitiatorSide=="Antigov")
Antigov_Init <- count(India_ecav, electionid, wt=NULL, sort=FALSE, name = "Antigov")

#Merge the count with the Nelda dataset.
All_Init <- full_join(Antigov_Init, Progov_Init, by=c("electionid"))
Golf_nelda <- merge(Foxtrot_nelda, All_Init, by = c("electionid"), all.x = TRUE)
Golf_nelda$Antigov[is.na(Golf_nelda$Antigov)] <- 0
Golf_nelda$Progov[is.na(Golf_nelda$Progov)] <- 0

#Drop all consolidated democracies.
Hotel_nelda <- subset(Golf_nelda,ccode!=2 & ccode!=20 & ccode!=200 & ccode!=210 &
  ccode!=211 & ccode!=212 & ccode!=220 & ccode!=225 & ccode!=230 &
  ccode!=235 &
  ccode!=255 & ccode!=305 & ccode!=205 & ccode!=350 & ccode!=375 &
  ccode!=380 &
  ccode!=385 & ccode!=390 & ccode!=395 & ccode!=325 & ccode!=740 &
  ccode!=900 &
  ccode!=920)

###Descriptive statistics
#Summary table.
vtable::sumtable((Hotel_nelda [c("nelda24","nelda11","nelda49","Progov","Antigov")])),

```

```

summ=c('notNA(x)', 'mean(x)', 'sd(x)', 'min(x)', 'max(x)'),
summ.names=c("N", "Mean", "Sd", "Min", "Max"), out="viewer")

#'Produce descriptive statistics for dependent variable
barplot(table(Hotel_nelda$nelda24),
  main="Distribution of electoral victory",
  xlab="Incumbent party lose election", ylab="Count")

#'Produce descriptive statistics for independent variable
summary(Hotel_nelda$Progov)
sum(Hotel_nelda$Progov)

hist(Hotel_nelda$Progov, main="Pro-governmental violence", xlab = "Event count",
  ylab = "Case count")
abline(v=mean(Hotel_nelda$Progov, na.rm=T), col="blue", lwd=3)
abline(v=median(Hotel_nelda$Progov, na.rm=T), col="red", lwd=3)

boxplot(Golf_nelda$Progov, main="Pro-governmental violence", ylab="Events")

#'Compare the independent variable with control variable Antigov.
median(Hotel_nelda$Progov)
mean(Hotel_nelda$Progov)
median(Hotel_nelda$Antigov)
mean(Hotel_nelda$Antigov)

stargazer::stargazer(Hotel_nelda[,c("Progov", "Antigov")], summary=T, type="html",
  out="AntiPro.html")

boxplot(Hotel_nelda$Progov, Hotel_nelda$Antigov,
  main = "Violent events instigated per election",
  at = c(1,2),
  names = c("Progov", "Antigov"),

```

```
ylab="Events",
las = 2,
col = c("blue","red"),
border = "black",
horizontal = FALSE,
notch = FALSE)

plot(Hotel_nelda$Progov,Hotel_nelda$Antigov,
     main="Covariation of Progov and Antigov violence",
     xlab="Progov instigated violence", ylab="Antigov instigated violence")

cor.test(Hotel_nelda$Progov,Hotel_nelda$Antigov)

##Inferential statistics.
#Log transform Progov and Antigov as distribution is skewed
Hotel_nelda$Progov.log <- log1p(Hotel_nelda$Progov)
Hotel_nelda$Antigov.log <- log1p(Hotel_nelda$Antigov)

#Produce three Logistic regression-models, gradually including the control variables.
model1 <- glm(as.factor(nelda24) ~ Progov.log,
              data=Hotel_nelda,family=binomial)
summary(model1)
confint(model1)

model2 <- glm(as.factor(nelda24) ~ Progov.log + Antigov.log,
              data=Hotel_nelda,family=binomial)
summary(model2)
confint(model2)

model3 <- glm(as.factor(nelda24) ~ Progov.log + Antigov.log +
              as.factor(nelda11) + as.factor(nelda49),
              data=Hotel_nelda,family=binomial)
```

