Political Trust, Political Participation and Conflict

A case study of the Boko Haram conflict in Nigeria

Simeon Lauterbach

May 2020

Abstract

This paper studies how the Boko Haram insurgency affected political trust and political participation in Nigeria between 2009 and 2017. Using a synthetic control method and a difference-in-difference design, I argue that during the conflict individuals, who were exposed to violence displayed decreased levels of political trust in the president, the army and the police, but found that trust then increased in the direct aftermath of conflict. With regard to political participation my empirical results are somewhat ambivalent. I find some evidence that non-institutionalised forms of political participation (such as joining others to raise an issue) increased, while institutionalised forms (such as voting) decreased. Overall, this paper contributes to the existing literature by shedding light on the question how political and economic stability can be fostered in conflict-torn countries.

I would first like to thank my supervisor, Prof. Benjamin Marx, for his time, his guidance and for pushing me always further throughout this research project. I am extremely grateful to my parents and my brother for their emotional and financial support during my studies. I want to thank Prof. Galbiati, Hicham Abbas, Danny Marshall, for discussing my research project and giving me valuable tips. At least, but not last, I want to thank my classmates, Alessandro, Kani, Fabio, Silke, Danell, Alberto, Yulin and Ananay for their support and the time we spent together. All errors are mine.

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1 Introduction

As scholars have demonstrated, political trust and political participation are important factors in fostering political stability and economic growth in developing countries [Listhaug and Jakobsen, 2017]. They are important for the policy-making process, the institutional framework and the provision of public goods within a country. For instance, scholars assume that increased levels of political trust and political participation lead to stability and a smooth state-functioning, thereby increasing the welfare of the population [De Luca and Verpoorten, 2015]. Acemoglu even emphasizes that the difference in levels of political trust can explain different economic developments across countries [Acemoglu et al., 2011]. As a consequence, and speaking in economic terms, low levels of political trust and political participation lead to welfare losses and can put countries on a lower economic growth path [Weil, 2009].

Why are political trust and participation for the development of a country so important? First of all, political trust describes the confidence of an individual in their state institutions [Hetherington and Rudolf, 2018]. It is an indicator of political legitimacy and state complying behaviour - as it displays the belief in the validity of the existing political institutions. Scholars are interested in political trust as it provides important information about the stability of political systems. In this respect, individuals with high levels of political trust are more likely to comply with state law, while low levels of political trust often lead to system challenging behavior [Turper and Aarts, 2015]. Political participation on the other hand can be characterized as citizens' activities affecting politics, such as voting or demonstrating [Van Deth, 2016]. To a limited degree, political participation gives citizens the opportunity to control "political activities" [Dalton, 2008]. When people participate politically, they exchange information, coordinate themselves and put public pressure on political elites, hopefully influencing government policies as a result.

Political trust and political participation are particularly crucial in Africa, which remains one of the poorest and most politically unstable continents in the world [Acemoglu, 2012, Hetherington and Rudolf, 2018]. One of the primary reasons for Africa's political instability is the reoccurrence of civil conflicts[1] – indeed, more than two-thirds of all Sub-Saharan countries have experienced at least one civil conflict since their independence.

Bellows and Miguel [2012] point out that during civil conflicts, individuals are exposed to extreme violence which causes trauma and can even alter identities, values and beliefs. This change is problematic, as it can diminish political trust and political participation, further weakening po-

[1] A civil conflict is defined as an internal conflict in one country involving at least two antagonistic parties (state government being among them) with at least 25 battle related deaths in one year. If the number of deaths exceeds 1000 per year, a civil conflict can be considered as a civil war [Couttenier, 2015].

litical stability and the economic outlook of a country [Juan and Pierskalla, 2016]. Policy makers in war-torn countries are often fearful that victims and ex-fighters no longer integrate socially, politically and economically within a country, increasing the likelihood of a new civil conflict emerging [Collier et al., 2003]. They also fear that low levels of political trust may undermine the implementation of peace agreements and essential reforms. Indeed, the more people distrust the state, the more they fear losing out from any reforms, and hence the more likely they are to reject plans for necessary political, social or economic change [Juan and Pierskalla, 2016].

Given that conflict is prevalent and reoccurring in most parts of the world, still relatively little is known about the effect of conflict on citizens' levels of political trust and participation [Bellows and Miguel, 2012]. With the above in mind, this paper aims to increase understanding of the institutional legacies of civil conflict[2]. The central questions that this project asks, then, are:

i. How do civil conflicts affect political trust? Do individuals exposed to conflict trust political institutions more or less? And in both cases, which institutions are affected, and why?

ii. How do civil conflicts affect the decision-making of those affected by the conflict on whether to participate in the political process? Do they engage more politically?

Answering these questions could help to understand how political trust and political participation are affected by civil conflicts, shedding light on why some countries, such as Sierra Leone, experience political and economic stability after civil conflicts and others, like the Republic of Congo, do not [Bellows and Miguel, 2012]. Furthermore, this project aims to understand which policies can promote political stability, thereby making it easier for the government to act as a state authority, implementing reform plans and enforcing state law [Juan and Pierskalla, 2016].

In addressing these questions, I propose to analyze the Boko Haram conflict in Nigeria. The conflict had its peak between 2012 and 2015 and continues only at a low-intensity level at present. Further, Boko Haram operates mainly in the north-eastern Region of the country - it is limited to a respective section of the country - and hence it will be possible to compare its effect on those who are affected versus those that are not - the structure of the conflict can be considered as a quasi experimental design. To implement the quasi experimental design, I use repeated cross-sectional survey data from the Afrobarometer and conflict data from the Uppsala Conflict Data Program. I then identify all individuals being exposed to the conflict and compare them to those not exposed through a synthetic control method and a difference-in-difference design. Overall, I measure the

[2]Political trust is measured through trust into the president, the army and the police. Political participation is measured in terms of attending community meetings, joining others to raise an issue or having voted at the last presidential election.

exposure to violence on two different aggregate levels: (a) the federal state and (b) the individual level on being exposed to violence within a 11km radius to a conflict location. I supplement my individual level findings with robustness checks by defining the conflict location broader - to towns/villages and local-government areas. Comparing different aggregate levels, gives the opportunity to precisely measure, how far the effects of violence are reaching. For instance, do we see differences between an affected federal state to one not affected? Or do we only notice differences between individuals who live in close proximity to conflict areas and those who live further away?

The rest of the paper is organized in the following way. First, I outline existing empirical findings on political trust, participation and conflict (section 2.1), the Boko Haram conflict (section 2.2), my hypothesis (section 2.3) and the contribution to the literature (section 2.4). Section 3 explains my research design by describing the data sets (section 3.1), my variables (section 3.2) and discusses my two identification strategies (section 3.2). Subsequently, I present my empirical results and my robustness tests (section 4). I conclude with the key takeaways, policy implications and a research outlook in section 5.

2 Literature

In this chapter, I will first present the existing literature on conflict, political trust and political participation. I shall then briefly outline the history of Boko Haram in Nigeria to get a better understanding of the conflict. Subsequently, I explain my hypothesis and the contribution to the literature.

2.1 Empirical Evidence on Conflict, Political Trust and Political Participation

Thus far, few studies have investigated the consequences of violence on political trust and political participation, due to the lack of individual survey data from crisis regions and the fact that most research has tented to focus on the consequences of civil conflicts on human capital, or physical outcomes such as education, health, consumption or income (Listhaug and Jakobsen, 2017 De Luca and Verpoorten, 2015). Even though these studies remain valuable, little is understood about post-war-recovery when not taking into account the effects on political trust or participation. Consequently, the *"social and institutional legacies of conflict, despite being arguably the most important, remain the least understood of all war impacts"* (Blattman & Miguel 2010 :42). This is even more remarkable when we consider that the effects of civil conflicts on institutional, political and social norms could be longer lasting than on pure "physical capital", as Bellows and Miguel [2012] point out.

An important study conducted by [Bellows and Miguel, 2012], investigates the effects of violent experiences during the civil war in Sierra Leone (1992-2002) on postwar behavior. They examine the effect of civil war violence on the individual and aggregate chiefdom level. On the aggregate chiefdom level, they distinguish chiefdom's with respect to the conflict intensity they experienced, and do not find any effects on political participation nor on other socio-economic outcomes, such as schooling decisions. For the individual level analysis, this study is critical as it uses highly qualitative household data, asking participants directly what kind of war violence they experienced. Bellows and Miguel find that individuals whose households experienced direct conflict violence, are more politically engaged in terms of community meetings, voting and the provision of local goods. The authors claim that there is a direct link between victimization and postwar behavior.

Research in Uganda, conducted by **Blattman** (2009), looks into the question of whether those forced into the Lord's Resistance Army (LRA) display levels of political participation different from those who did not participate in the civil conflict. To do this, Blattman directly compares survey data about political participation of abducted and non-abducted youths in northern Uganda. His analysis underlines that forced rebels subsequently engaged far more substantially in terms of voting, political jobs and community leadership. Blattman (2009) corroborates this by conducting around 200 qualitative interviews with ex-rebels, finding that they demonstrate increased levels of self-confidence and self-control, attributes which were then translated directly into the political process.

Cassar et al. [2013] confirm Blattman's findings relying on survey data from the civil war in Tajikistan (1991-1997). Their results suggest that former victims of violence show increased levels of political participation, but less social trust towards other members of their community, and less political trust towards state institutions. The authors attribute increased levels of political participation to the desire of victims to replace existing political institutions. They highlight that the civil conflict in Tajikistani led to the long-lasting disruption of political and social relations, challenging state building and economic growth up until the present day.

These findings are completed by **De Luca and Verpoorten [2015]**. They use data from the Afrobarometer and demonstrate that civil conflict in Uganda affects civic participation measured in terms of local meeting attendance and the frequency of political discussions. To do so they compare districts which differ in terms of battle events over four rounds of Afrobarometer data, and find that individuals attend more local meetings and discuss political matters the more their district suffered from battle events. Using a difference-in-difference design and IV estimates they suggest that the relationship is causal. However, they cannot confirm that conflict alters formal electoral participation.

Further research in Uganda shows that ethnic conflict decreases social trust and entrenches ethnic identity. **Rohner et al.** (2013) use survey data from the Afrobarometer (2000 and 2008) and conflict data from the Uppsala Data conflict program to study how the conflict with the Lords Resistance Army changed post-conflict social trust and ethnic identity. Their findings suggest that intense fighting decreases social trust and increases ethnic identity.

More evidence was provided by **Grosjean** (2014) analyzing survey data from civil conflicts in Central Asia, Yugoslavia and north Caucasus. Broadly speaking, she confirms that political mobilization increased for former victims, but also that there are long-lasting negative impacts on social and political trust. Further studies have suggested that exposure to war violence led to more political participation and community engagement among both holocaust survivors [**Carmil and Breznitz, 1991**] and Palestinians who survived Israeli air strikes [**Punamaki et al., 1997**]. Particularly for the latter, **Wood [2003]** argues that government violence prompts victims to join opposition forces out of a sense of moral outrage.

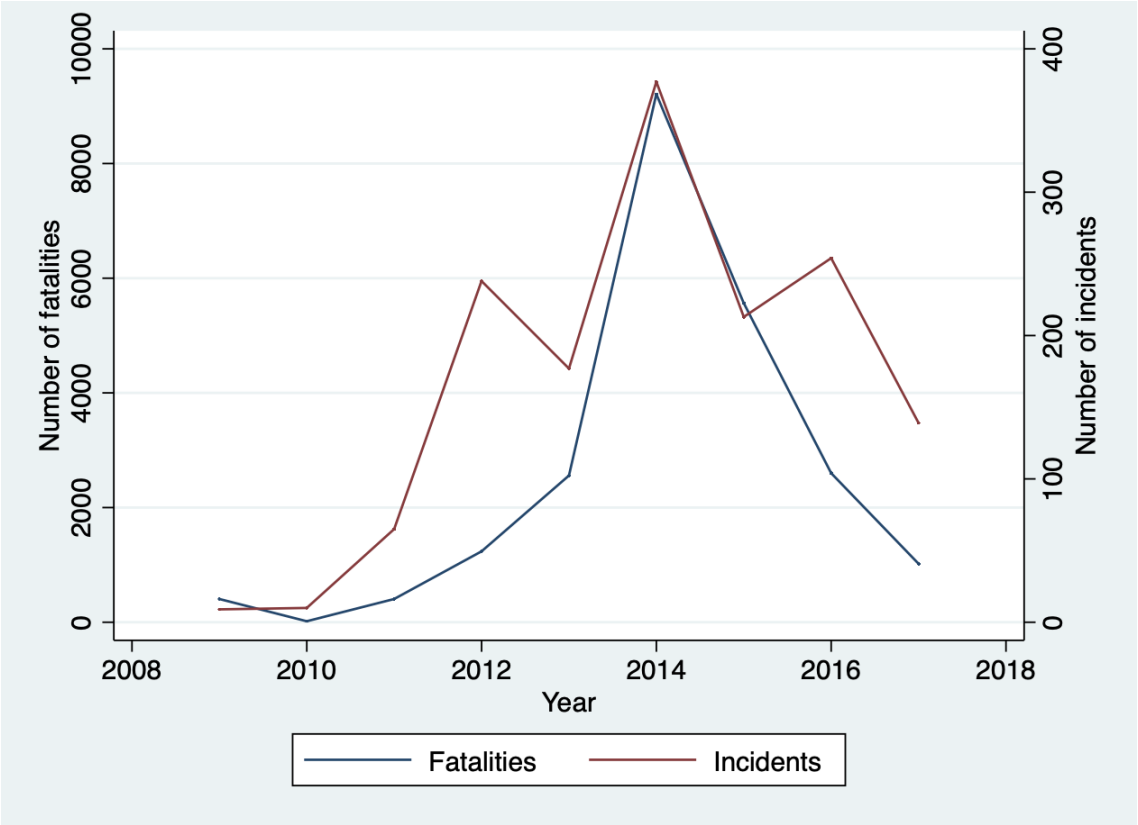
Other empirical studies find a negative correlation between colonial conflicts in Africa (1400-1700) and political trust [**Besley and Reynal-Querol, 2014**]; that traumatic exposure to violence leads to low levels of trust towards state institutions in the United States [**Alesina and Ferrara, 2002**]; and that members of communities with greater exposure to violence during the Nepalese Civil War are significantly more likely to contribute to the public good [**Gilligan et al., 2014**]. Besides these empirical studies, there are theoretical models stating that conflict erodes political and social trust, increasing the likelihood of a new conflict emerging in the future [**Rohner et al., 2013, Acemoglu and Wolitzky, 2014**].

