THE DEPARTMENT OF POLITICAL SCIENCE

UNIVERSITY OF GOTHENBURG

Examining the Ubiquitousness of Conflict-Related Sexual Violence in Territorial Conflicts

A quantitative study on how territorial conflicts are related to rebel perpetrated
conflict-related sexual violence and rebel groups funding
natural resources

Emelie Andersin

Abstract

This study explores how territorial conflicts are related to rebel perpetrated conflict-related sexual violence and if rebel groups funded by natural resources exacerbates that relationship. Prior research has explored how rebel groups funded by natural resources is related to rebel perpetrated conflict-related sexual violence (CRSV). This study claims that the mere presence of funding natural resources is not a sufficient incentive to carry out CRSV. Therefore, this study introduces an alternative predictor: the presence of a territorial conflict. Further, this study introduces carefully in theoretical terms the gender dimension of rebel CRSV in territorial conflicts. I expect territorial conflict to be the main driver, not rebel groups funded by natural resources, since territorial areas often carries an inherent value and territorial conflicts are highly violent-prone. I also expect conflicts experiencing territorial conflict and natural resource financing by rebel groups to produce a higher prevalence for rebel sexual violence. To study this theoretical framework, I will carry out a quantitative analysis using three dependent variables capturing both conflict-related sexual violence and wartime rape. The results show strong support between territorial conflict and wartime rape, but not conflict-related sexual violence. The results suggest that territorial conflict, natural resource financing and sexual violence are related to one another. However, we do not know more on how territorial conflicts is related to sexual violence.

Keywords: civil conflict, conflict-related sexual violence, wartime rape, territorial conflict, rebel groups, financing natural resources

Table of Contents

1. Introduction

In this section I will begin by introducing the research question, introduce the relevant research field and motivate the research gap. Previous studies (Whitaker, Walsh, Conrad, 2019; Rustad, Østby, Nordås, 2016) argues that rebel groups funded by natural resources and conflict-related sexual violence (CRSV) are positively associated. However, I argue that the mere presence of financing natural resources cannot be enough to explain rebel CRSV. I therefore extend previous research by introducing an alternative predictor to explain the relationship between rebel groups funded by natural resources and CRSV. I theorise that territorial conflicts are the main driver for rebel CRSV, and rebel groups funded by natural resources exacerbates rebel CRSV in territorial conflicts. I expect rebel CRSV to be more likely in settings of territorial contestation and even more when rebel groups are financing natural resources. This approach is supported by other studies which will be mentioned in this section. I will test this argument quantitatively, drawing on pertinent sources.

1.1 Research field and gap

In some conflicts, conflict-related sexual violence (CRSV) is more prevalent than in others. For example, Nicaragua and Chad experienced low levels of CRSV, meanwhile the Democratic Republic of Congo, Sudan and Sierra Leone experienced high levels of CRSV[1]. Previously, CRSV has been regarded as an inevitable consequence in conflicts. However, other studies have closely shown that this is false and CRSV is not ubiquitous in conflicts (e.g. Wood, 2009). I am interested in studying under what conditions rebel-perpetrated sexual violence[2] is committed in conflicts. Based on previous research, I will study when armed actors[3] are contesting over territorial areas, during which rebel groups are exploiting and financing their rebellion through natural resources and how this is related to conflict-related sexual violence[4]. I extend previous studies by introducing an alternative predictor to CRSV, which is the presence of a territorial conflict.

Previous research has explored the relationship between rebel groups exploitation of natural resources and sexual violence in conflicts (Whitaker, Walsh, Conrad, 2019; Rustad, Østby, Nordås, 2016). One prominent explanation by Whitaker et al. (2019) why natural resource exploitation is

---

[1] View appendix on p. 37-39.

[2] This study will solely focus on the CRSV committed by rebel groups. Whenever this study mentions CRSV, it is referring to data or research on CRSV by rebel groups.

[3] When referring to armed actors, it is defined as governments and rebel groups.

positively associated with perpetration of sexual violence is that rebel groups are exploiting economic endowments and it influences rebel groups incentives to perpetrate CRSV. These scholars are arguing that by profiting from natural resources, such as through extortion, influences rebel groups relationship with civilians and incentivizes to engage in CRSV. Thus, those rebel groups which are using financing strategies to generate an income are committing more acts of CRSV than those which are not, since these rebel groups are profiting from natural resources and therefore do not have to rely on the civilian population for material necessities. Another explanation for this relationship is elaborated by Rustad, Østby and Nordås (2016). They are arguing that the frequency of CRSV increases when rebel groups finance their rebellion through natural resources and when women are living close to artisanal and small-scale mining sites. Secondly, in the mining area there is a highly prevalent "hyper-masculine culture", which exposes women to a higher risk of sexual violence and transactional sex. Therefore, women living close or in the mining sites are easily recruited to transactional sex and thus carry a higher risk of being victims of sexual violence. Women living close to mining sites are targeted by CRSV due to the hyper-masculine culture and men are often disobeying norms in the society in the lawlessness. In environments as these, sexual violence against women are encouraged. Women are therefore a target to sexual violence (Rustad et al., 2016:77-78).

However, this relationship between the exploitation of natural resources[5] and its causality to higher levels of CRSV has been criticised by several scholars (Autesserre, 2012; Laudati and Mertens, 2019)[6]. I will now elaborate why I am introducing an alternative predictor to rebel CRSV instead of rebel groups funded by natural resources. Autesserre (2012)[7] argue that local populations, Congolese intellectuals, and think tanks, emphasise several causes for why the Democratic Republic of Congo are experiencing high levels of violence. Other emphasised causes are for example land issues, economic sources of abuse (disputes over cattle charcoal, timber, drugs) and competition between Congolese leaders for power. Approximately 8 percent of the conflicts in the DRC are over natural resources (Autesserre, 2012).

Further elaborated by Laudati and Mertens (2019), argues that Western NGOs have put forward a problematic cause-consequence framing. The framing implies wherever there is mineral resource exploitation (such as coltan), there is high levels of sexual violence. Sexual violence is

---

[5] These studies are referring to natural resources (of e.g. mining, charcoal and land. However, in my operationalisation section 4.1.3 I will introduce a broader range of natural resources.

[6] Most of the research problematising the relationship between natural resources and CRSV have been carried out in the DRC. One of these reasons can be because the DRC have received unprecedented media attention regarding the natural resource role during conflicts and how it is "causally" related to CRSV. This is not an object for me to only have research from the DRC.

[7] Autesserre (2012) is referring to CRSV committed by both governments and non-state actors.

linked to natural resources exploitation and rebel groups are displacing civilian populations from natural-resource rich regions in order to control natural resources to finance their rebellion. Thus, sexual violence is reduced to economic endowments since natural resources is an important funding for rebel groups and state forces. Further, since the region is experiencing high rates of CRSV committed by all actors, thus must natural resources exploitation and CRSV be linked in a causal relationship, referring to the article Rustad, Østby and Nordås (2016).

Laudati and Mertens (2019) emphasise the loose connection of a direct causality between natural resource exploitation and high rates of sexual violence and encourage to study additional causes. In Laudati and Mertens (2019) definition of natural resources, they are highlighting land, cattle, timber and minerals. One example from the narrative in this direct cause-consequence relationship and how it is may dismiss other factors is by analysing the mass rapes of 387 people in 2010 in Luvungi, DRC. High levels of sexual violence were once again framed as a causality between natural resource exploitation and CRSV. However, other reports contrary to these, reported that the perpetrated sexual violence was instead a retaliation against the local population for supporting and sympathising with government forces. The perpetrated sexual violence was a punitive action against the local population for shifting its allegiance to the antagonist. This is nonetheless one example, but it illustrates the complex dynamics in the nature of CRSV. This example further dilutes the narrative of the simplistic causality between conflict minerals and CRSV. To summarise, the relationship between conflicts, exploitation of natural resources and CRSV is far from apparent.

I argue that it is not the presence of natural resources or the financing mechanism of natural resources that are main predictors of CRSV. I expect that territorial conflict is the main driver of rebel perpetrated CRSV. I also expect that widespread rebel CRSV is particularly high when there is also natural resource exploitation, for some of the reasons mentioned in prior research, such as rebel groups financing natural resources are less dependent on support from civilian population and thus have less incentives to restrain CRSV.