```

summary(model3)
confint(model3)

#'Exponentiate the models to produce odd-ratios.
exp(coef(model1))
exp(coef(model2))
exp(coef(model3))

#'Produce regression table.
stargazer(model1,model2, model3,
  apply.coef=exp, t.auto=F, p.auto=F, report = "vc*t",
  single.row = F,out.header= FALSE,header=F,type="html",
  intercept.bottom = FALSE,
  covariate.labels = c("Intercept", "Progov","Antigov",
    "Free/fair Concerns Unclear","Free/fair Concerns Yes",
    "Monitors refuse No","Monitors refuse Unclear",
    "Monitors refuse Yes"),
  dep.var.caption = "",
  dep.var.labels = c("Incumbent party lose"),
  notes="Coefficients are odds-ratios",
  out="Regression 1.html")

###Robustness check
#'Regression without log-transformation
model4 <- glm(as.factor(nelda24) ~ Progov,
  data=Hotel_nelda,family=binomial)
summary(model4)
confint(model4)

model5 <- glm(as.factor(nelda24) ~ Progov + Antigov,
  data=Hotel_nelda,family=binomial)

```

```

summary(model5)
confint(model5)

model6 <- glm(as.factor(nelda24) ~ Progov + Antigov +
              as.factor(nelda11) + as.factor(nelda49),
              data=Hotel_nelda,family=binomial)
summary(model6)
confint(model6)

#'Exponentiate the models to produce odd-ratios.
exp(coef(model4))
exp(coef(model5))
exp(coef(model6))

stargazer(model4,model5, model6,
           apply.coef=exp, t.auto=F, p.auto=F, report = "vc*t",
           single.row = F,out.header= FALSE,header=F,type="html",
           intercept.bottom = FALSE,
           covariate.labels = c("Intercept", "Progov","Antigov",
                                "Free/fair Concerns Unclear","Free/fair Concerns Yes",
                                "Monitors refuse No","Monitors refuse Unclear",
                                "Monitors refuse Yes"),
           dep.var.caption = "",
           dep.var.labels = c("Incumbent party lose"),
           notes="Coefficients are odds-ratios",
           out="Regression 2.html")

#'Regression without outliers
India_nelda <- Hotel_nelda %>% filter(Progov < 51)
Julieta_nelda <- India_nelda %>% filter(Antigov < 51)

Julieta_nelda$Progov.log <- log1p(Julieta_nelda$Progov)

```

```

Julieta_nelda$Antigov.log <- log1p(Julieta_nelda$Antigov)

model7 <- glm(as.factor(nelda24) ~ Progov.log,
              data=Julieta_nelda,family=binomial)
summary(model7)
confint(model7)

model8 <- glm(as.factor(nelda24) ~ Progov.log + Antigov.log,
              data=Julieta_nelda,family=binomial)
summary(model8)
confint(model8)

model9 <- glm(as.factor(nelda24) ~ Progov.log + Antigov.log +
              as.factor(nelda11) + as.factor(nelda49),
              data=Julieta_nelda,family=binomial)
summary(model9)
confint(model9)

#Exponentiate the models to produce odd-ratios.
exp(coef(model7))
exp(coef(model8))
exp(coef(model9))

stargazer(model7,model8, model9,
          apply.coef=exp, t.auto=F, p.auto=F, report = "vc*t",
          single.row = F,out.header= FALSE,header=F,type="html",
          intercept.bottom = FALSE,
          covariate.labels = c("Intercept", "Progov","Antigov",
                              "Free/fair Concerns Unclear","Free/fair Concerns Yes",
                              "Monitors refuse No","Monitors refuse Unclear",
                              "Monitors refuse Yes"),
          dep.var.caption = "",

```

```
dep.var.labels = c("Incumbent party lose"),  
notes="Coefficients are odds-ratios",  
out="Regression 3.html")
```