2.2 Nigeria and the Boko Haram Conflict

Before outlining my hypothesis and the contribution to the literature, it is crucial to understand the Boko Haram conflict in Nigeria. Boko Haram is an Islamic terror organization operating in the north-eastern regions of Nigeria. The group aims to replace the federal government and to impose Islamic rule. After being founded by a group of young students in 2002, its first ambition was simply to break away from secular elements of Nigerian society and to recruit followers. Most recruits join Boko Haram from a lack of prospects and poverty due to weak state structures, mismanagement of governing elites and corruption [Pérouse de Montclos, 2014]. After Boko Haram operated "*peacefully*" for a a few years, the group radicalised and resorted to violence for the first time with terrorist attacks on the civilian population in 2009. Since then, Boko Haram has attacked civilians, police officers, soldiers and placed bombs in busy markets or villages. The first big attacks with over 100 fatalities began in 2011 with the inauguration of the elected president Goodluck

Jonathan. Boko Haram received extended global media attention through the hostage-taking of 276 school girls in Chibok in 2014.

Figure 1: **Annual Number of Fatalities *(left-hand scale)* and Number of Incidents *(right-hand scale)* in Nigeria between 01/2009 and 05/2017.**



Source: Own Compilation after UCDP 2019.

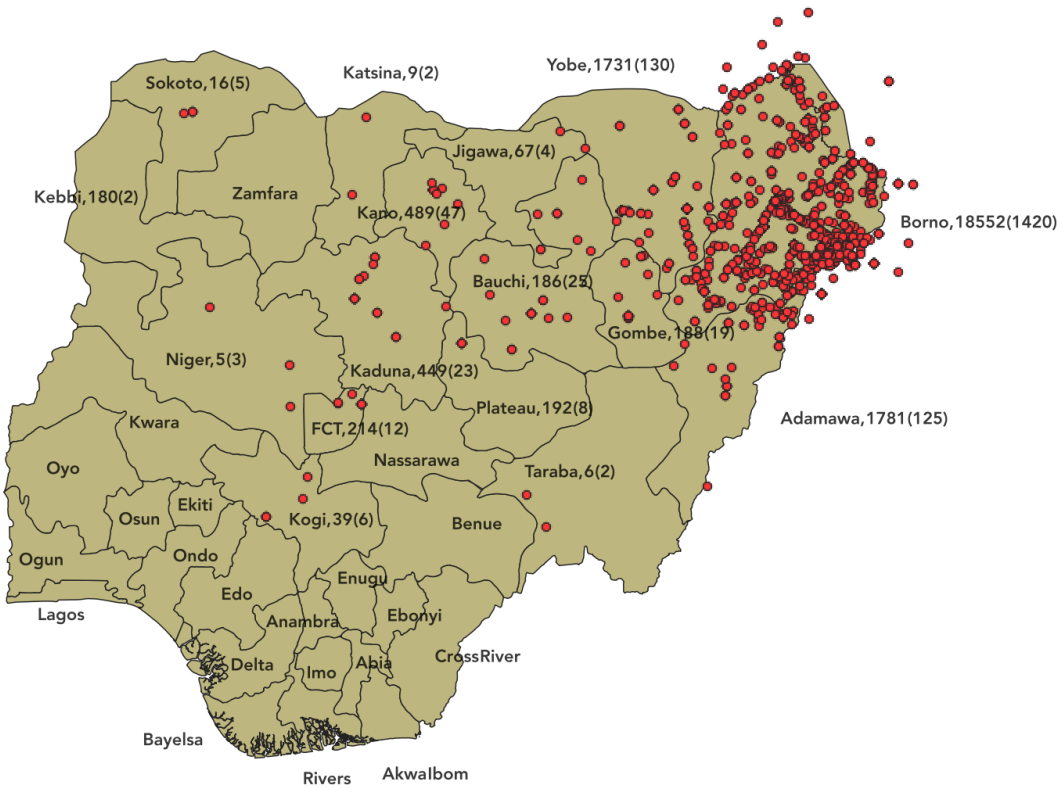
Figure 1 shows the total number of geo-referenced fatalities and fighting events between Boko Haram, the Nigerian government and civilians between 2009 and May 2017[3]. It is striking that the intensity of the conflict increased steadily until 2015. In fact, in 2015 Boko Haram controlled over 50,000 square kilometres, mainly in the federal state of Borno, and increasingly attacked neighbouring countries such as Chad, Cameroon and Niger. Boko Haram's ongoing insurgency sparked growing concern among the population that the Goodluck Jonathan's administration was incapable of handling the crisis. In addition, the security forces of Nigeria, the army and the policy, reacted with increasing severity against Boko Haram members, but also against the civilian population. Pérouse de Montclos [2014, p.15] points out that the security forces *"committed massacres, extra-judicial killings and arrests without trial"*. Those actions have undermined the confidence of

[3]The period after May 2017 has not been considered in this paper as Afrobarometer surveys have not been conducted since then.

communities to be protected by the state, up to the point, where civilians even sought for the protection of Boko Haram fighters. The study of the Royal Institute of International Affairs highlights that *"without visible efforts to regain the trust of communities, Nigeria's military will be caught fighting an interminable insurgency"* [Pérouse de Montclos, 2014, p.4].

Scholars are convinced that the insurgency of Boko Haram was one of the pivotal reasons for Jonathan losing the presidential election against Muhammadu Buhari in March 2015 [Owen and Usman, 2015]. Subsequently, Buhari employed a Multinational Task Force - with the African Union to reconquer occupied territories at the end of 2015. Many Boko Haram fighters were either captured or killed, accounting for the sharp decline in the number of deaths and attacks from 2016 onwards (see figure 1). Boko Haram remains active today, but only at a low-intensity level and is confined to the outskirts of villages in the federal state of Borno [UCDP, 2020]. In total, the group killed 28,000 people and displaced 2,5 Million between 2011 and 2017.

Figure 2: **Locations of Violent Incidents from Boko Haram in Nigeria between 01/2009-05/2017**



Note: The plain number displays the number of fatalities and the number in brackets the number of violent incidents. Source: Own compilation after UCDP.

Figure 2 displays the locations where fighting events between Boko Haram, the government of Nigeria and civilians took place between 2009 and May 2017. All red dots on the map signify either one or more events in the same location. We can see that the conflict mainly took place in the north-eastern states of Nigeria. It also shows the number of fatalities and incidents in each federal state. The federal state of Borno has the highest death toll with 18,552, followed by Adamawa with 1,781 and Yobe with 1,731 victims. Also affected were the federal states of Kano with 489, Kaduna with 449, Federal Capital Territory with 214 and Plateau with 192 fatalities. All other federal states record less than 40 victims or no victims at all.

Overall, there are three reasons why I argue the Boko Haram conflict is an appropriate case to study how conflict changes political trust and political participation. *First*, the conflict takes mainly place in the north-eastern part of the country - allowing me to conduct a "quasi-natural experiment", where I compare individuals being exposed to the conflict to those not being exposed to it. *Second*, the available data allows me to analyze how political trust and political participation are affected during the conflict and in the aftermath of it. For instance, I can control for conflict intensity measured by fighting events, our unit of analysis experienced. Nigeria also hold two presidential elections during the Boko Haram insurgency enabling me to see if voting behavior is affected in 2011 and 2015. *Third*, there has been little research done so far about political trust, political participation and Boko Haram in particular. To my knowledge there is no academic study analyzing how the conflict with Boko Haram alters political trust and political participation.

2.3 Summary and Hypothesis

In sum, the scarce literature extant demonstrates that civil conflicts lead to a decrease in political trust and an increase in political participation. Two theoretical mechanism back up these findings:

The first mechanism states that *institutional performance* is a main indicator for trust in political institutions. In general, performance theory relates institutional trust and distrust to the good or bad performance of government institutions [Newton and Norris, 2000, Lipset and Schneider, 1983]. It assumes that the general public recognizes how government institutions perform and reacts accordingly. In particular, micro-performance theory suggests that variations in the provision of services and goods is strongly linked to institutional trust and mistrust. For this paper, I argue that as long as the institutions of the executive, such as the president, the army or the police ensure the safety of citizens from Boko Haram they are considered trustworthy. If that is not the case, they are distrusted.

The second mechanism draws on the so-called *"dark side of social and political capital"* [Juan and Pierskalla, 2016, Grosjean, 2014, Cassar et al., 2013]. It describes that distrust of institu-

tions can serve as a motivational factor for citizens to engage in the political process. On this subject, the literature distinguishes between institutionalised and non-institutionalised forms of political participation. Institutionalised forms of political participation refer to all activities which are directly related to the institutional process, such as voting, contacting elected official etc. Non-institutionalised forms of political participation relate to all acts which have no direct relation with the functioning of political institutions or the electoral process. On this subject, the literature expects that *"distrusting citizens are more likely to engage in non-institutionalised forms of political participation, which are rather goal-oriented and issue specific"* [Hooghe and Kern, 2013, p.133]. If they engage in institutionalised forms and in particular in the voting process, the objective is to replace existing political institutions [Levi and Stoker, 2000]. For instance, people in affected regions in Nigeria could have voted more in the presidential election in 2011 and 2015 to (a) express their dissatisfaction with the handling of the Boko Haram conflict and (b) to remove the ruling president. Overall, I expect that people participate politically more in terms of institutionalised and non-institutionalised forms in affected areas of the Boko Haram conflict.

Drawing on the empirical findings and including the theoretical mechanism, I will test the following hypothesis on the federal state and on the individual level:

Hypothesis 1: Political trust decreases for individuals when exposed to civil conflicts. I expect that political trust should have decreased in Nigeria in the course of the conflict. It decreased especially for those institutions that are responsible for guaranteeing the safety and security of the public. Therefore, I test for trust in the president, the army and the police. In return, political trust should increase as the conflict ends.

Hypothesis 2: Political participation increases during the conflict, with the objective being to bring about a change in policy. For non-institutionalised forms I take into account attendance at community meetings, and joining others to raise an issue. For institutionalised forms, I account for having voted in the last presidential election.

2.4 Contribution to the Literature

This paper addresses two major caveats in the existing literature. The first one is the exogeneity assumption of violence. Bellows and Miguel [2012] and [Blattman, 2009] argue that the violence that took place in Uganda and Sierra Leone was exogenous. Even though their proposal seems credible, it could still be argued that the occurrence of conflict violence is somehow related to an individual's characteristics or the aggregate characteristics of a village or town. For example, rebels deliberately selected towns or villages that distrusted the state to recruit followers more successfully, so therefore distrust towards the state would clearly have existed already before the

conflict. Another example would be that rebels in Sierra Leone intentionally attacked representatives of the state in order to demoralize the population. In this instance, Bellows and Miguel [2012] findings that civil conflict victims participate more politically is not in fact due to the experience of violence, but rather down to pre-conflict characteristics. If the location-based or individual characteristics are related to the outcome, we might find reverse-causality.

The second *caveat* addresses the fact that most studies were conducted several years after the conflict. The surveys for Cassar et al. [2013] were collected 10 years after the Tajikistan war, for Bellows and Miguel [2012] 3 years after the war in Sierra Leone and for Blattman [2009] 5 years after the conflict in Uganda. Political trust and participation can be affected after the conflict by a lot of factors, including peace-keeping policies, support and care for war victims. Bellows and Miguel [2012], for instance, did not control if special care was being administered to victims who were affected by conflict. If this were the case, it might mean that the effect of civil conflict would be much smaller than assumed. For this reason, it is valuable to investigate what happens to political trust or political participation during and in the direct aftermath of conflict. This knowledge gives the opportunity, when social and political fragility is at its highest, to push ahead with compensatory political and institutional reforms, for example through political exchange, elections or reconciliation [Juan and Pierskalla, 2016].

A primary contribution of this paper shall be to address both these caveats. By applying a difference-in-difference design and a synthetic control method, I include one baseline and several pre-treatment observations. This allows me to control for time and location area fixed effects and, consequently, for individual and location based characteristics that might be related to the outcome. Further, I include two conflict periods and one directly after-conflict period[4] in the analysis. This provides insight into how political trust and participation changed in the course of the Boko Haram insurgency. Only De Luca and Verpoorten [2015] have included a pre- and post-intervention period in their identification strategy, and only in their case to study the effect on political participation, not political trust.

A secondary contribution is that I measure solely the exposure to violence on the aggregate level and not the direct experience of violence on the individual level. Therefore, this paper is complementary to those of Blattman [2009], Miguel et al. [2011] or Cassar et al. [2013]. It is complementary in the sense, that my approach allows to determine possible effects on individuals who claim not to have personally experienced violence, but have been exposed to it through their immediate proximity. For instance, these individuals are not considered in the analysis of Bellows and Miguel [2012] or Blattman [2009].

[4]The surveys of the post-conflict period were taken one year after the main fighting period.

A final contribution is the comparison of an affected federal state with a synthetic control, that is in fact most similar to the federal state. Some scholars argue that this allows to identify more precisely the effect of an intervention on the aggregate level [Abadie et al., 2015].

With these three arguments in mind, I argue that combining a synthethic control method and a difference-in-difference design allows this study to identify precisely how the exposure to violence changes political trust and political participation, and is thus a valuable contribution to the literature.

3 Research Design

3.1 Data Selection

3.1.1 Data Sets

I use two data sets in this paper: One from the Afrobarometer and the other one from the Uppsala Conflict Data Program (UCDP).

Afrobarometer is the biggest independent research network in Africa, repeatedly measuring public attitudes on political, social and economic matters in more than 30 African countries [Afrobarometer, 2020]. Between 1999 and 2020, Afrobarometer conducted seven survey independent surveys in Nigeria: 1999 (round 1), 2003 (round 2), 2005 (round 3), 2008 (round 4), 2012 (round 5), 2015 (round 6) and 2017 (round 7)[5]. Round 2 (2003) to round 7 (2017) contain between 1,500 and 2,500 respondents, while round 1 surveyed 4,000 individuals. This gives me a potential overall sample of 21,311 individuals. Importantly, the Afrobarometer geocodes their survey data, allowing me to identify where the surveys took place.