Going forward, this study argues to some extent that the correlation between exploitation of resources by rebel groups and conflict-related sexual violence identified in prior research is in fact driven primarily by territorial conflicts. Thus, this study will study territorial conflicts between armed actors and how it is related to rebel perpetrated conflict-related sexual violence. I expect a strong effect of rebel CRSV when there is both territorial conflict and rebels financing natural resources because the rebel group is not reliant on the civilian population. To finance natural resources, rebel groups must seize total control over the natural-rich area. In order to do so, the area must be depopulated (Keen, 1998; Meger, 2016). Rebel groups may then employ sexual

violence as a weapon of war to evacuate the region (Meger, 2016). I expect the combination of territorial conflicts and financing natural resources to increase the prevalence of rebel CRSV. In other words, natural resource exploitation may be a moderating variable between contestation over territorial control and conflict-related sexual violence. To my knowledge, there has been no conducted research on the relation between territorial conflicts, rebel groups funded by natural resources and rebel perpetrated CRSV. In developing the theoretical argument below, I also carefully consider the gender dimension of rebel-perpetrated sexual violence in territorial conflicts.

2. Previous literature

In this section I will discuss relevant previous literature. The first section will discuss the literature on territorial conflicts and rebel group behaviour. The second section will discuss the literature on conflict-related sexual violence and why rebel groups are perpetrating CRSV. Lastly, I will introduce the research approach and research-question.

2.1 Territorial conflict and rebel group behaviour

Scholars have argued that territorial issues are the most conflict prone and predicts higher levels for widespread violence (Vasques, 1995; Quackenbush, 2010). Other scholarship (Macaulay and Hensel, 2014) argue that conflicts are more likely when there are territorial claims over territories containing any type of natural resources. Those conflicts are facing higher levels of violence than territorial areas lacking natural resources. Non-renewable resources are especially violent-prone. They expect that the presence of natural resources in territorial areas for states to regard the territory more valuable and the state will be more eager to conquer the territory. Territories containing natural resources are more valued as they can produce an economic income for the state and increases the state's incentives to pursue the territory. Thus, several armed actors will be aggressive in pursuing the territory and willing to engage in armed conflict to conquer the territory, which increases violence.

According to Kalyvas (2006: 111-117) territorial control increases civilians' compliance and lowers the violence against civilians. Territorial control diminishes the probability for conflict and death. Kalyvas (2006:118-123) is further adding empirical evidence that civilian support declines when a rebel group is losing its territorial control. For example, during the revolution in Vietnam "there was a clear decline in popular support for the revolution that resulted from the loss of psychical control" (Kalyvas, 2006:121).

Other scholarship (Keen, 1998) is emphasising that rebel groups are deliberately creating chaos to gain access to natural resources and take control over the territorial area. This is performed by depopulating areas of civilians of resource rich areas. This is often executed by rebel groups lacking economic resources. They may use high levels of violence against civilians in order to maximise their success.

Further, violence against civilians is likely to emerge when two rebel groups are competing for power and attempting to win civilians loyalty. Winning civilians' loyalty is important for rebel groups. When non-combatants choose to no longer be loyal to the rebel group and instead shift

their loyalty to the antagonist, this causes severe consequences for the rebel group which may resort to violence to force the local population to guarantee back its loyalty (Weinstein, 2007:201-05).

Wood (2014) explains that rebel groups lacking a relation with civilians may engage in violence to plunder and force civilians to provide necessities. Rebel groups controlling a territorial area is positively correlated of having greater relations with civilians and thus carry out lower levels of violence against civilians.

Other findings from Meger (2016) suggest that in economic local wars rebel groups are targeting civilians in order to finance their violent activities. Rebel groups interested in financing and exploiting natural resources are instead targeting civilians to control resource-rich areas. Rebel groups exercising violence against non-combatants is thus not a by-product of civil war, but instead a conscious tactic to depopulate a territorial area. Rebel groups thus seeking to exploit natural resources to finance their rebellion benefit from the chaos and disorder as it serves as a profitable opportunity.

Meger (2016) continues that during the conflict in Sierra Leone from 1991-2002, the rebel group Revolutionary United Front (RUF) employed sexual violence as a weapon of war to expand its territorial control and economically exploit the region. This is summarised by the Sierra Leone Truth and Reconciliation Commission "there was a deliberate strategy to target [women and girls] because of their gender for violations of a gender-based nature" (Meger, 2016:104-106). Gender is connected to sexual violence as it carries gendered meanings and symbols which targets masculinity and humiliates the community. The affected civilian population is then most likely to evacuate the region. Therefore, sexual violence employed as a weapon of war effectively depopulates areas of civilians to seize a rich region containing natural resources to finance its rebellion. For example, RUF was successful in seizing and controlling the diamond rich Kono region by employing sexual violence similarly. RUF displaced the civilian population, put fear in communities and could realise their economic goal of exploiting natural resources.

Laudati and Mertens (2019) share the same explanation as Meger (2016) that sexual violence is a tool to demoralise and terrorise the local population to gain access to natural resources. Further, sexual violence may be used as a punitive action to gain access to natural resources and prevent civilians from hindering mineral trafficking.

These mentioned studies primary focuses on how territorial conflicts are highly violent-prone, how they are related to natural resources and non-sexual violence. This study will contribute to the research field on territorial conflicts by arguing that territorial conflicts to some extent are a predictor of CRSV. This study will also contribute to understand the relation between territorial conflicts, rebel groups funded by natural resources and the prevalence of rebel-perpetrated sexual

violence. Previously mentioned studies on CRSV have mostly carried out qualitative studies. I will contribute on carrying out a quantitative study on 86 conflicts. I will also add the gender perspective to the story as Meger (2016) and Wood (2014) have.

2.2 Conflict-related sexual violence

Conflict-related sexual violence is most often described as rape, in which the victim is a woman and the assailant is a man. Sexual violence is generally committed by men and most of the victims are women. Nonetheless, sexual violence is committed by both men and women as it affects both genders (Wood, 2009). CRSV has been historically considered as an inevitable consequence during all conflicts. However, recent research suggests that sexual violence is not an inevitable consequence and it varies across conflicts. Sexual violence varies in its (non-)presence, prevalence of sexual violence and forms of sexual violence (Wood, 2012).

Cohen (2013) adds that recruitment of soldiers is an important factor in influencing the frequency of CRSV. Rebel groups who have forcefully recruited soldiers by violence or threats increase the risk for sexual violence to occur. Rebel groups who do not forcefully recruit soldiers are expected to engage in lower levels of sexual violence. Wood (2018) also argues the variation of sexual violence is determined by the level of cohesion in a military organisation.

Other scholarship (Davies and True, 2015) are critical to the causal relationship of between the level of cohesion or conflict dynamics determining the variations of CRSV. These scholars argue that these studies are disregarding how sexual violence is affected by gender and patriarchal structures. In order to understand and prevent CRSV, it is important to be aware of the patriarchal structures that allow its occurrence. Gender roles and norms in the society shapes the prevalence of sexual violence as it does in rebel groups. Rebel groups forcefully recruiting soldiers are not gender-neutral acts. Instead rebel groups are guided by social constructions and cultural gender-roles shaping rebel groups incentives to perpetrate CRSV. The higher inequality in the society, the higher likelihood for increased prevalence of CRSV to be committed by rebel groups.

Rebel groups access to natural resources is positively correlated with CRSV (Cohen, 2013). Fortna, Lotito and Rubin (2018) continues that when rebel groups are not dependent on the local population's support since they are financing their rebellion through natural resources, they are engaging in higher levels of violence against civilians. Wood (2014) sympathise that rebel groups financing their rebellion through external actors or by exploiting natural resources engage in higher levels of civilian violence than rebel groups who do not.

Previous research has focused on how rebel perpetrated CRSV is shaped by forced recruitment of soldiers, the level of cohesion within the military group and patriarchal structures. I

will add to the research field on continuing studying rebel groups engaging in CRSV. I will add two control variables to account for both gender inequality and forced recruitment in my quantitative study. I cannot empirically examine how gender-roles are manifested in the rebel groups and how it governs the prevalence of sexual violence due to lack of data, but I will discuss the gender dimension in my theoretical framework.

2.3 Research approach

I have previously given evidence that some scholars (Whitaker, Walsh, Conrad, 2019; Rustad, Østby, Nordås, 2016) and NGOs argue that economic endowments from natural resources changes the relation with the civilian population and increases the rebel perpetration of CRSV against civilians. It is also linked to a hyper-masculine mining culture in which women are exposed to a higher probability of sexual violence. I argue that territorial contestation between armed actors to be a more probable predictor to rebel perpetrated CRSV. There has been no study, to my knowledge, on territorial contestation and how it is related to CRSV. Further, how rebel groups financing their rebellion through natural resources may exacerbate the rebel perpetrated CRSV in territorial conflicts. My research question is thus the following:

Under what conditions do rebel groups perpetrate conflict-related sexual violence?