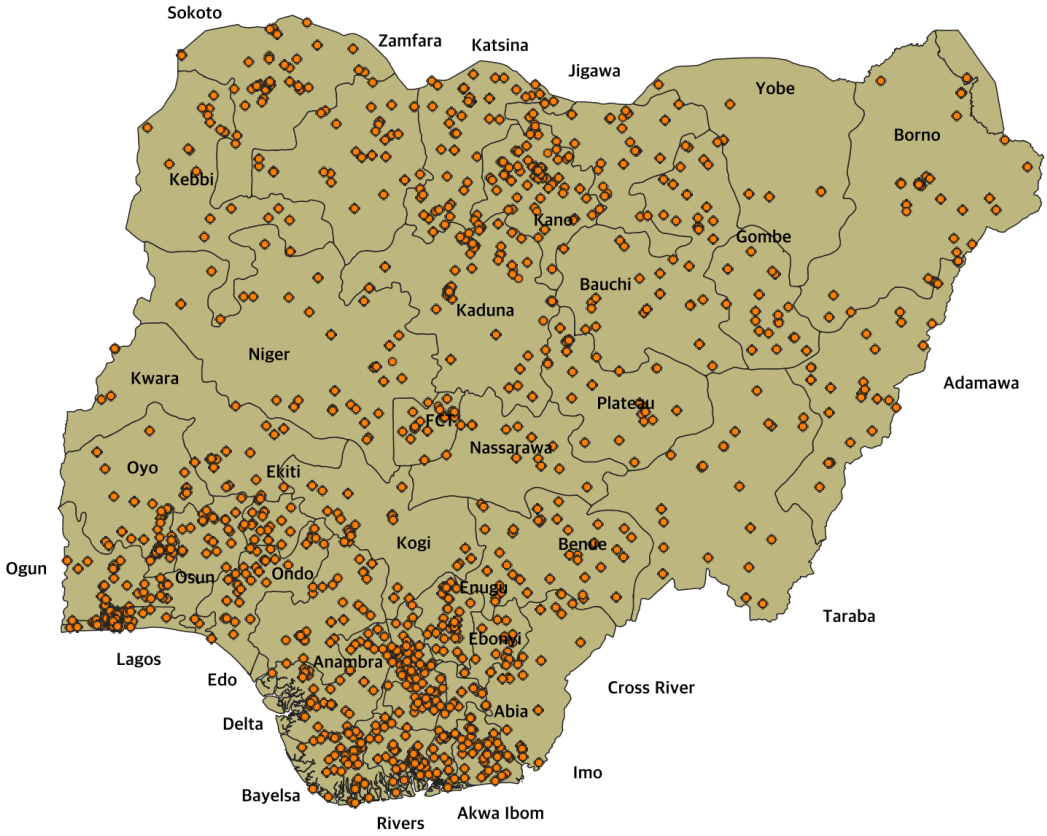
The points shown in figure 3 represent the locations of the Afrobarometer surveys. It is important to add that each round of surveys has conducted interviews in some of the same areas, but also in different locations. Therefore not every village or town was surveyed in each round. Further, round 6 of Afrobarometer was not conducted in the federal states of Adamawa, Borno and Yobe, which were the most affected states during the Boko Haram conflict[6]. Figure 3 shows that most surveys were conducted in the south, south-west and north of Nigeria. When comparing to figure 2, we can conclude that most survey data are available for the conflict-affected states Kano,

[5]The exact fieldwork dates are: round 1: 1.11-1.12.1999; round 2: 13.10-29.10.2003; round 3: 28.8-31.12.2005; round 4: 13.-25.5.2008; round 5: 29.10-30.11.2012;round 6: 5.12.2014-19.1.2015; round 7: 26.4-10.5.2017 [see Afrobarometer, 2020].

[6]I suppose this was due to the fragile security situation with regard to Boko Haram.

Gombe, Bauchi, Katsina and Plateau.

Figure 3: **Survey Locations of Afrobarometer Round 1 to Round 7**



Source: Own compilation after Afrobarometer 2019.

Data from the Afrobarometer network does not ask individuals directly whether they experienced conflict violence. Consequently I measure the impact of **being exposed** to conflict. To do so, I use geocoded data from the Uppsala Conflict Data Program (UCDP) [see UCDP, 2020]. UCDP operates the largest conflict database in the world. They geocode every deadly attack perpetrated by rebel groups and state actors on civilians (defined as one sided violence) and every deadly combat between rebel' groups and state actors (defined as state-based violence), allowing researchers to track every conflict related event by location and date.

For this paper it is crucial to understand their methodology and defintions. UCDP defines a conflict related event as *"the use of armed force by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death in either the best, low or high estimate categories at a specific location and for a specific temporal duration* [Sundberg et al., 2012]. All events which meet these criteria and where fatality estimates could be verified, are coded as a

single unit of analysis in the UCDP dataset. Further, UCDP applies a baseline definition: A civil conflict is only deemed to be active if it surpasses the 25 deaths threshold per year between two different actors, for example government vs. rebels or rebels vs. civilians. All violent conflicts which are below this threshold are considered to be inactive.

The data collection of UCDP is compiled via articles published in international and national newspapers. They retrieve additional information from reports by Non-governmental organizations and international organizations. They then compare these sources with each other and calculate the possible lowest, best and highest number of fatalities. In this paper, I rely on the possible best estimation of fatalities. Since UCDP relies on public available conflict information, it is likely that there are more, but unlikely to be less, fatalities than reported in the best estimate. There are two reasons for this: First, information is rare in conflict zones - some violent events are simply not reported due to limited public access. Second, it is sometimes unclear which actors are involved in a fighting event. If that is the case, UCDP does not code these events. For this paper, presented numbers of fighting events and numbers of fatalities are **likely to be significantly higher**.

3.1.2 Variables

My variables of interest are political trust and political participation. In this section, I outline how these variables are measured in the Afrobarometer set. In addition, I explain which other control variables I use. I chose the control variables on the basis of (a) relevant literature explaining which factors are likely to impact political trust and political participation and (b) on the basis of Nigeria-specific characteristics [see: Bellows and Miguel, 2012, Blattman and Miguel, 2010, Hutchinson and Johnson, 2005, Brady et al., 1995, Gates and Justesen, 2012, Hetherington and Rudolf, 2018, Uslaner, 2002, Cassar et al., 2013].

Dependent Variables

Concerning *political trust*, I am interested in how trust changes in the president, the army and the police. Afrobarometer assesses these variables by asking: How much do you trust the following institution?: 0 (not at all), 1 (a little), 2 (somewhat), 3 (a lot). Out of these three variables, I create a sum score, denoted as general trust, to measure the impact of the conflict on all of these together.

Political participation is measured in terms of attending community meetings, joining others to raise an issue and having voted in the last election. Afrobarometer asks: During the past year have you attended community meetings or joined others to raise an issue? The respondents scale is the following: No (0), Yes, once or twice (1), Yes, several times (2), Yes, often (3). Again, I construct a sum score out of attending community meetings and joining others to raise an issue, denoted as participation, to analyze a joint effect. For having voted at the last presidential election

I create a dummy variable (0= No, 1= Yes). To create a better comparability between the dependent variables, I standardize trust in the president, the police, the army, general trust, attending community meetings, joining others to raise an issue and participation, with mean 0 and standard deviation 1.

Individual-Level Variables

I shall now explain which other individual-level variables are likely to impact political trust and political participation. All of these are used in my identification strategies.

Socio-Economic Status: According to the literature, political trust and political participation are highly influenced by the socio-economic status (SES) of an individual [Blattman, 2009, Brady et al., 1995]. There is robust evidence that a positive correlation between education, income, employment status and political participation and political trust exists [Hutchinson and Johnson, 2005, Foster and Frieden, 2017]. On this basis, I control for the employment status (0= unemployed ; 1= employed) and the education status (0= no education, 1= primary education, 2= secondary education, 3= post-secondary education). I can not control for income, as it is not assessed by Afrobarometer. However, it is likely that people living in extreme poverty are less trusting and less participatory in the political process. I follow Gates and Justesen [2012] and include a poverty index, which assesses how often respondents have gone without food in the last year. This is measured on a 0 to 4 scale, where 0 stands for "never", 1 "just once or twice", 2 "several times", 3 "many times" and 4 "always".

Attitudinal Characteristics: Political trust and political participation are also positively correlated to political interest and exposure to the media [Miguel et al., 2011, Hutchinson and Johnson, 2005, Hetherington and Rudolf, 2018]. I examine political interest the following way: *"How much are you interested in political affairs?"* - measured on a 0 to 3 scale (0= Not at all interested; 1= Not very interested; 2= Somewhat interested; 3= Very interested). Media exposure is assessed by the extent to which a respondent listens to the radio. I expect that people in rural areas are more likely to inform themselves via the radio rather than through the television or newspapers [Bellows and Miguel, 2012, Gates and Justesen, 2012]. Afrobarometer asks respondents how often they receive news via the radio: 0= Never; 1= Less than once a month; 2= A few times a month; 3= A few times a week; 4= Every day.

Public Good Delivery: Another driver of political trust is the provision of public goods [Uslaner, 2002]. People expect from the government to provide public goods such as education, health, police, electricity or water. If people are not satisfied with the public good delivery, they tend to distrust the state. On this account, I create a 0-6 index assessing if a respondent has nearby access

to a police station, a health station, a school, a post-office, water and electricity.

Country-Specific Characteristics: There is some evidence that people tend to distrust those of other religions less than people who share their own religious beliefs [Cassar et al., 2013]. As the presidential elections in Nigeria are either won by a Muslin of the north or a Christian from the south, I want to exclude the possibility that a change in political trust is driven by the religion of the president. I create a dummy variable, which is equal to 1 if the religion of the respondent matches the religion of the president. Religion is measured as being either Christian (value 0) or Muslim (value 1). Approximately 98 percent of Nigerians are either Christians (50 percent) or Muslims (48 percent). Another Nigeria specific aspect is the long conflict between "herders" and "farmers" in the northern part of the country [CrisisGroup, 2017]. The two groups fight for land, food and water resources. Therefore, I expect that people working in the agricultural sector in the north could be less trusting towards the state government as it does not provide security or conflict resolutions. For that reason, I include the occupation status of the respondent, which I divide into the agricultural sector (0) and all other sectors (1)[7].

Respondent's characteristics: I control for age, gender (0= male; 1= female) and the living area (0= urban region; 1= rural region). Age is divided into three subgroups (<30; 30-50; 50+).

Again, I standardize all categorical control variables, "poverty", "interest in politics", "media exposure", and the "provision of public goods" with mean 0 and standard deviation 1.

3.2 Identification Strategy

This paper investigates how the exposure to violence affects political trust and political participation. To address this issue, I use two identification strategies to measure the exposure to violence on the federal state level and the individual level: (1) The synthetic control method accounts for the federal state level, while (2) the difference-in-difference (DiD) defines all individuals as being exposed to violence if they were surveyed within 0.1 radial degrees (11km) to a fighting event (conflict location). To verify my results for the latter, I apply two robustness checks, where I expand the conflict location to towns/villages and local government areas. I proceed by explaining the synthethic control method and the difference-in-difference design.

[7] I do not differentiate the occupation status further, as the interpretation will be complicated. Afrobarometer assesses over 30 different occupations. It can be noted that in 2019 $\approx$ 37 percent of Nigerians workforce worked in the agricultural sector [Tradingeconomics, 2020].

3.2.1 Synthetic Control Method

My first identification strategy is a synthetic control method at the federal state level of Nigeria [see: Abadie et al., 2015]. A synthethic control method studies the effect of an intervention on an outcome by comparing the effect on an aggregate level, such as federal states or countries, with the effect on their synthethic control. In our case, I compare the effect of Boko Haram on political trust and political participation for the federal state of Kano with its synthetic counterpart.

Suppose there is a sample with *I+1* units (in our case federal states in Nigeria) indexed by *i*. Unit *i= 1* is our treated case and units *i = 2* up to *i = I+1* are potential comparison units. The treated unit is the unit exposed to the event, the comparison units constitute the donor pool. The comparison units should approximate the counterfactual of the treated unit before the intervention. Therefore it is important to restrict the donor pool to all units with outcomes *"that are thought to be driven by the same structural process as for the unit representing the case of interest and that were not subject to structural shocks to the outcome variable during the sample period of the study"* [Abadie et al., 2010]. Further, we require a positive number of pre-intervention and post-intervention periods, that is $T_0 > 0$, $T_1 > 0$ and $T = T_1 + T_0$.

In reference to Abadie et al. [2015], I define a synthetic control as a weighted average of the units in the donor pool, which can be represented as a $(I \times 1)$ vector of weights $W = (w_2, \ldots, w_{i+1})'$. The weights are chosen prior to the characteristics of the matching variables, which do not include the variables of interests during the pre-treatment period. The matching variables need to be appropriate in reference to the study of interest. In fact, we need to select the value of W^* such that the treated unit is best resembled by the synthetic control. To do so, we define X_1 as a $(k \times 1)$ vector containing the values of the pre-treatment characteristics (matching variables) of the treated unit. X_0 will be a $k \times I$ matrix collecting the values of the same characteristics in the donor pool. We proceed by choosing W^* such that it minimizes:

$$\sum_{m=1}^{k} v_m (X_{1m} - X_{0m} W)^2 \tag{1}$$

, where v_m depicts the weights we assign to each variable in the donor pool when measuring the difference between X_1 and $X_0 \times W$. Higher weights are assigned to those matching variables which closely reproduce the variable of interest in the treated unit. Overall, the weights should reduce the difference between the outcome variable in the pre-intervention period as much as possible, which is measured by the root mean square prediction error (RMSPE)[8]. The treatment effect is

[8] More formally, the RMSPE is defined as:

$$\left(\frac{1}{T_0} \sum_{t=1}^{T_0} (Y_{1t} - \sum_{i=2}^{I+1} w_i * Y_{it})^2\right)^{\frac{1}{2}} \tag{2}$$

.

calculated as follows: Denote Y_{it} the outcome of unit i at time t, where Y_1 is a $(T_1 \times 1)$ vector collecting all post-intervention outcome values for the treated unit. Further denote Y_i as a $T_1 \times I$ matrix. In this matrix column I collects all outcome values of the donor pool in a given post-treatment period. The treatment effect is the difference in outcome of the treated unit and its synthetic control in the post-intervention period (t $\geq T_0$), given by the following equation:

$$Y_{1t} - \sum_{i=2}^{I+1} w_i^* Y_{it} \tag{3}$$

For any given post-intervention period t (with $t > T_0$), the synthetic control estimator will calculate the effect of the treatment as the difference between the outcome variable of the treated unit and the outcome variable $\times$ the weight we are assigning to each donor in the pool.