By introducing this research framework, we will hopefully understand better the story on how natural resources and conflict-related sexual violence is related by introducing the presence of territorial conflicts. Territorial contestation is highly conflict-prone and strongly linked to the use of violence against civilians (Vasques, 1995; Quackenbush, 2010). When territorial control is challenged by an antagonist, this may create anxiety for the group that controls the territorial area in fear that the civilian population may empathise with the antagonist ruling. When non-combatants show an interest to instead support the antagonist, the group which controls the territorial area may use violence to restore the support (Weinstein, 2007). One way to restore the support is to employ sexual violence as a weapon of war. Sexual violence is an effective tool because it comes along with shame, humiliation, manipulates gender-roles and damages communities. Along with the shame and humiliation, the local population would then not dare to support the antagonist in fear of more sanctions. To retrieve control over territorial areas containing natural resources, one effective tool is to enforce sexual violence to depopulate the resource-rich areas (Meger, 2016).

The research question will be answered in a quantitative analysis analysing 86 conflicts covering the period 1980-2009. I will then analyse how territorial conflicts are related to rebel perpetrated CRSV and if rebel groups financing their rebellion through natural resources exacerbates the relationship.

3. Theory

In this section I will introduce the theoretical framework for this study, drawing on previous literature. After, I will explain briefly the definitions of the main theoretical terms. Lastly, I will illustrate the causal chain and this study's two hypotheses.

Territory carries an inherent value in conflicts, be it a cultural, a strategic position, or access to natural resources. To control and conquer territorial areas may increase the level of violence as many armed actors are interested in seizing that area. To access and seize territorial areas, rebel groups may employ sexual violence as a weapon of war. Therefore, I focus on this theorised and unexplored aspect: the interaction of territorial conflict, rebel groups funded by natural resources and the prevalence of rebel CRSV. I expect CRSV to be more likely in contexts of territorial contestation, and more so when rebel groups are exploiting natural resources in territorial conflicts. I also expect territorial conflicts to be the main driver of CRSV, not financing natural resources. Rebel groups incentives to use violence against civilians decreases when civilians are compliant and sympathising with the rebel group. When a rebel group's territorial control is challenged by some other armed actor the violence thus increases. This in order to force the local population to sympathise with the rebel group and not the antagonist. If civilians would then sympathise with the antagonist, the incentives to use violence increases in order to restore the support (Weinstein, 2007). Previous research argue that territorial conflicts are highly violent-prone (Vasques, 1995; Quackenbush, 2010; Hensel, 1995), and has previously measured non-sexual violence in territorial conflicts. Further, previous research on CRSV perpetrated by rebel groups have focused on how it is related to natural resources (Whitaker, Walsh, Conrad, 2019; Rustad, Østby, Nordås, 2016).

Previous research (Keen, 1998) argue that rebel groups are actively depopulating areas of civilians and it is executed in high levels of violence. Meger (2016) argue that sexual violence can be employed as a weapon of war by rebel groups to access territorial areas containing natural resources. Sexual violence can then be employed as a weapon of war against civilians to effectively depopulate areas of civilians to satisfy their self-interested economic motives to finance natural resources. Thus, I expect rebel groups contesting over control of territorial areas are engaging in CRSV to cause higher levels of chaos and instability to access territorial areas. Rebel groups exploiting natural resources to finance their rebellion are thus exacerbating the relation between territorial conflicts and CRSV. The relevant natural resources in this study are all types of natural resources, such as oil, gas, gems, land, minerals, and water. Previous research on the connection between exploitation on natural resources and CRSV have mainly focused on minerals driving

sexual violence. Instead I am including more potentially important natural resources which exacerbates the relationship between territorial conflicts and CRSV.

Previous research by Cohen (2013), Wood (2014) and Fortna et.al. (2018) argue that rebel groups access to natural resources influences rebel groups to have less constraints in engaging in CRSV. When rebel groups are not funding its rebellion with economic aid from the civilian population and armed actors begin competing over territorial areas, the likelihood for civilian violence increases. Furthermore, since rebel groups have a motive to create disorder, destroy villages and depopulate territorial areas of civilians one can predict higher levels of violence to access territorial areas containing natural resources. We also know that the mass-rapes in Luvungi in the DRC was an act of retaliation against the local population for supporting and sympathising with the government forces (Laudati and Mertens, 2019).

In theorising the relationship between territorial conflict and rebel CRSV, it is important to bear in mind the gendered nature of this violence. As in all social groups and settings, rebel groups are shaped by social constructions and gender-roles of what men and women should be. While the strategy of perpetrating this violence is explained, one must also account for the gender inequality which is important to understand CRSV. This in turn fashions rebel groups relation to CRSV and the soldier's values and attitudes against sexual violence. Furthermore, it also fashions what a soldier is and what masculinity is in warfare. Why sexual violence is successful during conflicts, according to Meger (2016:69) is "because of its exploitation of social constructions of femininity and masculinity". Women need protection and are vulnerable, whereas men are the protectors. Sexual violence manipulates this social construction when women are raped, and men cannot protect women and girls. The militarisation of masculinity fosters misogyny to strive after the hegemonic masculinity and to constantly fulfil the ideal of the "male soldier". Including gender inequality and gendered hierarchies in the theoretical argument is important to understand how it is related to CRSV. Gender roles and gendered hierarchies permits CRSV to be perpetrated. Thus, CRSV is a by-product due to gendered hierarchies rather than a by-product of conflict. Not all conflicts are experiencing CRSV, thus CRSV is not an inevitable consequence in conflicts. I expect that the higher level of gender inequality, the higher prevalence of rebel perpetrated CRSV. However, I cannot empirically test gender inequality or gender roles in rebel groups perpetrating CRSV, but it still carries theoretical significance. I will account for gender inequality and gendered hierarchies in my statistical analysis by adding a control variable measuring female labour force.

I still argue the importance of rebel groups funded by natural resources and that it exacerbates the prevalence of CRSV in territorial conflicts. However, this study argue that territorial conflicts is the primary driver to high frequency of CRSV. This theory extends from previous

research as I am measuring rebel CRSV in territorial conflicts. I am also extending previous research on rebel groups funded by natural resources and rebel CRSV by adding new evidence on how territorial contestation is related to the story. This theory adds the fragile relationship between civilians and rebel groups in settings of territorial conflicts. Further, I add previous evidence when territorial areas contain natural resources and how it exacerbates rebel CRSV. Further, I am developing a theoretical insight on gender inequality influence on rebel CRSV by adding a control variable measuring female employment.

3.1 Causal chain and hypotheses

3.1.1 Hypotheses

H1: Territorial conflicts are positively correlated with rebel-perpetrated sexual violence.

H2: Rebel groups financing their rebellion through natural resources in territorial conflicts are positively related to a higher prevalence of conflict-related sexual violence.
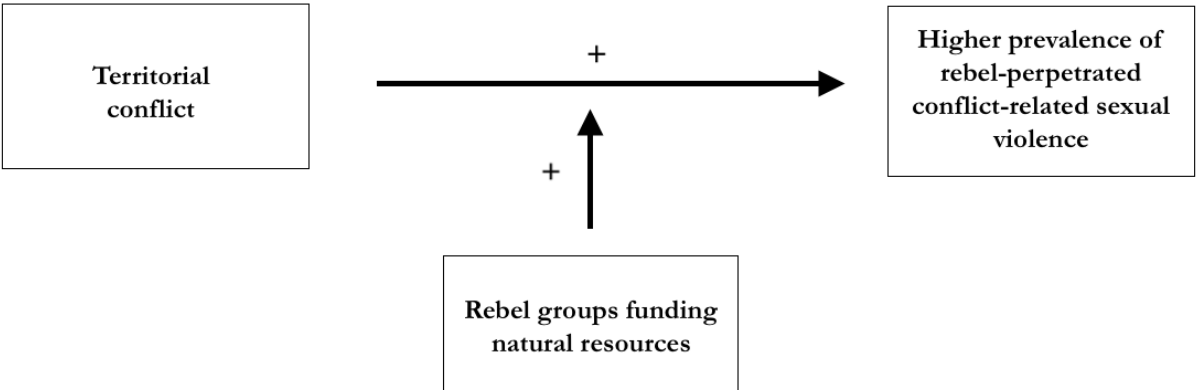
3.1.2 Casual chain

This study's main driver for CRSV is territorial conflict. I theoretically expect that the presence of a territorial conflict increases the prevalence of CRSV. I then expect the presence of a territorial conflict and rebel groups funding natural resources to generate a higher prevalence of CRSV.

4. Research design

In this section I will briefly summarise the operationalisation of the theoretical framework in this study. Then I will go through the operationalisations of the independent variable, the dependent variables, the moderating variable and the control variables. Finally, I will explain the limitations on the main variables, time-scope, validity, and reliability.

This study's aim is to test the theoretical framework put forward. The theoretical framework argues that contestation between a government and at least one rebel group over territorial issues increases higher levels of rebel perpetrated CRSV, rather than natural resources exploitation on its own. Instead natural resource exploitation and funding by rebel groups exacerbates rebel perpetrated sexual violence in territorial conflicts. This study will be testing this relationship in a large-N quantitative design to analyse the correlation. As this study will contain a large number of data, the statistical design is the most suitable option to analyse this information easily (Esaiasson, Giljam, Oscarsson, Towns and Wängnerud, 2012:96). The independent variable is measured using the dataset of UCDP/PRIO Armed Conflict Dataset by Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand (2002), as updated by Petterson (2019). The dependent variables are measured by the Sexual Violence in Armed Conflict (SVAC) dataset by Cohen and Nordås (2012) and the Cohen dataset from 2013. I will include a robustness check variable from Cohen's latest dataset from 2016. I am choosing to use Cohen's dataset from 2013 as it is within the same time scope as other main variables, e.g. SVAC[8]. To test the moderating variable of financing natural resources by rebel groups, this study will use the dataset by Rustad and Binningsbø (2012). All the datasets are measured in conflict-level and the hypotheses will be tested in multiple regression analyses and a cross-tabulation model. The number of observations is 86 conflicts in the dataset from 1980-2009.

---

[8] I will explain more in detail why I am using three different datasets below in the operationalisation of the dependent variable and further in the limitation section.

Table 1: Summary statistics of the main variables.

Variables	Obs	Mean	Std. Dev.	Min	Max
SVAC	72	.8767123	1.013043	0	3
Cohen 2013	86	1.069767	1.103904	0	3
Cohen 2016	85	1.070588	1.110429	0	3
Territorial conflict	84	.4404762	.4994259	0	1
Natural resource financing	85	.1764706	.3834825	0	1
Female labour	85	48.01294	21.01343	9.8	90.7
Ethnic war	86	1.430233	.7752145	0	2
Forced recruitment	86	.4534884	.5007518	0	1
Polity2	84	1.416667	5.627404	-9	10

This is a summary of the variables I will be using in the regression analyses.

4.1 Operationalisation

4.1.1 Operationalisation of the independent variable

The independent variable will be operationalised using the UCDP/PRIO Armed Conflict Dataset version 19.1 (Petterson, 2019; Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand, 2002). The definition of armed conflict from UCDP is "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year" (Pettersson, 2019). The relevant conflict type is the internal conflict concerning a government and one or more rebel groups, all other conflict types were excluded. It extracted the data over incompatibility concerning territory in internal conflicts between a government and at least one rebel group. However, the data also captures territorial conflicts between rebel groups. The variable has been codified as a dummy variable as (1) when the conflict has been fought over territorial issues and (0) when it has not been fought over territorial issues.

4.1.2 Operationalisation of the dependent variables

The dependent variables will be operationalised by three datasets on the prevalence of CRSV perpetrated by rebel groups against civilians. They are measuring prevalence of sexual violence at

a conflict-level. I will use the dataset covering CRSV by Cohen (2013) and the other one is Sexual Violence in Armed Conflicts (SVAC) by Nordås and Cohen (2013). I will also include a robustness check from Cohen's latest dataset from 2016. It may include new updates on the prevalence of rape and corrected errors. Therefore, I will include a robustness check by creating a variable in the dataset and adding information on the 86 conflicts in the main dataset of the Cohen dataset (2013)[9]. I have included an appendix covering all conflicts, with their dummy values and the prevalence of CRSV in each conflict[10]. I am creating a variable to add information on the prevalence on CRSV perpetrated by rebel groups from the SVAC dataset in the main dataset. I extracted information on CRSV perpetrated by rebel groups on the highest score from every report in the Cohen dataset[11]. The main dataset (Cohen, 2013) covers 86 conflicts from 1980-2009, whereas the SVAC dataset covers 72 conflicts from 1989-2009. Further, the Cohen dataset definition on sexual violence is wartime rape in an ordinal scale from 0-3. The SVAC dataset has the same scale on prevalence of CRSV. The SVAC dataset offers a more comprehensive definition over CRSV. The SVAC dataset defines CRSV as rape, sexual slavery, forced prostitution, forced pregnancy, forced sterilisation/abortion, sexual mutilation and sexual torture.

The SVAC dataset has gathered its information on the prevalence of sexual violence from three sources: the U.S. State Department (State), Amnesty International (AI) and Human Rights Watch (HRW) (Cohen and Nordås, 2013). The information in Cohen datasets is gathered from the U.S. State Department Human Rights Country Reports.

As mentioned, all datasets have the same coding scale of prevalence on CRSV. The scale of 3 is described as "massive" or "systematic" or the reports of sexual violence are at least 1,000 or more incidents of victims. The prevalence of 2 is described as "widespread" or "common" or between 25-999 incidents of sexual violence. The scale of 1 is often desired as "isolated reports" or reports of less than 25 incidents or victims. By codifying the scale of CRSV as 0 does not mean that there were no incidents of rape, rather that the sources did not receive any reports on its occurrence. Since reports of sexual violence is generally underreported, the result will be carefully evaluated.

---

[9] The Cohen dataset includes conflicts from 1948-2009, however it only includes active conflicts between 1980 and 2009.

[10] On p. 37-39 I have attached appendix 1 covering all 86 conflicts in the dataset.

[11] If a rebel group received during the conflict-years e.g. in the AI report a 1, in the State report a 2 and in the HRW report a 3, the variable (the conflict) was codified as a 3.

4.1.3 Operationalisation of the moderating variable

The moderating variable is measuring if rebel groups are exploiting and financing natural resources. The information is gathered from the Rustad and Binningsbø dataset (2012). The definition is "whether the conflict episode had a natural resource financing mechanism. All types of natural resources may finance rebel groups…" (Rustad and Binningsbø, 2012). The funding variable will have a value of (1) if the rebel group had a natural resource financing mechanism and (0) if it did not. The natural resources accounts for all types of natural resources e.g. land, water, agricultural products, oil, gas, diamonds, and other gems such as minerals, narcotics, and timber. The dataset is available until 2006.

4.1.4 Control variables

Previous studies have argued the relevance of measuring gender inequality in structures and how it may affect social and cultural norms fashioning a higher acceptance of sexual violence against women (e.g. Davies and True, 2015; Boesten, 2017; Koos, 2017;). Therefore, this study will add the measurement of female labour force gathered by the World Bank. It measures to what extent women are economically active in the labour force, women ages from 15 or older. Female labour force reveals cultural factors, such as women are expected to help in their household. Further, it reveals gender discrimination against women and structural gender inequalities e.g. women's right to employment. When female labour force participation increases, the society is becoming more equal and women are being less gender discriminated as she is included in the labour force. This variable is available in the Cohen dataset (2013).

In reference to previous quantitative studies measuring patterns of CRSV which have used the prevalence of ethnic war (Cohen, 2013), this study will use the ethnic war variable in the Cohen dataset which is a three-level variable with a value of 0 (no ethnic war), 1 (the war was ambitious or mixed) or 2 (the conflict was ethnic).

Previous studies have argued that rebel groups recruitment strategies impact prevalence of CRSV (Cohen, 2013; Davies and True, 2015). This study will include a control variable measuring if rebel groups have forcefully recruited soldiers to their military organisation. This variable is available in the Cohen 2013 dataset. The variable will have a value of (1) if it has forcefully recruited soldiers and a (0) if it has not.

In reference to previous studies (Macaualay and Hensen, 2012; Hayden, 2000) using the measurement of political regime with occurrence of territorial conflict and the presence of natural resources, and Hayden (2000) with the prevalence of CRSV. This study will use the variable

included in the Cohen dataset on Polity2. The variable is the Polity Score which is measuring the scale from democratic to autocratic. It measures the highest Polity2 score for the study period.

I will also use natural resource financing by rebel groups as a control variable when testing hypothesis 1 to check if the natural resource financing is a stronger predictor to sexual violence than territorial conflicts. The results will then reveal if there is support for my argument that territorial conflicts are a stronger predictor to sexual violence than funding of natural resources.

4.2 Limitations and scope

For the dependent variables, several scholars raise concern about the quality of the data and scholar's ability to use these data to make causal claims (Boesten, 2017). Furthermore, Buss (2018) have found implications when gathering data on CRSV. Women can be hard to reach because of geographic locations, cultural norms and stigma which may prevent people from reporting sexual violence. Buss (2018) continue explaining that to research and gather data on CRSV is not impossible, but it comes with some methodological constraints. Secondly, none of the datasets are measuring the exact number of victims, instead the coding is based on the definition gathered from reports such as "systematic sexual violence" or "isolated reports" in an ordinal scale from 0-3. The definition of systematic sexual violence may carry other biases and definitions from reports and contexts. Further, a conflict receiving unprecedented media attention e.g. Bosnia-Herzegovina or Rwanda, might reveal more observations and thus receive a higher scoring than other conflicts with less media attention, even though both conflicts carry a similar amount of committed CRSV.