Abadie et al. [2015, p.496] underline that in comparison to a difference-in-difference strategy *"A combination of a few aggregate entities as a control often does a better job than taking all of them together"*. This is often the case, when there is only a small-number of comparison units such as countries or federal states. To apply the synthetic control, there should be enough pre-intervention periods and, if possible, after intervention periods available to control for persisting effects. According to Abadie et al. [2010, p. 498] roughly a decade long pre-intervention period is the minimum for the synthetic control method. To validate the results, two falsification procedures should be applied: an "in-time placebo test", where we assign treatment to a given year when no treatment occurred and an "in-space placebo test", where we assign treatment to units which were not affected.

3.2.2 Difference-in-Difference Design

My second identification strategy is a difference-in-difference (DiD) design [see: Lechner, 2011]. A DiD design is a statistical technique which attempts to study the effect of a treatment (in our case conflict) on a treatment group given a control group. It calculates the effect of a treatment on an outcome by comparing the average change over time of the outcome in the treatment group to the control group.

My DiD estimation analyzes round 2 to 7 of the Afrobarometer set. Unfortunately I could not obtain the geocoded data of the first Afrobarometer round. Ideally, I would have liked to construct a local government area (LGA) panel data set[9] to compare affected with unaffected LGA's. However, Afrobarometer surveyed in 571 LGA's since 2003, but rarely in the same ones every round. To include as many individuals as possible in the analysis, I use a different approach. I define treatment on all individuals who lived within a 0.1 radial degree radius (11km) of a violent incident involving

[9]The LGA level is comparable to the district level in European countries.

Boko Haram between 2009 and 2017. These incidents contain solely deadly fighting events between Boko Haram and citizens; between security forces of the Nigerian government and Boko Haram; or between security forces of the Nigerian government and citizens. For example, if an individual was interviewed in 2003 and in 2015 the place of residence was within 11km of a conflict area, then this person is coded as "treated". Even though this specification might seem odd initially, it has two advantages: First, it allows me to include all affected areas in the north in my specification. In particular, I include villages and towns in Yobe, Zamfara and Borno which were under attack in 2012, but were not surveyed in 2015. Second, I can take into account the most affected city, Maidugiri, which witnessed over 351 fighting events between 2009 and 2017, but which was not surveyed in 2015. The control group is formed by all individuals surveyed more than 0.2 radial degrees to an event. To avoid an artificial demarcation, where individual i was surveyed 11 km (treatment group) and individual j 12 km (control group) from an event, I discard all individuals surveyed 0.1-0.2 radial degrees from a fighting event from the sample. I base my treatment period on rounds 5 and 6 (time of the Boko Haram conflict), and my after-treatment period on round 7. My pre-treatment periods are accordingly rounds 2 to 4. My estimation equation is the following:

Estimation Model 1:

$$\begin{aligned} Y_{igt}^{j} = ß \times ConflictLocation_{it} + \sigma \times ConflictLocation_{it} \times A_t^{Post} \\ +\kappa \times X_{igt} + \mu \times X_{igt} \times A_t + \alpha_g + \delta_t + \mu_{igt} \end{aligned} \tag{4}$$

Y_{igt}^{j} is our variable of interest of individual i, living in local government area g being surveyed at time t. σ is our coefficient of interest multiplied with the dummy *ConflictLocation*, which takes the value 1 if the individual was survey within a 11km radius to a fighting event and multiplied with our treatment and after-treatment years A_t^{Post}, $\forall t \in [2012, 2015, 2017]$. ß $\times$ *ConflictLocation* accounts for differences between the treatment and the control group. X_{igt} are individual covariates, which are also interacted with each survey year A_t, $\forall t \in [2003, 2005, 2008, 2012, 2015, 2017]$. That accounts for time-varying interaction effects between the covariates and the survey years. My control variables are gender, age, living area, religion of the president, education, poverty, occupation and employment status. I control for attitudinal characteristics and public good delivery in the robustness section of this paper. α_g are local government area fixed effects and δ are time fixed effects. u_{igt} are individual standard errors clustered at the local government area to account for heteroskedasticity and arbitrary serial correlations within the clusters.

Table 8 [Appendix] shows that my treatment group is rather small in 2015 and 2017 with 129 and 96 respondents respectively. Indeed, there is a strong reduction in the number of treated respondents in 2015 and 2017, when compared to previous previous surveys. As outlined, Afrobarometer conducted fewer surveys in the north of the country in the course of the Boko Haram conflict. Consequently, I only partly capture what happened during the "intense conflict period" in

2014 and 2015. To account for this, I re-estimate the model by including the Afrobarometer surveys from Niger and Cameroon in a second step. Afrobarometer surveyed there in 2013, 2015 and 2018. I match those dates to survey rounds 5, 6 and 7 of Nigeria. Figure 8 [Appendix] shows the survey locations of Afrobarometer in Niger and Cameroon and displays that Boko Haram attacks took place in the northern part of Cameroon, close to the Nigerian border and the south-east and west of Niger. Hence, this enlarges my treatment group as table 9 [Appendix] proves. It also increases my potential sample size from approximately 11 000 to 17 000 respondents. The treatment period is still 2012 and 2015. I include all covariates outlined in section 3.3.2, except for occupation which was not measured in Niger or Cameroon in rounds 5 and 6.

I verify my results by placebo tests and robustness checks. For the placebo tests, I check whether prior to the treatment, the difference between the treatment and control group is significant. If that is the case, the pre-trend assumption is violated and my empirical results can not be confirmed [Lechner, 2011]. For the robustness checks, I first control if an omitted variable bias is present. That said, I check whether the omission of other control variables changes significantly my results. I then control if the definition of my conflict location influences my estimates.

4 Empirical Findings

4.1 Federal State Level Analysis

4.1.1 Empirical Results

To apply the synthetic control method, I use rounds 1 to 7 of the Afrobarometer. I construct a panel data set on the federal state level and compute the averages of all dependent and independent variables. My panel data set includes 22 federal states[10]. I define Kano as my treated unit, as it recorded the highest number of fatalities and incidents (figure 2) after Adamawa, Borne and Yobe[11]. Further, Kano experienced one of the most violent attacks perpetrated by Boko Haram: the so-called "Kano Bombings" which killed over 120 civilians, and injured over 260 more in November 2014 [BBC, 2020]. This happened just days before the Afrobarometer Survey Round 6 took place. Conflict intensity increased in Kano up until 2015 (figure 1), after which there was a significant decline with no attack being recorded in Kano after 2016 on wards. For this reason, I base the pre-treatment on rounds 1 to 4 (1999, 2003, 2005, 2008), the treatment period on rounds 5 and 6 (2012, 2015) and the after-treatment period on 2017. My pre-treatment therefore covers the required period of approximately a decade. I proceed now by presenting (a) the federal states

[10] 14 federal states were left out, since they were not surveyed each round. This concerns Yobe, Borno, Adamawa, Imo, Cross River, Ekiti, Gombe, Bayelsa, Cross River, Anambra, Kebbi, Tarabe, Nassarawa, Zamfara and Jigawa.

[11] As the conflict intensity is higher in Adamawa, Borno and Yobe, it would have been more appropriate to use one of those states as my treated unit, but there is no survey data available for those states in 2015.

in the donor pool, (b) the matching variables and (c) my empirical results.

As described, the donor pool should only include units which were not subject to the treatment and did not undergo other important structural changes. Therefore, I exclude all federal states, which recorded more than 25 deaths per year in the course of the conflict[12]. I also exclude the federal state of Lagos. In fact, Lagos is a city state, which makes it difficult to compare size-wise. Additionally, the population of Lagos has undergone significant transformation in terms of size and migration. I therefore argue that this transformation structurally influences political trust and political participation. Indeed, the population grew from 6 million in 2000 to 16 million in 2018 [Review, 2020] and it now has a very diverse population, owing to migration from surrounding countries and other parts of Nigeria. For this reason, I conclude that Lagos cannot be compared to other federal states in Nigeria. Overall then, my donor pool consists of Abia, Akwa Ibon, Benue, Delta, Edo, Enugu, Katsina, Kwara, Niger, Ogun, Ondo, Osun, Oyo, River and Sokoto.

As for my matching variables, I decided to use all of those which are likely to influence political trust and participation. Subsequently, I use all control variables which are outlined in chapter 3.2.2: age, gender, religion of the president, occupation, employment status, education, poverty index, public good delivery, interest in politics and media exposure. A synthethic control weight from Kano which consists of all important predictor variables for political trust and participation can effectively isolate the effect of Boko Haram.

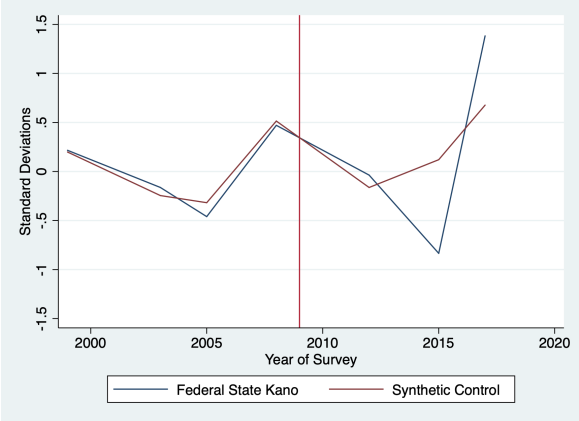
I shall now outline my empirical findings for *political trust* and *political participation*. First, tables 11-13 [Appendix] show which weights the synthethic controls assigns to each donor, denoted as W^* in equation 1, and to the machting variables, denoted as v_m in equation 1. As the description of the weights for each donor and for each matching variable is too long, I directly discuss the treatment effects of Boko Haram on political trust and political participation.

My findings show that Boko Haram has an effect on political trust in Kano. Figure 4 depicts the average value of trust in the president, the police, the army and general trust for Kano and its synthetic counterpart between 1999 and 2017. The average value is measured in terms of standard deviations. First, the synthethic control reproduces Kano well in the pre-treatment period, with minor deviations for the president in 2005. That is necessary for the pre-trend to hold [Abadie et al., 2015]. Second, we can observe that trust in the president, the army and general trust fell in 2012 and 2015 and increased afterwards. Trust in the police fell in 2012 and increased subsequently. Third, the difference between the Kano and the synthethic control is for all four variables the highest in 2015 and 2017.

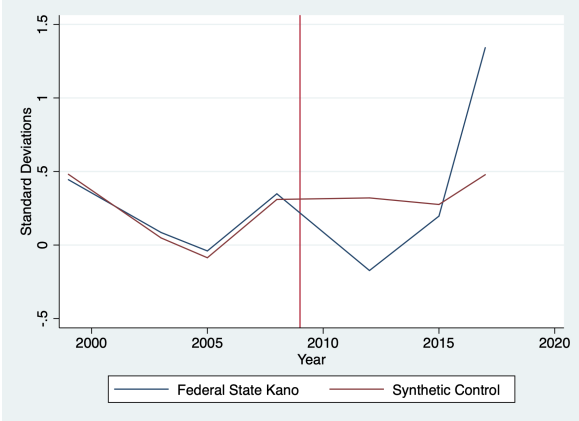
[12]I follow Upsala's definition that an actor (Boko Haram) is only active if more than 25 deaths per year are recorded. On this basis I rule out the federal states of Bauchi, FCT, Kaduna, Kogi and Plateau as potential donors.

Figure 4: **Political Trust in Kano and its Synthetic Control, 2012-2017**

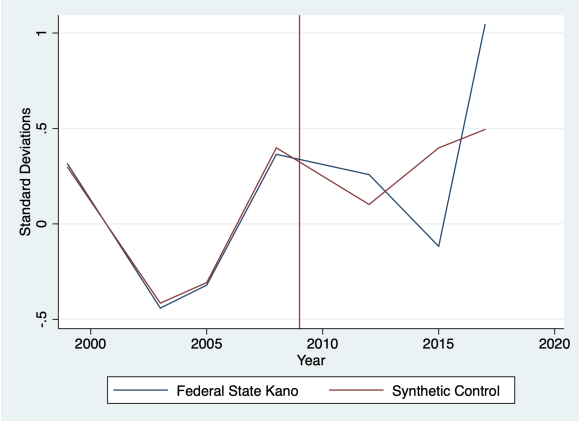
(a) Trust in the President



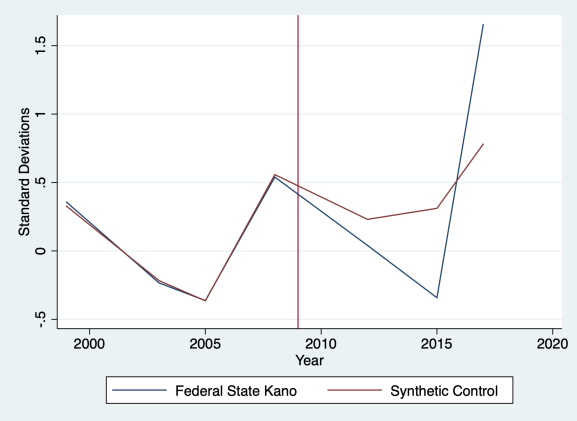
(b) Trust in the Police



(c) Trust in the Army



(d) General Trust



Note: The y-axis reports the standardized average for each variable in Kano and its synthetic control. The x-axis reports the years. The survey years were 1999, 2003, 2005, 2008, 2012, 2015 and 2017.

Table 1: **Treatment Effects on Political Trust for Kano, 2012-2017**

	President	**Police**	**Army**	**General**
2012 x Treatment	0.13 (0.53)	-0.49 (0.06)*	-0.16 (0.20)	-0.19 (0.00)***
2015 x Treatment	-0.95 (0.00)***	-0.08 (0.60)	-0.51 (0.00)***	-0.65 (0.00)***
2017 x Treatment	0.70 (0.00)***	0.86 (0.20)	0.55 (0.00)***	0.87 (0.00)***

Note: *p<0.10; **p<0.05; ***p<0.01. Reported are standardized treatment effects and p-values in brackets.

Table 1 depicts the standardized treatment effects and p-values for each treatment year in Kano. The standardized treatment effects need to be interpreted as the difference between Kano and the synthetic control. The p-values show if this difference is significant and therefore if the intervention (Boko Haram) has an effect on the variables of interest. Significant is the decrease of trust in the president by nearly one standard deviation in 2015 and the increase by 0.7 standard deviations in

2017 on the 1 percent level. There is also a decrease of trust in the police significant on the 10 percent level in 2012. Further, trust decreased by 0.51 standard deviations in the army in 2015 and increased afterwards by 0.55 standard deviations. The combined trust index shows that trust decreased in 2012 and 2015, and then increased in 2017. The double decrease and the increase in 2017 demonstrates that overall trust in the executive diminished during and increased after the conflict.

According to political participation, my theoretical assumptions are not confirmed. Figure 9 [Appendix] portrays that the synthetic control does not well reproduce Kano for all political participation variables in the pre-treatment period. Since the fit is somewhat poor, I conclude that the pre-trend assumptions does not hold [Abadie et al., 2015]. In this context, I do not find any significant treatment effects on political participation in Kano. Table 2 shows the point estimates for attending community meetings, joining other to raise an issue, having voted at the last presidential election and the participation index. We can see that none of the point estimates is significant. They are mostly negative in 2012 and positive in 2017. In 2015, the treatment effects for attending community meetings and the participation index are negative, while they are positive for voting and joining others to raise an issue.

Table 2: **Treatment Effects on Political Participation for Kano, 2012-2017**

	Meetings	**Joining others**	**Voted**	**Participation**
2012 x Treatment	-0.79 (0.20)	-0.52 (0.26)	0.05 (0.64)	-0.87 (0.26)
2015 x Treatment	-0.53 (0.33)	0.23 (0.53)	0.10 (0.64)	-0.22 (0.80)
2017 x Treatment	0.37 (0.503)	0.21 (0.73)	0.11 (0.35)	0.21 (0.80)

Note: *p<0.10; **p<0.05; ***p<0.01. Reported are standardized treatment effects for attending community meetings, joining others to raise an issue and participation. The treatment effect for having voted at the last presidential election is not standardized, since the variable is binary. P-values are reported in the brackets.

In summary, I do not see a clear or significant pattern of how the conflict has affected political participation in Kano. One possible explanation is that measuring political participation on the aggregate federal state level is too wide. Therefore, an analysis on the individual level - in my DiD estimation - could be appropriate.

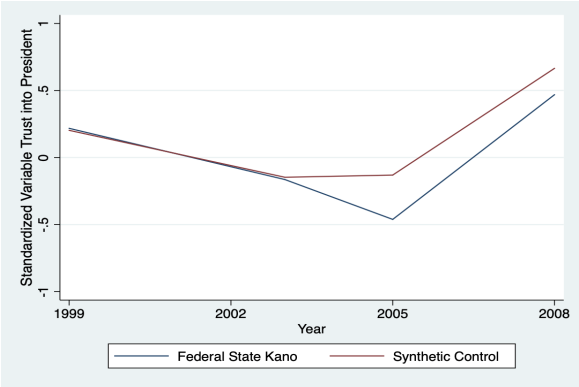
4.1.2 Placebo Checks

I conduct two placebo studies to evaluate the credibility of my results for political trust. The first placebo study is an in-time placebo test, where I reassign the treatment prior to the Boko Haram conflict. If I detect a significant placebo treatment effect and a disconvergence of the trend between the synthetic control and Kano after the placebo treatment, the prediction power

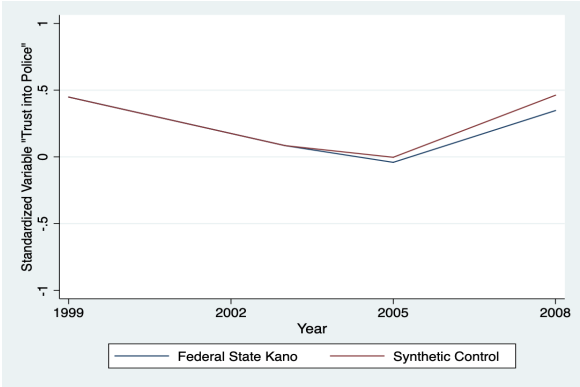
of the synthetic control is undermined[13]. My "fake" treatment year is defined on 2005 - nearly the middle of the pre-treatment period. Figure 5 displays the results of the in-time placebo test. The placebo synthetic control replicates well the pre-trend for all variables of interest before 2005. In 2005, there seems to be an important average treatment effect (ATE) on trust in the president (ATE=0.35) and general trust (ATE=0.42). However, none of these placebo treatment effects are significant. Thus, I do not discard the president nor general trust from the analysis. Moreover, the synthetic control from Kano does not converge for all variables of interest after 2005, implying that the placebo treatment has no perceivable effect.

Figure 5: **In-Time Placebo Test for Political Trust in Kano and its Synthetic Control, 1999-2008**

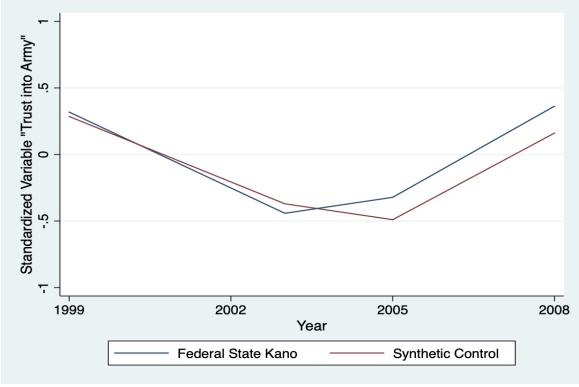
(a) Trust in the President



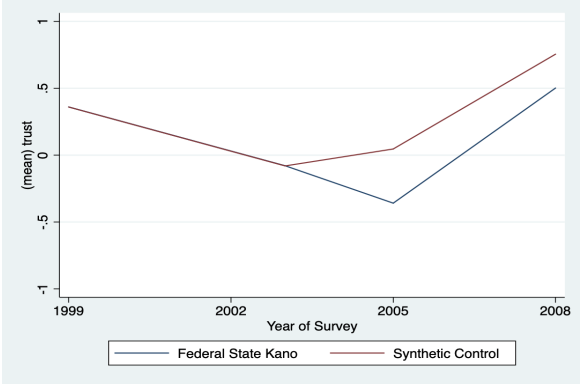
(b) Trust in the Police



(c) Trust in the Army



(d) General Trust



Note: "Placebo Treatment" is defined on 2005. The y-axis reports the standardized values for each variable of interest. The x-axis displays years. The survey years were 1999, 2003, 2005 and 2008.

I apply a second placebo test by reassigning the treatment to federal states which were not affected by Boko Haram. This procedure allows me to compare the effect of Boko Haram in Kano to the distribution of placebo effects in the donor pool. The effect of Boko Haram in Kano can be considered significant, if it is unusually large relative to the distribution of placebo effects in

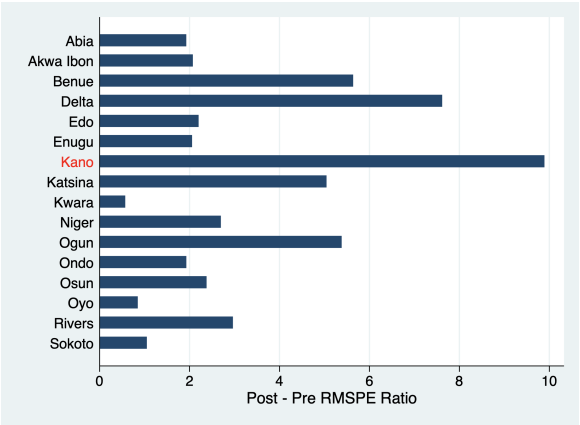
[13]It is important to mention, that it is difficult to find an exact match of the synthetic control to Kano for the entire pre-treatment period as the number of surveys (4) within that period are very little [see Abadie et al., 2010].

the donor pool [Abadie et al., 2015, p. 23]. This can be measured by comparing the ratio of the post and pre RMSPE for each unit. If this ratio is the highest for the affected state, the treatment seems to have an effect.

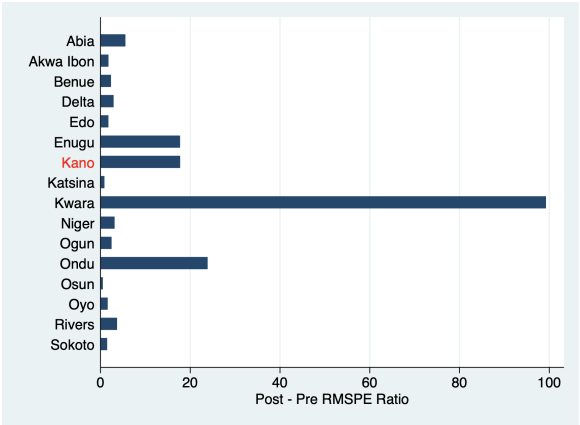
Figure 6 presents the ratio of the post-2012 and pre-2012 RMSPE (post-pre RMSPE ratio)[14]. The post-pre RMSPE ratio is the highest for trust in the president, the army and general trust. Therefore, the "treatment effects" are valid for those three variables in contrast to the police, for which the treatment effects do not hold, as the post-pre RMSPE ratio is not the highest. Nonetheless, it is striking that the post-pre RMSPE of general trust is over 400 times higher when compared to all other federal states. That is a very strong indication that overall combined trust in the president, the police and the army fell in the course of the Boko Haram conflict and increased afterwards.

Figure 6: **In-Space Placebo for Political Trust in Kano and its Synthetic Control, 1999-2017**

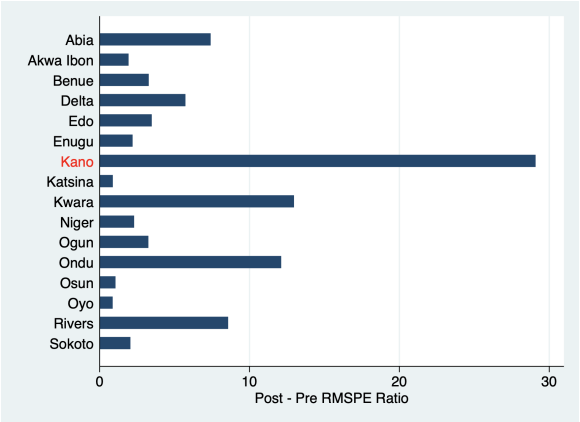
(a) Trust in the President



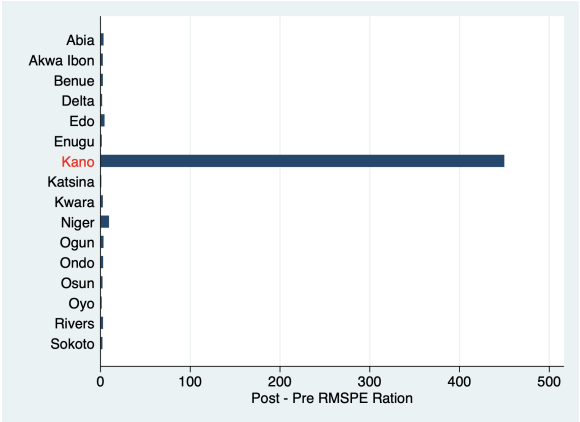
(b) Trust in the Police



(c) Trust in the Army



(d) General Trust



[14]As a reminder: The RMSPE indicates the gap of the variable of interest between the treated state and its synthetic control.

As a conclusion, the synthetic control method provides an indication that the conflict with Boko Haram decreased political trust in Kano. Except for the police, this decrease was most notable in 2015, partly attributable to the "Kano Bombings", which happened just days before round 6 of the Afrobarometer survey was conducted there. However, there are no long-lasting negative effects as trust increased remarkably after 2015 when the conflict was contained. The institutional trust mechanism seems to hold - trust decreases when state institutions do not provide security and increases when the opposite is the case.

4.2 Individual Level Analysis

4.2.1 Empirical Results

In this chapter I present the results of the estimates presented in model 1 for Nigeria and for the inclusion of additional Afrobarometer data sets from Cameroon and Niger.

Table 3: **Political Trust in Nigeria, 2003-2017**

	President	Police	Army	Trust
Conflict Location	-0.1174	-0.1296	0.2335	0.0186
	(0.1951)	(0.1733)	(0.2573)	(0.2722)
2012 × Treatment	-0.2837*	-0.2519*	-0.3052	-0.4068**
	(0.1172)	(0.1379)	(0.1756)	(0.1562)
2015 × Treatment	-0.2702	-0.0799	-0.2219	-0.2924
	(0.1930)	(0.1597)	(0.1978)	(0.2120)
2017 × Treatment	0.3177*	0.0952	-0.1311	0.1130
	(0.1420)	(0.1424)	(0.1543)	(0.1038)
Controls	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes
N	11923	11828	11633	11571
R^2	0.109	0.030	0.104	0.122

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are standardized treatment effects and standard errors. Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, poverty, employment status, occupation status and if the respondents religion matches the religion of the president.

Table 3 demonstrates how the conflict altered political trust solely in Nigeria. The treatment effects need to be interpreted in terms of standard deviations. Row 2 shows that confidence in the president, the police, the army and general trust deteriorated by 0.28, 0.25, 0.31 and 0.41 standard deviations significant at the 10 and 5 percent level in 2012. No treatment effects are found in 2015, yet the coefficients of interests are all negative. This insignificance might be driven by the fact that 2015 does not include the most affected regions in Nigeria (see chapter 2.2). In 2017, trust in the president increased by 0.32 standard deviations significant the 10 percent level. The coefficients for general trust and the police are insignificant, but positive in 2017. On the contrary, the coefficient for the army is negative.