However, I am still using this data because it is one of the few available datasets covering conflict-level data. The SVAC data has a broader set of sources using three different sources from HRW, AI and State. If one report were to fail to observe the frequency of CRSV in e.g. Angola, then the two other reports would probably capture the prevalence of sexual violence. By using the SVAC dataset and Cohen datasets from 2013 and 2016 covering prevalence of sexual violence, the probability of a more rigorous understanding of the prevalence of sexual violence increases. The result will be carefully examined considering the different limitations elaborated above.

As for the moderating variable, the dataset is capturing the theoretical definition of rebel groups funding natural resources during conflicts. The validity is determined to be high and equal to the theoretical definition.

The time-period for the regression analyses with Cohen datasets (2013, 2016) is between 1980-2009 and the regression analysis with the SVAC-dataset is between 1989-2009. However, when limited in a time span pre-2009 would not then gather information regarding more recent conflicts and reports of sexual violence. We would not know how or if the prevalence of sexual

violence has changed throughout the years as the dynamics of conflicts have been changing. The recent reports of the conflicts in Nigeria, Syria and Iraq are not included in the dataset. Nonetheless, with the time spans in this study the results will give an understanding of the relationship between territorial conflicts, rebel groups funding natural resources and the prevalence of sexual violence from 1980-2009.

This study will carry out three regression analyses. The first regression analysis will test the correlation between territorial conflicts and sexual violence using the SVAC dataset. The second regression analysis will test the correlation between territorial conflicts and CRSV using the Cohen dataset (2013). The third regression will run an additional robustness check using Cohen (2016) as the dependent variable. Lastly, I will have a cross-tabulation model measuring the interaction between territorial conflict, natural resource funding and rebel-perpetrated conflict-related sexual violence.

5. Results

In this section, I will first show the relevant data by providing a summary, a correlation matrix of the relevant variables and the conflict-regions. After, I will run three regression analyses and summarise the results. Thereafter, I will add a cross-tabulation model measuring the interactions between territorial conflict, natural resource financing and CRSV.

Table 2: Summary statistics of the selected variables.

Variables	Obs.	Mean	Std. Dev.	Min	Max
SVAC	72	.8767123	1.013043	0	3
Cohen 2013	86	1.069767	1.103904	0	3
Cohen 2016	85	1.070588	1.110429	0	3
Territorial conflict	84	.4404762	.4994259	0	1
Natural resource financing	85	.1764706	.3834825	0	1
Female labour	85	48.01294	21.01343	9.8	90.7
Ethnic war	86	1.430233	.7752145	0	2
Forced recruitment	86	.4534884	.5007518	0	1
Polity2	84	1.416667	5.627404	-9	10

Comment: The SVAC dataset defines CRSV as rape, sexual slavery, forced prostitution, forced pregnancy, forced sterilization/abort, sexual mutilation and sexual torture. Cohen 2013 and 2016 defines CRSV as wartime rape.

Table 2 is a summary of the main variables used in this study. It reveals e.g. the number of observations, the mean values and the scale of the variable.

Table 3: The conflict regions and the number of countries in the dataset.

Region	Freq.	Percent	Cum.
Asia	26	30.23	30.23
Eastern Europe	9	10.47	40.70
Latin America	6	6.98	47.67
North Africa	16	18.60	66.28
Sub-Saharan Africa	28	32.56	98.84
Western Europe (UK)	1	1.16	100.00
Total	86	100.00	

Table 3 is a summary of the main regions the included conflicts in the dataset from 1980-2009. I will attach an appendix over all conflicts on pages 37-39.

Table 4: Correlationmatrix

Variables	1	2	3	4	5	6	7	8	9
1 SVAC	1								
2 Cohen 2013	0.577***	1							
3 Cohen 2016	0.590***	0.988***	1						
4 Territorial conflict	0.207	0.341**	0.315**	1					
5 Natural resource	0.353**	0.184	0.152	0.335**	1				
6 Female labour	0.260*	0.344**	0.355**	0.198	0.342**	1			
7 Ethnic war	0.0646	-0.167	-0.132	-0.515***	-0.166	0.00694	1		
8 Forced recruitment	0.375**	0.217	0.190	0.444***	0.288*	0.110	-0.376**	1	
9 Polity 2	0.131	0.0308	0.0484	-0.101	-0.0649	-0.0476	-0.0802	0.0276	1

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 4 is a correlation matrix for the independent variable, the three dependent variables, the moderating variable and four control variables. Both dependent variables from Cohen are significantly positively correlated to the independent variable. The SVAC-variable is not significantly correlated with territorial conflicts. However, the conflict-related sexual violence is significantly positively correlated to rebels funded by natural resources and rebel groups forcefully recruiting soldiers. Both Cohen variables and the SVAC-variable are positively significantly correlated with female labour. This means that gender inequality is related to higher prevalence of wartime rape and CRSV. Territorial conflicts are positive and significantly correlated with funding through natural resources, but foremost forced recruitment. Ethnic war is significant and negatively

correlated with territorial conflicts and forced recruitment. Regarding rebel groups funded by natural resources, territorial conflicts are more positively correlated with than the dependent variables. Whereas the SVAC data is more significant and positively correlated with the moderating variable, both Cohen 2013 and 2016 are not significantly correlated. Female labour is positively correlated with all dependent variables. Forced recruitment is significantly correlated and positive with the SVAC-variable, territorial conflicts and natural resource financing. However, forced recruitment of combatants is significantly correlated and negative with ethnic war. Polity 2 is not significantly correlated with any variable, which is surprising.

The correlation matrix reveals a simple correlation between the independent variable, the dependent variables, the moderating variable and the control variables. Further, to control that the correlations revealed in the correlation matrix is not a spurious correlation, I will run three regression analyses. The result from the regression analyses is visualised below.

Table 5: Regression analysis. The dependent variable: The SVAC dataset.

	Model 1	Model 2
Territorial conflict	0.297	0.290
	(0.232)	(0.259)
Natural resource finance		0.521
		(0.267)
Female labour		0.00609
		(0.00560)
Forced recruitment		0.661**
		(0.234)
Ethnic war		0.407*
		(0.159)
Polity2		0.0308
		(0.0193)
Intercept	0.703***	-0.727
	(0.162)	(0.408)
N	72	69
R-squared	0.023	0.312
Adjusted R-sq	0.009	0.245

Standard errors in parentheses
p<0.05, ** p<0.01, *** p<0.001

Table 5 reveals the results in a regression analysis. The model 1 is demonstrating the result between the independent and the dependent variable. The result shows a positive association between the independent and the dependent variable, however it is not significant. The model 2 shows the result between the independent and the dependent variable with all control variables included. The second model shows two significant coefficients. The result reveals a contrary result than what this study is arguing. Territorial conflict is not associated with prevalence of rebel CRSV. This does not support the argument of territorial conflicts being a predictor to CRSV. The coefficients of ethnic war and sexual violence is positive and significant, which in previous studies has been dismissed as a predictor to sexual violence. The positive association between forced recruitment and CRSV supports the theoretical background that forced recruitment is a strong predictor to CRSV. Female labour participation reveals no significant results, even though previous research has argued for the importance of gender inequality. The result does not support hypothesis 1 *"Territorial conflicts are positively correlated with conflict-related sexual violence"*.

Table 6: Regression analysis. Dependent variable: The Cohen dataset (2013).

	Model 1	Model 2
Territorial conflict	0.908***	0.666*
	(0.219)	(0.271)
Natural resource finance		0.0743
		(0.318)
Female labour		0.0120*
		(0.00579)
Forced recruitment		0.290
		(0.257)
Ethnic war		0.0732
		(0.158)
Polity2		0.0231
		(0.0198)
Intercept	0.660***	-0.0972
	(0.146)	(0.363)
N	84	81
R-squared	0.173	0.253
Adjusted R-squared	0.163	0.192

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 6 shows the result from a regression analysis. The first model shows the result from a regression analysis between the independent variable and the dependent variable. Model 2 shows the regression analysis with the independent and the dependent variable including all control variables. The result shows two significant positive associations. The significant result is between rape and territorial conflicts. The result supports H1 *"territorial conflicts are positively correlated with sexual violence"*. The coefficient of natural resource funding is not significant with wartime rape, whereas territorial conflict is, which is supporting the study's argument. The second positive association is female labour which is statistically significant and supports this study's theoretical argument regarding gender inequality's influence on CRSV. The robustness check with the Cohen 2016 variable yields a similar result. [12]

---

[12] The regression analysis with Cohen 2016 is attached as appendix 2 on p. 40.

Table 7: Cross-tabulation model with territorial conflict, natural resource financement and rebel-perpetrated conflict-related sexual violence.

Conflict characteristics / Rebel group CRSV	Territorial conflict and natural resource financing	Territorial conflict and no natural resource financing	No territorial conflict and natural resource financing	No territorial conflict and no natural resource financing
SVAC	1,58	0,69	1	0,67
Cohen 2013	1,75	1,48	1	0,66
Cohen 2016	1,66	1,5	1	0,63

Note: I have measured the mean value of CRSV in four different conflict characteristics by three dependent variables measuring rebel perpetrated CRSV. The scale of CRSV is from 0-3.

I am carrying out a cross-tabulation model to understand how territorial conflicts, rebel groups funded by natural resources, and CRSV are associated in a relationship. A cross-tabulation model gives a tentative understanding to what extent CRSV is associated in different conflict-types relevant to examine in this study. This tabulation is exploring hypothesis 2. This table shows the result from 86 conflicts experiencing territorial conflict, no territorial conflict, rebels financing natural resources and rebels not financing through natural resources and the mean value of rebel CRSV. The result from Cohen 2013 and 2016 supports this study's argument that territorial conflict is a higher estimator for rebel CRSV than rebel groups financed by natural resources. The result from Cohen 2013 resulted in a value of 1,48 in conflicts only experiencing territorial conflict and in conflicts only featuring natural resource financing resulted in a value of 1. The result from Cohen 2016 yields a similar result. However, the result from SVAC does not support this study's argument. In those conflicts experiencing both territorial conflict and natural resource financing is a higher estimator for CRSV than conflicts not experiencing territorial conflict and natural resource financing. This result reveals exploratory evidence to hypothesis 2 "*Rebel groups financing their rebellion through natural resources in territorial conflicts are positively related to a higher prevalence of conflict-related sexual violence*". The combination of territorial conflict and natural resource financing yields a higher prevalence score of rebel group CRSV, than all other conflict-types included in the model. The lowest score of rebel group CRSV is those conflicts neither experiencing territorial conflict and natural resources. However, these results are descriptive, and I will therefore examine the

relationship between territorial conflict, rebel groups funded by natural resources and CRSV in two case studies.

6. Case-studies

This section will explore two empirical case studies to support this thesis argument. This section will examine the conflict in Rwanda and Sierra Leone. The Rwandan conflict experienced territorial conflict and high levels of rebel CRSV, but not rebel groups funding natural resources. The Sierra Leone conflict experienced territorial conflict, exploitation of natural resources and high levels of rebel perpetrated CRSV.

6.1 Rwanda

The conflict in Rwanda was triggered by the Rwandan Patriotic Front's (RPF) attack from Uganda in 1990 with the aim of ending the Hutu regime and seizing territorial control over the country. In 1993, following a seven-month cease-fire, the RPF decided to launch an attack to seize control over northern Rwanda, resulting in two folding their territorial control. The Hutu regime had lost territorial control due to rebel offensives and decided to respond by intensifying the violence against Tutsi civilians, by killing 300 Tutsis in northern Rwanda. As a retaliation against the RPF territorial claims over Rwanda, the Hutu regime initiated in 1994 the genocide against Tutsi civilians and killed 800,000 people. This retaliation was triggered once the Tutsi rebels had successfully gained substantial control over the country. In late 1993, extremists Hutu began to plan a large-scale retaliation against Tutsi civilians. The Hutu extremists aim with this attack was to kill as many Tutsi civilians to an extent it would prevent Rwanda from being conquered by Tutsi rebels. The RPF knew the Hutu extremists were planning a large-scale attack against Tutsi civilians. However, the Tutsi rebels could have reached a possible peaceful solution to avoid mass killings of civilians by agreeing the Hutu Power movement to choose political representatives in a transitional government. Otherwise, they would respond militarily to seize territorial control over Rwanda. The Tutsi rebels chose to respond militarily, and the genocide intensified (Kuperman, 2004).

In the Rwandan conflict, sexual violence was employed as a weapon of genocide against Tutsi and Hutu women and girls. However, Tutsi women were targeted strategically based on their ethnicity. The Interhamwe employed several strategies of sexual violence, such as forced marriage, rape, sexual torture and sexual mutilation. Rape became a weapon of war to terminate the Tutsi ethnic group and to terrorise the community (Burnet, 2012).

6.2 Sierra Leone

In 1991, the rebel group Revolutionary United Front (RUF) aim was to overthrow the government of Sierra Leone (Bensel and Sample, 2017). In the following year, RUF and government forces fought to control diamond-rich areas (Ross, 2004). RUF restrained themselves in employing violent strategies upon civilians. One of the codes of conduct was "Do not take liberty from women". (Bensel and Sample, 2017). Nonetheless, the RUF committed CRSV from the start of the conflict through abduction of girls and women to be sex-slaves and high-levels of sexual violence (HRW, 2003). However, RUF combatant-resources was limited to hold their territorial areas and thus started forcefully recruiting combatants through abduction and violence. Further, combatants of RUF were highly motivated to finance their rebellion through diamond mines and looting of civilians. During 1994, RUF-territorial areas were challenged by pro-government forces (SLA) and their military strategies changed to engaging in attacking villages, massive destruction against civilians and thriving in disorder. By 1998, the rebel group controlled half of Sierra Leone, including all mineral-rich areas. Civilians were facing high levels of violence of torture, sexual violence and killings. As RUF lost their territory to the SLA, soldiers were driven by individual goals of exploiting and funding the rebellion through natural resources. Thus, the loss of territory escalated the violence against civilians. Women were targeted to be "bush wives" for the soldiers, to be sex-slaves, clean clothes and cook food (Bensel and Sample, 2017). The sexual violence peaked when RUF were expanding its territory in military operations which occurred throughout the country. After having seized the territory or village, the combatants rewarded themselves by raping and looting (HRW, 2003).

7. Analysis and conclusion

This section will summarise this study's purpose and the results will be analysed. Further, I will discuss conclusions based on the results and previous literature. Lastly, I will advise on recommendations for future research.

The purpose of this study was to understand if territorial conflicts is a predictor to rebel perpetrated CRSV. Further, if rebel groups financing their rebellion through natural resources could be an exacerbating factor to the relation between territorial contestation and CRSV. This study has carried out a quantitative study with 86 conflicts between 1980-2009, analysing three dependent variables to measure the prevalence of conflict-related sexual violence. The research question *"Under what conditions do rebel groups perpetrate conflict-related sexual violence?",* has been answered in multiple regression analyses and a cross-tabulation model. Further, the study put forward two hypotheses drawn by pertinent literature. The first hypothesis is *territorial conflicts are positively correlated with conflict-related sexual violence.* The second hypothesis is *rebel groups financing their rebellion by natural resources in territorial conflicts are related to a higher prevalence of conflict-related sexual violence.* However, only the first hypothesis received support by the Cohen data on wartime rape, not the SVAC-variable measuring CRSV on a broader definition. The study's argument received strong support when running the Cohen datasets that territorial conflicts is a stronger predictor to rebel perpetrated rape. However, when running the SVAC-dataset (table 5) H1 did not receive support as territorial conflicts were not positively and significantly associated. This study was expecting rebel groups funding natural resources to exacerbate rebel CRSV in territorial conflicts (H2) and that argument received tentative support when measuring all dependent variables in the cross-tabulation model. Natural resource funding did not receive any support to be a higher predictor than territorial conflicts.

The case-studies supports the theoretical framework that territorial conflict and CRSV are closely associated. Based from the evidence from Rwanda and Sierra Leone, rebel groups that are losing territorial control retaliates violently against civilians. Further, it seems as natural resource funding carries an impact among RUF-soldiers in comparison to Hutu militias. For example, RUF-soldiers were driven by individual goals and "rewarded" themselves by raping and looting. In the Rwandan conflict, Hutu extremists had also forced marriage, but were not driven by individual goals. However, the Rwandan conflict was strongly characterised by ethnic hatred. I encourage more research to further understand to what extent rebel groups funding natural resources exacerbates CRSV since these cases-studies are limited.