Table 4: **Political Trust in Nigeria, Cameroon and Niger, 2003-2017**

	President	Police	Army	Trust
Conflict Location	0.0750	0.2328	-0.0391	0.1021
	(0.1166)	(0.1725)	(0.1222)	(0.1258)
2012 × Treatment	-0.1901**	-0.2127**	-0.0418	-0.1925*
	(0.0924)	(0.1010)	(0.1112)	(0.1018)
2015 × Treatment	-0.3257***	-0.0938	-0.2810**	-0.3041**
	(0.1205)	(0.1000)	(0.1201)	(0.1212)
2017 × Treatment	0.3845**	0.0600	0.2066*	0.2793**
	(0.1454)	(0.1115)	(0.1197)	(0.1096)
Controls	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes
N	17401	17401	17401	17401
R^2	0.068	0.021	0.065	0.076

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are standardized treatment effects and standard errors. Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, poverty, employment status and if the respondents religion matches with the religion of the president

Further results cover the inclusion of Cameroon and Niger. In comparison to table 4, I can now include all individuals from Cameroon and Niger which were mostly and more heavily affected between 2013 and 2014. Turning to table 4, we observe significant treatment effects in 2015, which was not the case when I solely analyzed Nigeria (see table 3). The point estimates in 2015 are

higher and more significant than those in 2012 in table 4. As already mentioned, the highest number of deaths and fighting events occurred between 2013 and 2014, which explains why the points estimates are now stronger in 2015 than compared solely to Nigeria. For instance, presidential trust decreased by 0.19 standard deviations significant at the 5 percent level in 2012 and by 0.33 standard deviations significant at the 1 percent level in 2015. General trust decreased by 0.19 standard deviations significant at the ten percent level in 2012 and by 0.3 standard deviations significant at the 5 percent level in 2015. We also detect a negative treatment effect for the army in 2015 significant at the 5 percent level and a positive after treatment effect in 2017 significant at the ten percent level. We did not detect any effect for the army in table 3. The point estimate for the police remains significant at the 5 percent level in 2012. It is very important to stress that the loss of confidence does not last, as we cannot see any persistent effects from the conflict on political trust. All point estimates are positive and significant for the president, the army and trust in 2017. In particular the point estimate for the president is the highest with 0.38 standard deviations when compared to 2012 and 2015.

It is remarkable that all of these results follow the theoretical framework put forward by this paper. First, political trust declines during a conflict and, second, it declines more the stronger the conflict is. Overall, the results of table 4 are nearly identical to those of the synthetic control method (table 1). Political trust in the president, the army and general trust decreased during the conflict and then increased after 2015. The point estimate for the police is significant in 2012 in table 4 and 1. Furthermore, by including Niger and Cameroon it is less likely than an omitted variable bias is present.

Looking at my second interest of research, political participation, I anticipated that people get more involved with the political process during the course of the conflict. However, this does not seem to be the case when showing the results of my analysis in table 5. Column 1 and 2 show that there is no significant treatment effect in 2012, 2015 and 2017 for attending community meetings or joining others to raise an issue. Yet, the mean difference in having voted at the last presidential election between the treatment and control group is slightly significant and negative in 2015. Since Afrobarometer Round 6 was conducted before the 2015 presidential election in Nigeria, this would mean that respondents in 2015 attest to having voted less at the presidential election in 2011. Contradictory, I do not find a significant voting effect in 2012 for the election in 2011. Consequently, I cannot yet draw any conclusions about voting behaviour from the current results. Further, there is a negative treatment effect for participation in 2017 significant at the 10 percent level.

Table 5: **Political Participation in Nigeria, 2003-2017**

	Meetings	Joining others	Voted	Participation
Conflict Location	0.1066	0.0650	-0.0410	0.1096
	(0.2213)	(0.2171)	(0.0556)	(0.2182)
2012 × Treatment	0.0420	-0.0950	-0.0441	-0.0340
	(0.1267)	(0.1279)	(0.0386)	(0.1385)
2015 × Treatment	-0.0977	0.1103	-0.1589*	-0.0180
	(0.1273)	(0.1052)	(0.0912)	(0.1059)
2017 × Treatment	-0.1720	-0.1437	-0.0724	-0.1855*
	(0.1084)	(0.1061)	(0.0602)	(0.0908)
Controls	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes
N	11993	11940	11320	11905
R^2	0.102	0.105	0.078	0.122

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, poverty, employment status, occupation status and if the respondents religion matches the religion of the president.

Now I compare the results from Nigeria with those from Nigeria, Cameroon and Niger and see that the empirical findings for political participation are however only partly consistent with those of Nigeria (table 4). First, column 1 of table 6 shows, that there is no effect on attending community meetings. This is also the case in table 5. Second, the point estimate for joining others are negative in 2012 and positive in 2015 in table 5. Those coefficients have the same signs and are now significant at the 1 and 5 percent level in table 6. Third, the point estimate for having voted at the last presidential election is still negative and significant at the 5 percent level in 2015. Yet the presidential elections in Niger and Cameroon took place in 2011 and 2018. Therefore, the point estimates for having voted at the last presidential election in 2012 and 2015 measures the effect of Boko Haram on the presidential election in Nigeria, Cameroon and Niger in 2011. If Boko Haram did have an effect on voting behaviour we should see a strong negative and significant treatment effect in 2012 and 2015. However, this is not the case. The point estimate of having voted at the last presidential election is only slightly negative and insignificant in 2012. I also cannot interpret the after-treatment effects for voting in 2017, as the presidential elections in Niger were boycotted

by the opposition in 2016 [Reuters, 2016] and those of Cameroon took place in 2018 - one year after the treatment. Fourth, the coefficients for political participation are negative in 2012, 2015 and 2017 in table 5. They are now negative in 2012, significant at the 5 percent level and positive in 2015 and 2017.

Table 6: **Political Participation in Nigeria, Cameroon and Niger, 2003-2017**

	Meetings	Joining others	Voted	Participation
Conflict Location	0.3024	0.1337	0.0270	0.2546
	(0.1503)	(0.1425)	(0.0653)	(0.1711)
2012 × Treatment	-0.1803	-0.3537***	-0.0305	-0.3007**
	(0.1000)	(0.0796)	(0.0330)	(0.1282)
2015 × Treatment	0.0371	0.2449**	-0.1354*	0.1496
	(0.1051)	(0.0927)	(0.0650)	(0.1242)
2017 × Treatment	0.0614	0.0088	-0.0550	0.0364
	(0.1199)	(0.1212)	(0.0447)	(0.1428)
Controls	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes
N	17356	17401	16135	17356
R^2	0.069	0.075	0.053	0.086

NOTE: Significance levels: *<0.10; **<0.05 ***<0.01. Reported are treatment effects and standard errors. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, poverty, employment status and if the respondents religion matches with the religion of the president

In summary, my first estimation only includes individuals surveyed in Nigeria. My second estimation extends the dataset to Cameroon and Niger. Overall, both estimations do not show any effect on attending community meetings and the effects for political participation are different in both estimations. In 2015, there is a negative treatment effect on voting in both estimations - however the interpretation is rather difficult (see above). We find only a similar pattern for joining others to raise an issue. The point estimates are negative in 2012 and positive in 2015 in table 5 and 6. As for the latter they are significant on the 1 and 5 percent level. This pattern is similar to the one established in the synthetic control method for Kano, where the treatment effects are first negative and then positive.

Overall, my results for political participation are not promising - the only indication that political participation does increase during conflict is given by joining others to raise an issue, which is significant and positive during the most intense conflict period in 2015.

4.2.2 Placebo Checks

To ensure that my results are valid, I check whether the pre-trend assumptions holds for my empirical results. I take survey round 4 (2008) as a baseline and (a) control if the mean difference between the treated and the control group is not significant in 2003 and 2005 and (b) if the treatment effects stay significant in 2012, 2015 and 2017. I estimate the following equation:

Estimation Model 2:

$$\begin{aligned} Y_{igt}^{j} = ß \times ConflictLocation_{it} + \sigma \times ConflictLocation_{it} \times A_t^{Pre} \\ +\sigma \times ConflictLocation_{it} \times A_t^{Post} + \kappa \times X_{igt} + \mu \times X_{igt} \times A_t + \alpha_g + \delta_t + \mu_{igt} \end{aligned} \tag{5}$$

I do not explain further estimation model 2 as it is nearly the same as estimation model 1 (chapter 3.2.2.). The only difference is that I include pre-treatment effects denoted as the dummy A_t^{Pre}, which takes the value 1 for 2003 and 2005. Figure 7 plots the point estimates (treatment effects) and its 95 % confidence for all variables of interests across all years. I proceed by presenting the placebo-estimates for political trust and political participation.

Placebo-estimates for political trust: In figure 7 (a) none of the point estimates are significant in 2003 and 2005 [15]. The point estimates for the president stay significant in 2012* and 2017**; for the police in 2012* and for general trust in 2012**. Therefore, the results of table 3 hold. In figure 7 (b) the pre-trend holds for the president, the army and general trust; it does not hold for the police as the point estimate is significant in 2003. The treatment effect for the army vanishes in 2015, but stays significant in 2017*. The point estimates stay significant for the president and general trust in 2012, 2015 and 2017. Overall, the results of table 4 are confirmed for the president, general trust and partly for the army. Even though the points estimates are not confirmed for the police in 2012 and the army in 2015, the signs of their coefficients stay the same.

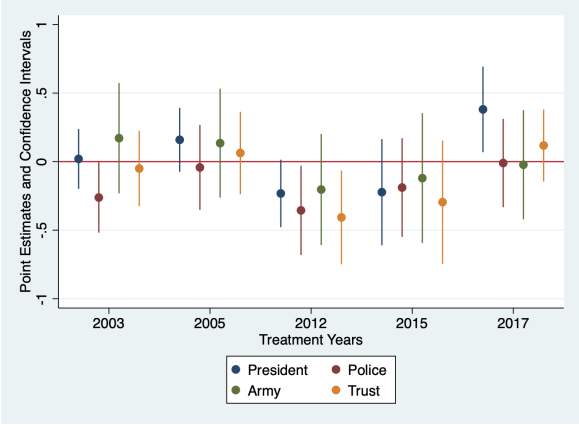
Placebo-estimates for political participation: I turn to the placebo results for political participation. Figure 7 (c) confirms the pre-trend for "voting at the last presidential election" and "participation", yet the treatment effect of participation vanishes in 2017 and remains for voting in 2015. Therefore, the results of table 3 are only confirmed for "having voted at the last presidential election". Figure 7 (d) depicts that the pre-trend as well as treatment effects hold for "having voted

[15]Note: The stars denote the significance level at the 1 %***, 5%** and 10%* level for a given treatment year.

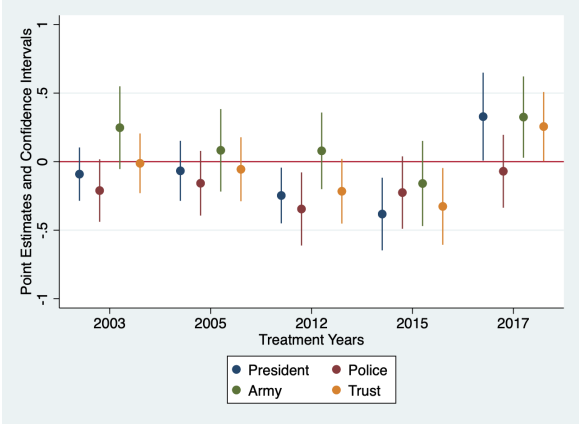
in the last presidential election", "joining others to raise an issue" and "political participation". Conclusively, I can confirm my estimations for joining others to raise an issue and having voted at the last presidential election. I can only confirm the effects on participation for the estimation, when including Nigeria, Cameroon and Niger.

Figure 7: **Political Trust and Participation in Nigeria, Cameroon and Niger, 2003-2017**

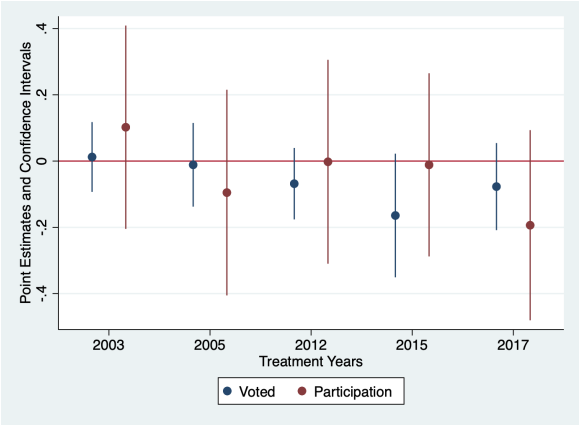
(a) Political Trust, Nigeria



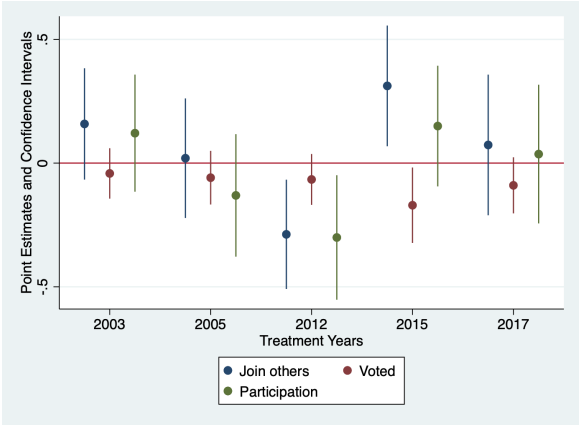
(b) Political Trust, Nigeria, Cameroon, Niger



(c) Political Participation in Nigeria



(d) Political Participation in Nigeria, Cameroon, Niger



Overall, the results of the DiD estimations are consistent with the synthetic control method for trust in the president and general trust and only partly consistent for trust in the army and the police. Across all presented models I confirm that general trust and presidential trust decreased in the course of the conflict and increased afterwards. When applying the placebo tests the significance of the point estimates vanishes for the army and the police in both estimations, yet the signs of the coefficients are negative in 2012, 2015 and positive in 2017. The positive after-treatment effect stays significant for the army in estimation 2. Considering that general trust measured by the sum index (trust in the president, the army and the police), I argue that political trust decreases in those institutions that are responsible for the security of citizens during conflict. However, once the conflict ended, political trust increases. Conclusively, I verify my first hypothesis implying that

the institutional performance mechanism holds - trust decreases if the institutions of the executive fail to guarantee the security of its citizens and increases if they succeed.

With respect to political participation, the most important finding is that, when conflict intensity is at its highest the factor "joining others to raise an issue" increased significantly for people being exposed to the conflict. The fact that the point estimate is negative in 2012, could be an indication that it takes some time for people to mobilize. The results for having voted and participation are ambivalent. There is no effect on attending community meetings across all estimations, which is why I discard this variable from now on for the rest of this paper. Overall, I can only partly confirm my second hypothesis. Joining others to raise an issue could be an indication that non-institutionalised forms of political participation increases when political trust falls. However, this is not confirmed by attending community meetings and the results for institutionalized forms such as voting are inconclusive. However, if there is a effect on voting it is rather negative. More striking indeed is that there is no evidence that people exposed to conflict tend to participate more once the conflict has ended. These findings do not correspond with the existing literature. One reason could be that I measure the exposure to violence and not the direct experience of violence, as Bellows and Miguel (2009) or Blattman (2009) did. Perhaps only the direct experience increases political participation in the long-run, but not the exposure to it. Further research needs to be done in this direction.

4.2.3 Robustness Checks

All results could be biased for two reasons: First, "interest into politics", "media exposure" and "public good delivery" can have an impact on political trust and participation. The possible impact of those variables on political trust and political participation are outlined in section 3.1.2. Second, my estimations can be driven my model-specifications. In particular, the LGA-fixed effects might not observe all time-invariant characteristics, as a lot of LGA's were not surveyed in each survey round of the Afrobarometer. To give evidence of structural validity, I apply several robustness-checks to the data-sets of Nigeria, Niger and Cameroon. I use those three countries since their point estimates were the strongest.

The *first robustness test* accounts for public good delivery. If individuals in the treatment group suddenly had less access to public goods compared to the control group in 2012 and 2015, it could explain the decline in political trust. I use model 2 to control for pre-trends and treatment effects and exclude all control variables of the socio-economic status, except for education. I include the public good delivery index (see section 3.2.2.). Table 14 [Appendix] verifies my empirical results. Row 1 and 2 show that the pre-trend holds for all variables of interest. We find the same pattern as before - political trust decreases during and increases after the conflict. All point estimates for

trust in the president, the police, the army and general trust remain significant at the 5 and 10 percent level. Again, joining others to raise an issue decreases significantly in 2012 and increases in 2015. Having voted at the last presidential elections remains significant in 2015, as does participation in 2012.

My results could also be driven by the fact that I did not control for interest in politics and media exposure. Eventually, individuals in the treatment group were less interested in politics and exposed themselves less to the media in 2012 and 2015 for unobserved reasons. Therefore, I run a *second robustness test*, where I include the control variables interest in politics, media exposure and exclude all control variables of the SES except for education in estimation model 2. This time I do not discuss the results in detail, but table 15 [Appendix] again verifies all point estimates in the empirical section.

Subsequently I argue that including public good delivery, interest in politics and media exposure does not alter my results. Nonetheless, my results could be driven by the specification of my estimation model 1. Regrouping all individuals by conflict location, does not result in a stable panel with respect to towns, villages or local government areas. My fixed effects would be more accurate, if I could observe at each time the same locations defined as towns, villages or local government areas. To counteract this, I apply a third and fourth robustness-check.

For my *third robustness test* I match the geo-coordinates of each individual in the Afrobarometer by survey year with the area of each village and town Nigeria. I keep only those towns and villages, which were surveyed in 2003, 2005, 2008, 2012, 2015 and 2017. Ultimately, I end up with a panel of 26 towns and villages being consistently surveyed between 2003 and 2017 (table 16, Appendix). In regards to my fourth robustness test, it has to be noted that some of the bigger towns consists of several LGA's. For instance, the capital Kano of the federal state of Kano with a population of approximately 4 million, includes 8 LGA's[16]. I consider all towns and villages recording more than 25 conflict deaths as treated and run the following estimation:

Model Estimation 3:

$$\begin{aligned} Y^{j}_{igt} = \sigma \times ConflictGroup_{gt} \times A^{C}_{t} + \\ \kappa \times X_{igt} + \mu \times X_{igt} \times A_{t} + \alpha_{g} + \delta_{t} + \mu_{igt} \end{aligned} \tag{6}$$

Y^{j}_{igt} is our variable of interest of individual i living in village, town g at time t. *ConflictGroup* is a dummy taking the value 1 for all treated villages and towns and is multiplied by the survey years A^{C}_{t} $\forall t \in [2005, 2008, 2012, 2015, 2017]$ to account for the pre-trend assumption. 2003 is my

[16]The town Kano includes the following LGA's: Dala, Fagge, Gwale, Kano Municipal, Kumbotso, Nasarawa, Tarauni and Ungogo [CityPopulation, 2020]

baseline year for comparison. X_{igt} are individual covariates, also interacted with a time dummy for each survey year $A_t, \forall t \in [2003, 2005, 2008, 2012, 2015, 2017]$. α are village, town fixed effects and δ time fixed effect. μ_{igt} are clustered standard errors on the village, town level.

Table 10 [Appendix] shows how many individuals form the treatment and control group, whereas the treatment group is relatively small with 126, 82 and 75 in 2012, 2015 and 2017 respectively. The small group size means that the results may not be as meaningful. Nevertheless, table 17 confirms the same pattern established before: The point estimates for the president are negative in 2012, 2015 and positive in 2017. Interestingly, the point estimate for the president is the strongest across all estimation with -0.60 standard deviations across all estimations. This could be due to the fact that my panel includes the metropolis of Kano, which was affected by the "Kano bombings" days before the sixth Afrobaromter round. The treatment effects for trust in the army and general trust are negative in 2012. Interestingly is that the point estimate for the army (-0.23 standard deviations) is negative and insignificant in 2017. Yet, when compared to the point estimates in 2015 and 2012, we can see that the difference between trust in the army for the control and treatment group becomes smaller. This is a sign that we do not detect any long-term and negative effects on trust in the army. Further, we observe a negative treatment effect on voting behaviour in 2012. Combining this with the negative effect on voting in 2015 that we established before, this could be an indication that voting behaviour was negatively affected by Boko Haram. The coefficients of joining others to raise an issue are not significant, but negative and positive in 2012 and 2015. I confirm these results by estimating how the number of violent incidents a town or village experienced affect our variables of interest. More precisely I compute the following estimation:

Model Estimation 4:

$$Y_{igt}^{j} = \sigma \times log(1 + \omega_{gt}) \times A_t^C + \kappa \times X_{igt} + \mu \times X_{igt} \times A_t + \alpha_g + \delta_t + \mu_{igt} \tag{7}$$

Treatment is now defined by the accumulated number of fighting events a village and town was exposed to. For this ω_{gt} takes the value of fighting events a town, village g experienced until 2012 for the survey years 2003, 2005, 2008, 2012. The number of fighting events a town, village experienced are added for the survey years 2015 and 2017[17]. Without going into too much detail, the results of estimation model 3 are confirmed by estimation model 4, as table 18 demonstrates.

For my fourth robustness check, I construct a panel data set on the LGA-level. Unfortunately, it was not possible for me to construct a sufficient panel for all LGA's through the entire survey period of Afrobarometer in Nigeria. If I do so, I have 8 LGA's constantly being surveyed between 2003 - 2017, only one of which was affected by Boko Haram. To compensate, I did the following:

[17]The treatment effect is given in terms of the natural logarithm - to establish the effect on the dependent variable, we need to divide the coefficient of interest by 100.

I coded the survey years 2003, 2005, 2008 in Nigeria as the pre-treatment period. On top of that I added surveyed LGA's for Cameroon and Niger in 2013 which did not experience any attack[18]. Then, I coded the survey years 2012, 2015 as the treatment period from Nigeria and 2015 from Niger and Cameroon. My after-treatment period consists of the surveys taken in 2017 for Niger, Cameroon and Nigeria. Out of this, I was able to construct panel data consisting out of 107 LGA's, from which 6 reported more than 25 fatalities in the course of the Boko Haram conflict. They form my treatment group and are displayed in table 7, which gives an overview over the affected LGA's and the total number of fatalities and violent incidents they recorded.

Table 7: **Treated LGA's in Nigeria, Cameroon and Niger, 2012-2015**

Country	**LGA**	**Fatalities**	**Violent Incidents**
Cameroon	Mokolo	136	23
Cameroon	Mora	308	68
Nigeria	Jos North	192	9
Nigeria	Kaduna South	83	13
Nigeria	Maidugur	2767	317
Niger	Madarounfa	111	36

I run the following two estimations to analyze how conflict and conflict intensity impacted political trust and political participation in the LGA's.

Model Estimation 5:

$$\overline{Y_{lt}^{j}} = \sigma \times ConflictGroup_{lt} \times A_t^C + \kappa \times \overline{X_{lt}} + \mu \times \overline{X_{lt}} \times A_t + \alpha_l + \delta_t + u_{lt} \tag{8}$$

Model Estimation 6:

$$\overline{Y_{lt}^{j}} = \sigma \times log(1 + \omega_{lt}) \times A_t^C + \kappa \times \overline{X_{lt}} + \mu \times \overline{X_{lt}} \times A_t + \alpha_l + \delta_t + u_{lt} \tag{9}$$

Estimation models 5 and 6 are similar to the ones used for towns and villages. This time, I compute the average value for each variable of interest $\overline{Y_{lt}^{j}}$ and control variable $\overline{X_{lt}}$ at time t in LGA l. Our time dummy A_t consists now of three dates, the pre-, during and after-treatment period, while A_t^C only takes the during and after-treatment period into account. The dummy variable *ConflictGroup* re-groups all affected LGA's and ω accounts for the number of violent incidents happening within a LGA during the treatment period. I decided to take the average value for each LGA, as some LGA's such as Mokolo and Mora contain only 12 and 16 individuals respectively in the treatment period[19].

[18] As mentioned, the main conflict period in Cameroon and Niger was between 2014 and 2016.

[19] Nevertheless, my estimated results were similar, when not taking the average value for the variables of interest and control variables in each LGA at time t.

Before I present the results, I must emphasise that the results of this estimation need to be taken with caution. I cannot sufficiently account for time-fixed effects or pre-treatment effects. My pre-treatment period, which serves as my baseline comparison, is also very different compared to all estimations presented before, as I am taking the average for all LGA's across different survey years. In spite of this, the total number of fatalities and fighting events are very high in the affected LGA's, as table 7 demonstrates. Therefore, I expect the conflict to have at least some effect on political trust and political participation in the treatment period.

Table 19 reports the treatment effects for political trust and political participation for all affected LGA's. During the treatment period, the point estimates are negative for the president (-0.34 standard deviation) and the army (-0.32 standard deviations) significant at the 5 percent level. The treatment effect for general trust is also negative, but not significant. Again, the point estimates for joining others to raise an issue and participation are positive during the treatment. The point estimate for having voted is slightly negative. All of these results founds are similar to the ones before.

There is no significant after-treatment effect for our variables of interest, yet the coefficient for the president is negative in 2017. As mentioned, one explanation could be the different baseline comparison with respect to the estimations seen before. Nonetheless, it is notable that the point estimate for the president is insignificant and smaller in the after-treatment period compared to during the treatment period. It signifies, that the difference in presidential trust decreased between the control and treatment groups and no persistent effects are to be found.

Table 20 confirms the results, when taking treatment intensity into account. Overall, the robustness test on the LGA-level verifies my estimations in the empirical part of this paper.

5 Conclusion

This paper enriches the academic debate on the social and institutional legacies of civil conflict. I study the effect of the Boko Haram insurgency (2009-2017) on political trust and political participation in Nigeria, and also to a lesser degree in Cameroon and Niger. Using a synthetic control method and a difference-in-difference design, I am interested in how exposure to violence alters political trust and political participation. I examine exposure to violence on both the federal and individual levels, where I define treatment as being proximity to a conflict location of 11km. I verify my findings by defining the conflict location on the town/village and local government area level in the robustness section of this paper. My empirical results show similar patterns and results at both the federal and individual level. Therefore, the exposure to violence has far-reaching effects,

on individuals who are in the immediate vicinity, but also on those who are further away[20].

Specifically, I find evidence that political trust decreases in the president, the army and for general trust during the main conflict period 2012-2015. In general, my point estimates are stronger in 2015 when the conflict intensity was at its highest in terms of fatalities and fighting events. On the contrary, political trust increases for the president after the Boko Haram insurgency. I also find either positive or non-significant after-treatment effects for the army and general trust.

Consequently, the empirical evidence suggests that citizens in conflict affected regions are very adept at distinguishing between successful and unsuccessful institutional performance. To a degree, they hold institutions for security and safety accountable for policy failures. As treatment effects were strongest for the president across all estimations, I argue that citizens attribute most of the responsibility to the office of the president. My findings also show that no long-term negative consequences are to be expected in terms of political trust once the institutions succeed in ending or containing the conflict. Thus, institutions have the opportunity to successfully achieve long-term stability and prosperity in conflict affected areas. This contradicts the so-called "conflict trap", which claims that political trust decreases after a conflict, thereby increasing the likelihood of a new conflict emerging [Collier et al., 2003].

My findings for political participation are rather ambivalent. I find a positive mobilization effect for joining others to raise an issue in 2015 - the period when conflict intensity was at its highest in terms of fighting events and number of fatalities. It might be that people engage more in non-institutionalised forms of political participation as a response to conflict and the decline in political trust. Yet, I cannot confirm this result for attending community meetings or for institutionalised forms of political participation such as voting behaviour. If there are any effects on having voted at the last presidential election, they are rather negative. Interestingly, there are no post-conflict effects on political participation amongst exposed individuals, contrary to previous findings established in the literature.

With all of this mind, I can derive several policy implications. First, institutions of the executive and mainly the president should be aware that policy failures or successes will be directly related to them in regards to conflict. This can be crucial when standing for re-election. Second, any decline in political trust should be counteracted by measures which attempt to increase political participation, particularly those which relate to institutionalised forms such as voting behaviour. This would help to increase state legitimacy and can have an impact on important policies affecting the conflict. Third, it should be noted that political confidence is even higher in affected

[20]The effects of the exposure to violence always need to be interpreted in reference to the control group.

areas than in non-affected ones. Politicians should therefore not hesitate to implement necessary reforms or peace negotiations in order to ensure long-term stability, security and prosperity.

I suggest channeling further research into the following directions: above all, the findings of this study should be supplemented by analysing other conflicts with a similar methodological approach. The increasing instability in the Lake Chad region and the resurgence of Boko Haram in 2020 also necessitates further analysis; for this one would need to wait for the release of Afrobaromter round 8. I would also like to extend this research by more precisely investigating voting behaviour in conflict areas.