Now when we have learned the results from the analyses, we must go back to the limitations when using statistical data to measure CRSV. As mentioned by other scholars on the limitations to measure CRSV (see e.g. Boesten, 2017 and Buss, 2018), this is something to bear in mind. For example, the regression analyses received contradictory results when using the SVAC dataset and the Cohen datasets. The SVAC dataset did not support this study's hypotheses, while both Cohen datasets did support the first hypothesis. One of the reasons to the contradictory results is that they have different definitions on CRSV. The SVAC dataset defines sexual violence in a broader definition (e.g. forced sterilization, sexual slavery) in comparison to the Cohen datasets which only measures occurrences of wartime rape. This is a limitation on the Cohen datasets, which supported the study's argument and the first hypothesis. A dataset covering sexual violence based on the occurrence of rape is still a way to measure CRSV, but it is a small definition in comparison to the SVAC dataset. One of the possible implications why I find results for wartime rape, but not for CRSV more broadly may be that rape is more easily reported in comparison to other forms of CRSV. Another implication may be that rape is more common than e.g. sexual mutilation and forced pregnancy. Rape is a more effective tool to depopulate natural-rich areas than other forms of sexual violence. It is more common for women in captivity to experience other forms of CRSV than rape, e.g. forced prostitution and forced sterilisation/abortion.

Furthermore, the Cohen dataset has observations on 86 conflicts, while the SVAC dataset has 72 observations. This might be a reason why the Cohen results is revealing a stronger correlation between territorial conflicts and sexual violence than the SVAC result. If the SVAC dataset would have observations on the missing 14 conflicts, maybe it would have yielded a similar result as the Cohen dataset. Perhaps with a dataset as this it would be easier to understand the reality of sexual violence. Another reason why the results are different is due to different uses of sources to measure prevalence of CRSV. The Cohen datasets gathered information from the U.S. State Department Human Rights Country Reports and the SVAC dataset uses three different sources of AI, HRW and State. The U.S. Country reports has a different mandate than NGOs have. The U.S. Country reports are mandated by U.S. law to be submitted annually, whereas AI has a limited mandate. Further the U.S. Country Reports have a larger budget to carry out more rigorous reports and collect more information on CRSV.

Further, knowing the limitations on measuring and gathering statistical data on CRSV, how much can one discuss about causality and significant correlations between territorial conflicts and CRSV? To some extent, we can understand a general understanding that some mechanisms may be a predictor for sexual violence. However, this study's results illustrate the difficulties on proclaiming causality and understanding the reality of sexual violence. Therefore, to conclude, the

first hypothesis received support from two dependent variables from Cohen (2013 and 2016), but not the SVAC variable. To summarise, territorial conflicts are significantly related to some forms of CRSV, according to some measures, but not others. Further, I present some tentative evidence that financing natural resources do exacerbate the relation between territorial conflicts and CRSV. Since this study cannot state a rigorous and definitive conclusion with two contradicting results, I argue for more research on how territorial conflicts is related to CRSV.

This study's aim was to examine how territorial conflicts are related to CRSV and how rebel groups may exacerbate this relation when they are financing their rebellion through natural resources. This study has contributed to a rather lacking research field with a first statistical examination on territorial conflicts and how it is related to rebel perpetrated CRSV. Secondly, if natural resource financing exacerbates the relationship between territorial conflicts and CRSV.

Recommendations for future is to study what forms of CRSV is perpetrated in territorial conflicts and financing natural resource by rebel groups. Is rape in comparison to other forms of CRSV more common in conflicts and is that is the reason why we received different results? I would also recommend to empirically study causes behind CRSV by interviewing survivors and ex-combatants. Further, to study if certain natural resources are more valuable than others in territorial conflicts and if so, does those natural resources exacerbate CRSV (e.g. non-renewable natural resources, see Macaulay and Hensel, 2014)? It would also be interesting to compare rebel groups who did to a lesser extent perpetrate CRSV, for example in conflicts such as Cambodia (1978-98), Ivory Coast (2002-07) and Nicaragua (1981-88) with rebel groups who perpetrated more CRSV e.g. Angola (1975-2002), DRC (1998-) and Sierra Leone (1991-2001). In these chosen conflicts, all experienced territorial contestation and rebel groups financing natural resources. Why did the rebel groups in Cambodia, Ivory Coast and Nicaragua not perpetrate CRSV on a larger scale, even though the conflict was over territorial contestation and rebel groups were financing natural resources? Also, to further compare conflicts when rebel groups are exercising natural resource funding and rebel lacking that financing mechanism.

Future research must have in mind that CRSV is not ubiquitous to understand under what premises rebel groups perpetrate CRSV. Sexual violence is difficult to predict and to understand, but it is important to continue researching on sexual violence to stop it from occurring. Specially to understand rebel CRSV and how its relation to the civilian population may or may not affect the outcome of CRSV.

List of References

Autesserre, S. (2012). Dangerous Tales: Dominant Narratives on the Congo and Their Unintended Consequences. *African Affairs.* 111.443. pp.. 202-22.

Bensel, T. T., & Sample, L. L. (2017). Collective Sexual Violence in Bosnia and Sierra Leone: A Comparative Case Study Analysis. *International Journal of Offender Therapy and Comparative Criminology.* 61.10. pp. 1075-1098.

Boesten, J. (2017). Of Exceptions and Continuities: Theory and Methodology in Research on Conflict-related Sexual Violence. *International Feminist Journal of Politics* 19.4 pp. 506-19.

Burnet, J. E. (2012). Situating Sexual Violence in Rwanda (1990–2001): Sexual Agency, Sexual Consent, and the Political Economy of War. A*frican Studies Review.* 55.2. pp. 97-118.

Buss, D. (2018). Conflict Minerals and Sexual Violence in Central Africa: Troubling Research. *Social Politics: International Studies in Gender, State & Society.* 25.4 pp. 545-67.

Cohen, D. K. (2016). Codebook and Variable Descriptions for Rape during Civil War.

Cohen, D. K.. (2018) *Rape during Civil War.* Ithaca: Cornell University Press.

Cohen, D. K. (2013). Explaining Rape during Civil War: Cross-National Evidence (1980-2009). *American Political Science Review.* 107.3. pp. 461-477.

Cohen, D. K., & Nordås, R. (2013). Sexual Violence in Armed Conflict Dataset Codebook and User Instruction Guide (Version 1.0).

Davies, E. S. & True, J. (2015). Reframing Conflict-related Sexual and Gender-based Violence: Bringing Gender Analysis Back in. *Security Dialogue.* 46.6 . pp. 495-512.

Esaiasson, P., Gilljam, M., Oscarsson, H., Towns, A., Wängnerud, L. (2017). *Metodpraktikan: Konsten att studera samhälle, individ och marknad.* Stockholm: Wolters Kluwers AB

Fortna, P. V., Lotito, J. N. & Rubin, A. M. (2018). Don't Bite the Hand That Feeds: Rebel Funding Sources and the Use of Terrorism in Civil Wars. *International Studies Quarterly.* 62.4. pp..782-94.

Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., & Strand, H. (2002). Armed Conflict 1946-2001: A New Dataset. *Journal of Peace Research.* 39(5). pp. 615-637.

Hayden, M. R. (2000). Rape and Rape Avoidance in Ethno-National Conflicts: Sexual Violence in Liminalized States. *American Anthropologist* 102.1 pp. 27-41.

Human Rights Watch. (2003). "WE'LL KILL YOU IF YOU CRY": SEXUAL VIOLENCE IN THE SIERRA LEONE CONFLICT. Vol. 15, No. 1 (A) New York.

Kalyvas, N. S. (2006). *The Logic of Violence in Civil War.* Cambridge: Cambridge University Press Print.

Keen, D. (1998). *The Economic Functions of Violence in Civil Wars.* London: Oxford University Press for the International Institute for Strategic Studies.

Koos, C. (2017). Sexual Violence in Armed Conflicts: Research Progress and Remaining Gaps. *Third World Quarterly.* 38.9. pp. 1935-951.

Kuperman, A. J. (2004). Provoking Genocide: A Revised History of the Rwandan Patriotic Front. *Journal of Genocide Research.* 6.1. pp. 61-84.

Laudati, A. & Mertens, C. (2019). Resources and Rape: Congo's (toxic) Discursive Complex. *African Studies Review.* pp. 1-26.

Macaulay, C. & Hensel, R. P. (2014). Natural Resources and Territorial Conflict. Paper presented at the 2014 Annual Meeting of the International Studies Association, Toronto.

Meger, S. (2016) *Rape Loot Pillage: The Political Economy of Sexual Violence in Armed Conflict.* New York: Oxford University Press.

Pettersson, T., Högbladh, S., & Öberg. M. (2019). Organized violence, 1989-2018 and peace agreements. *Journal of Peace Research.* 56(4). pp. 589-603.

Quackenbush, S. L. (2010). Territorial Issues and Recurrent Conflict. *Conflict Management and Peace Science.* 27.3. pp. 239-252.

Ross, M. L. (2004). How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases. *International Organization.* 58.1. pp. 35-67.

Rustad, S. A., & Binningsbø, H. M. (2012). A Price worth Fighting For? Natural Resources and Conflict Recurrence. *Journal of Peace Research.* 49.4. pp. 531-546.

Rustad, S. A., & Binningsbø, H. M. (2012). The natural resource conflict dataset: 1946-2006: Version 1.0. Codebook.

Rustad, S. A., Østby, G & Nordås, R. (2016). Does Artisanal Mining Increase the Risk of Sexual Violence? *Quality in Primary Care.* 24.2. pp. 77-80.

Vasquez, J. (1995). Why Do Neighbours Fight? Proximity, Interaction, or Territoriality. *Journal of Peace Research.* 32.3. pp. 277-293.

Weinstein, M. J. (2007). *Inside Rebellion.* Cambridge: Cambridge University Press.

Whitaker, B. E., Walsh, I. J. & Conrad, J. (2019). Natural Resource Exploitation and Sexual Violence by Rebel Groups. *The Journal of Politics.* 81.2. pp. 702-06.

Wood, J. E. (2018). Rape as a Practice of War: Toward a Typology of Political Violence. *Politics & Society.* 46.4. pp. 513-37.

Wood, J. E. (2009). Armed Groups and Sexual Violence: When Is Wartime Rape Rare? *Politics & Society.* 37.1. pp. 131-61.

Wood, J. E. (2012). Rape during War is Not Inevitable: Variation in Wartime Sexual Violence, in Morten Bergsmo, Alf B. Skre och Elisabeth Jean Wood (eds), *Understanding and Proving International Sex Crimes.* Oslo*:* Torkel Opsahl Academic Epublisher. pp. 389–419.

Wood, M. R. (2014). From Loos to Looting? Battlefield Costs and Rebel Incentives for Violence. *International Organization.* 68. pp. 979-999.

Appendix 1: Highest coded level of CRSV and conflict-dataset, 1980-2009

Country and rebel groups fighting in the conflict	War Years	Territorial conflict	Natural resource financing	Highest score SVAC	Highest score Cohen 2013	Highest score Cohen 2016
AFGHANISTAN (Mujahedeen)	1979-92	**x**		0	1	1
AFGHANISTAN (v. Taliban)	1992-2001	x		3	2	2
AFGHANISTAN (v. Taliban II)	2003-	x		0	2	2
ALGERIA (FIS,GIA, GSPC)	1992-	x		0	2	2
ANGOLA (FLEC (Cabinda))	1992-2004			0	2	2
ANGOLA (UNITA)	1975-2002	x	x	2	2	2
AZERBAIJAN (Nagorno-Karabagh)	1992-94		x	0	0	0
BANGLADESH (Chittagong Hills)	1976-97			0	0	0
BOSNIA HERZ. (Rep. Srpska/Croats)	1992-95	.		3	3	3
BURMA (CPB, Karens, etc.)	1948-	x	x	1	2	2
BURUNDI (Hutu groups v. govt)	1993-2006	x		3	3	3
BURUNDI (Org. massacres, both sides)	1988-88			.	0	0
CAMBODIA (Khmer Rouge, FUNCINPEC, etc)	1978-98	x	x	1	1	1
CHAD (FROLINAT, various ...)	1965-			1	1	1
CHAD (FARF, other rebels in South)	1992-98	x		0	0	0
CHINA (Xinjiang)	1990-98			.	0	0
COLOMBIA (FARC, ELN, etc)	1963-	x		1	2	2
CONGO/BRAZZAVILLE (Factional fighting)	1997-99	x		1	2	2
CROATIA (Krajina)	1992-95			0	1	1
DEM. REP. CONGO/ZAIRE (AFDL (Kabila))	1996-97			0	2	2
DEM. REP. CONGO/ZAIRE (RCD, etc v. govt)	1998-	x	x	3	3	3
DJIBOUTI (FRUD)	1991-94	x		1	1	.
EL SALVADOR (FMLN)	1979-92	x		0	0	0

ETHIOPIA (Eritrea, Tigray, etc.)	1962-92	x		0	1	1
ETHIOPIA (Oromo Lib. Front)	1992-			0	0	0
GEORGIA (Abkhazia)	1992-94			2	3	3
GUATEMALA (URNG, various)	1968-96	x		0	0	0
GUINEA BISSAU (Mil. Faction)	1998-99			.	0	0
HAITI (Mil. Coup)	1991-95			0	2	2
INDIA (Kashmir)	1989-			1	3	3
INDIA (N.East rebels)	1956-	x		0	3	3
INDIA (Naxalites)	1988-	x		0	2	2
INDIA (Sikhs)	1982-93			2	0	0
INDONESIA (E. Timor)	1975-99			0	2	2
INDONESIA (GAM I (Aceh))	1989-91			0	0	0
INDONESIA (GAM II (Aceh))	1999-2005			1	1	1
INDONESIA (OPM (West Papua))	1965-85			.	0	0
IRAN (KDPI (Kurds))	1979-93			0	0	0
IRAN (PJAK)	2004-	x		0	0	0
IRAQ (KDP, PUK (Kurds))	1974-93			0	0	0
IRAQ (Shia uprising)	1991-91			0	0	0
IRAQ (Sunni and Shia rebels)	2004-			1	1	1
ISRAEL (Palestinian insurgents)	1949-			1	0	0
IVORY COAST (anti-Gbagbo)	2002-07	x	x	1	1	1
LEBANON (various militias)	1975-90			1	1	1
LIBERIA (NPFL (Taylor), INPFL (Johnson))	1989-96	x	x	2	3	3
LIBERIA (LURD)	2000-03	x	x	2	1	1
MALI (Tuaregs)	1989-94			0	0	0
MOROCCO (Polisario)	1975-88			0	0	0
MOZAMBIQUE (RENAMO)	1976-92	x	x	2	2	2
NEPAL (CPN-M/UPF (Maoists)	1997-2006	x		1	1	1
NICARAGUA (Contras)	1981-88	x	x	0	1	0
PAKISTAN (MQM:Sindhis v. Mohajirs)	1993-99	x		1	1	1
PAKISTAN (Baluchistan)	2004-			1	0	0
PAKISTAN (Taliban)	2007-			.	0	0
PAPUA N.G. (BRA (Bougainville))	1988-98			1	2	2
PERU (Sendero Luminoso)	1981-95	x	x	2	2	2

PHILIPPINES (MNLF, MILF)	1970-		x	1	1	1
PHILIPPINES (NPA)	1969-	x		0	1	1
RUSSIA (Chechnya)	1994-96			0	0	0
RUSSIA (Chechnya II)	1999-			1	0	1
RWANDA (RPF, genocide)	1990-2002	x		1	3	3
SENEGAL (MFDC (Casamance))	1989-		x	2	2	2
SIERRA LEONE (RUF, AFRC, etc.)	1991-2000	x	x	3	3	3
SOMALIA (post-Barre war)	1991-			2	3	3
SOMALIA (SSDF, SNM (Isaaqs))	1981-91	x	x	0	0	0
SOUTH AFRICA (ANC, PAC, Azapo)	1983-94			.	0	0
SRI LANKA (JVP II)	1987-89	x		0	0	0
SRI LANKA (LTTE, etc.)	1983-2009			3	1	1
SUDAN (SPLA, etc.)	1983-2005			2	2	2
SUDAN (Darfur (SLA, JEM, etc))	2003-	x		2	3	3
SYRIA (Muslim Brothers)	1979-1982			.	0	0
TAJIKISTAN (UTO)	1992-97	x		0	2	2
THAILAND (Hill Tribes, CPT)	1966-81	x		.	0	0
THAILAND (Pattani)	2004-			0	0	0
TURKEY (Militia-ized party politics)	1977-80			.	0	0
TURKEY (PKK)	1984-			0	0	0
UGANDA (LRA, West Nile, etc.)	1989-	x		2	3	3
UGANDA (NRA, etc.)	1981-88	x		.	2	2
UK (IRA)	1969-98			0	0	0
YEMEN (South Yemen)	1994-94			.	0	0
YEMEN (al-Houthi rebels)	2004-			0	1	1
YEMEN PEOP. REP. (Faction of Socialist Party)	1986-87			.	0	0
YUGOSLAVIA (Croatia/Krajina)	1991-91			0	0	0
YUGOSLAVIA (UCK)	1998-99			3	0	0
ZIMBABWE (Ndebele guerillas)	1983-87			.	0	0

Appendix 2: Regression analysis: Robustness-check (Cohen 2016)

	Model 1	Model 2
Territorial conflict	0.875***	0.663*
	(0.224)	(0.282)
Natural resource finance		-0.00348
		(0.323)
Female labour		0.0128*
		(0.00586)
Forced recruitment		0.263
		(0.262)
Ethnic war		0.103
		(0.161)
Polity2		0.0257
		(0.0203)
Intercept	0.681***	-0.152
	(0.148)	(0.367)
N	83	80
R-squared	0.158	0.244
Adjusted R-squared	0.148	0.182

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001