Another interesting research idea would be to further examine the treatment utilised in this paper. For instance, the effects on political trust and political participation could be different if violence is perpetrated by state actors or rebels. For this, I decided to re-run estimation model 1 for Nigeria, Cameroon and Niger and defined treatment only for individuals which experienced within 11km an attack of Boko Haram on civilians[21]. First preliminary results in table 21 [Appendix] show that the point estimates are stronger for the president and the army in comparison to the estimation, where I account for all types of fighting events (see table 4).

[21] More precisely: I excluded all fighting events with regards to security forces vs. Boko Haram and security forces vs. civilians.

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6 Appendix

Table 8: **Control and Treatment Group in Nigeria, Total Number of Respondents**

Year	Control Group	Treatment Group	Total
2003	1763	446	2209
2005	1881	357	2238
2008	1842	329	2171
2012	1943	325	2268
2015	2048	129	2177
2017	1279	96	1375

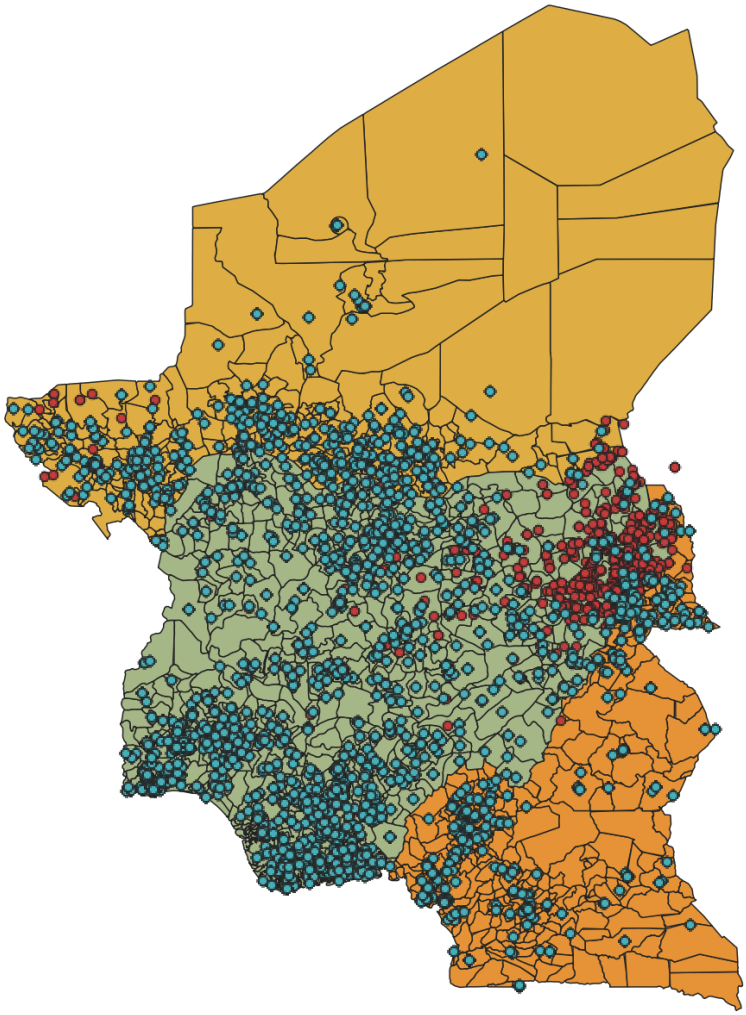
Table 9: **Control and Treatment Group in Nigeria, Cameroon, Niger, Total Number of Respondents**

Year	Control Group	Treatment Group	Total
2003	1763	446	2209
2005	1881	357	2238
2008	1842	329	2171
2012	3922	479	4194
2015	4050	261	4311
2017	1279	297	3511

Table 10: **Control and Treatment Group in Nigeria, 26 Towns and Villages, Total Number of Respondents**

Year	Control Group	Treatment Group	Total
2003	719	207	926
2005	662	149	811
2008	527	136	663
2012	559	126	685
2015	532	82	614
2017	414	75	489

Figure 8: **Survey Locations of Afrobarometer and Boko Haram Incidents, Nigeria, Cameroon and Niger, 2003-2017**



NOTE: Displayed are the local government areas of Cameroon (orange), Niger (yellow) and Nigeria (green). All red dots display violent incidents in the course of the Boko Haram conflict. All blue dots display Afrobarometer survey locations.

Table 11: **Synthetic Control Weights for Political Trust and Political Participation, Nigeria, 1999-2017**

Federal States	**President**	**Police**	**Army**	**General**	**Meetings**	**Join others**	**Voted**	**Participation**
Abia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Akwa Ibon	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00
Anambra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delta	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Edo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enugu	0.00	0.12	0.44	0.12	0.00	0.00	0.00	0.00
Katsina	0.00	0.24	0.00	0.17	0.05	0.00	0.44	0.11
Kwara	0.48	0.21	0.00	0.14	0.00	0.00	0.00	0.00
Niger	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03
Ogun	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ondo	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00
Osun	0.32	0.00	0.00	0.01	0.90	0.49	0.00	0.84
Oyo	0.20	0.00	0.41	0.24	0.00	0.00	0.03	0.00
Sokoto	0.00	0.38	0.10	0.32	0.02	0.51	0.00	0.02
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 12: **Weight of Predictor Means for all Political Trust Variables**

Variable	President	Police	Army	General
Age	0.10	0.02	0.07	0.08
Gender	0.07	0.19	0.01	0.00
Rural Area	0.10	0.52	0.32	0.07
Religion of the president	0.04	0.12	0.09	0.22
Education	0.04	0.07	0.15	0.13
Unemployment	0.02	0.02	0.00	0.05
Occupation	0.18	0.03	0.20	0.20
Poverty	0.21	0.00	0.00	0.01
Public Good Delivery	0.02	0.00	0.00	0.03
Interest into Politics	0.10	0.03	0.05	0.07
Media Exposure	0.12	0.00	0.11	0.14
Total	1.00	1.00	1.00	1.00

Note: Age is measured continuously.

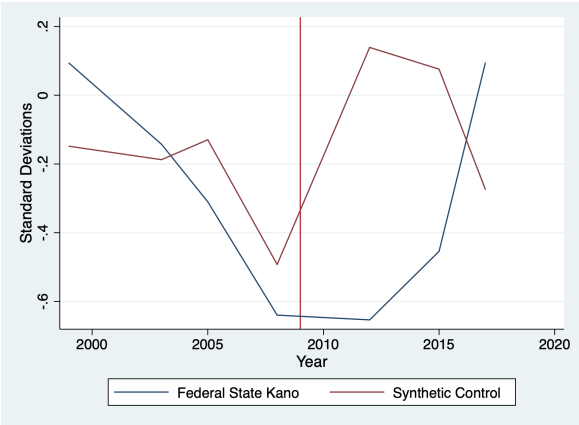
Table 13: **Weight of Predictor Means for all Political Participation Variables**

Variable	Meetings	Joining others	Voted	Participation
Age	0.00	0.03	0.36	0.00
Gender	0.03	0.00	0.08	0.00
Rural Area	0.00	0.05	0.03	0.04
Religion of the president	0.02	0.28	0.01	0.02
Education	0.01	0.06	0.01	0.00
Unemployment	0.26	0.05	0.07	0.39
Occupation	0.57	0.19	0.07	0.06
Poverty	0.02	0.18	0.02	0.00
Public Good Delivery	0.00	0.03	0.10	0.02
Interest into Politics	0.07	0.13	0.04	0.03
Media Exposure	0.02	0.00	0.21	0.44
Total	1.00	1.00	1.00	1.00

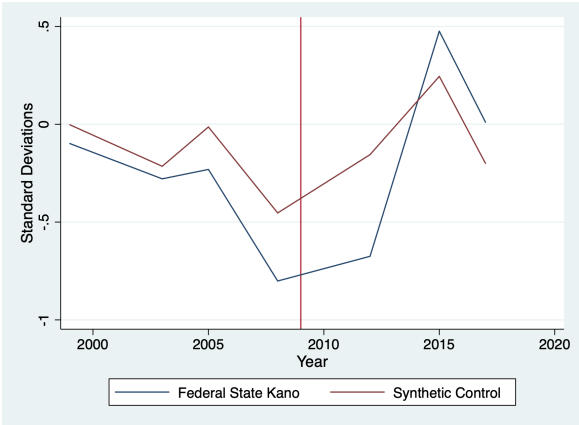
NOTE: Age is measured continuously.

Figure 9: **Political Participation in Kano and its Synthetic Counterpart in Nigeria, 1999-2017**

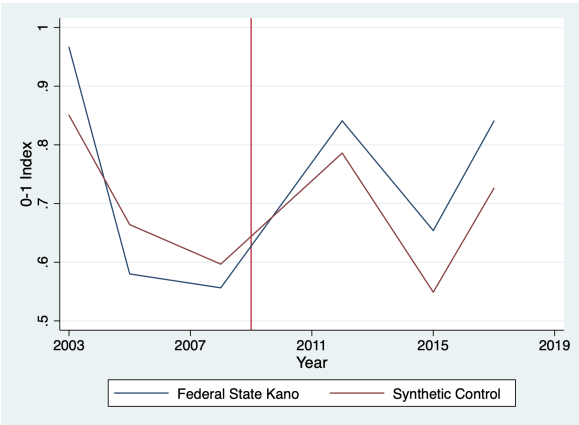
(a) Attending Community Meetings



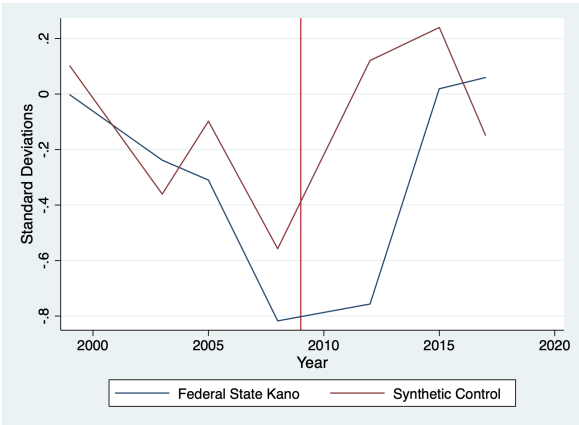
(b) Joining others



(c) Voted at the last Presidential Election



(d) Participation



NOTE: The y-axis reports the averages for each variables of interest measured in terms of standard deviations or in terms of a 0-1 index (0=No; 1=Yes) for Kano and its synthethic control. The x-axis reports the years. The survey years were 1999, 2003, 2005, 2008, 2012, 2015 and 2017. Please note there is no survey data available for having voted at the last presidential election in 1999.

Table 14: **Model 2: Political Trust and Political Participation in Nigeria, Cameroon and Niger, 2003-2017**

	President	Police	Army	Trust	Joining others	Voted	Participation
Conflict Location	0.1548	0.3205	-0.1268	0.1333	0.1169	0.0684	0.2585
	(0.1465)	(0.2190)	(0.1617)	(0.1639)	(0.1737)	(0.0804)	(0.1778)
2003 × Treatment	-0.0027	-0.1510	0.2232	0.0404	0.1236	-0.0083	0.0969
	(0.1122)	(0.1403)	(0.1591)	(0.1308)	(0.1356)	(0.0532)	(0.1363)
2005 × Treatment	-0.0832	-0.0941	0.0845	-0.0364	-0.0382	-0.0380	-0.1680
	(0.1157)	(0.1411)	(0.1570)	(0.1298)	(0.1303)	(0.0599)	(0.1350)
2012 × Treatment	-0.2454**	-0.2855*	0.0225	-0.2174*	-0.3244***	-0.0732	-0.3079**
	(0.1138)	(0.1500)	(0.1543)	(0.1319)	(0.1176)	(0.0564)	(0.1328)
2015 × Treatment	-0.3502**	-0.1243	-0.1218	-0.2547	0.2201*	-0.2063**	0.1531
	(0.1486)	(0.1576)	(0.1654)	(0.1595)	(0.1361)	(0.0811)	(0.1331)
2017 × Treatment	0.3524**	-0.0187	0.3115**	0.2824*	0.0161	-0.0902	-0.0001
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	16881	16881	16881	16881	16881	15647	16845
R^2	0.061	0.019	0.061	0.070	0.073	0.052	0.083

NOTE: Significance levels: *<0.10; **<0.05 ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, public good delivery and if the respondents religion corresponds to the religion of the president

Table 15: **Model 2: Political Trust and Political Participation in Nigeria, Cameroon and Niger, 2003-2017**

	President	Police	Army	Trust	Joining others	Voted	Participation
Conflict Location	0.1375	0.3395	-0.1227	0.1343	0.1506	0.0514	0.2923
	(0.1424)	(0.2176)	(0.1681)	(0.1616)	(0.1814)	(0.0794)	(0.1830)
2003 × Treatment	-0.0374	-0.1469	0.2100	0.0205	0.1516	-0.0142	0.1192
	(0.1012)	(0.1336)	(0.1572)	(0.1215)	(0.1302)	(0.0503)	(0.1328)
2005 × Treatment	-0.0426	-0.0996	0.0857	-0.0197	-0.0683	-0.0587	-0.2135
	(0.1104)	(0.1334)	(0.1585)	(0.1254)	(0.1322)	(0.0570)	(0.1361)
2012 × Treatment	-0.2743**	-0.2944*	-0.0049	-0.2463*	-0.3116**	-0.0885*	-0.3094*
	(0.1114)	(0.1477)	(0.1537)	(0.1296)	(0.1176)	(0.0533)	(0.1319)
2015 × Treatment	-0.3751**	-0.1199	-0.1231	-0.2640*	0.2099*	-0.2170**	0.1088
	(0.1396)	(0.1516)	(0.1667)	(0.1537)	(0.1376)	(0.0792)	(0.1328)
2017 × Treatment	0.3580**	-0.0317	0.2779*	0.2649*	0.0306	-0.0895	-0.0116
	(0.1527)	(0.1543)	(0.1565)	(0.1340)	(0.1538)	(0.0607)	(0.1524)
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	17327	17327	17327	17327	17327	16068	17284
R^2	0.073	0.023	0.068	0.082	0.099	0.068	0.114

NOTE: Significance levels: *<0.10; **<0.05 ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident. The control variables are age, gender, education, urban/rural living area, media exposure, interest into political affairs and if the respondents religion corresponds to the religion of the president

Table 16: **Panel Data Set Towns and Villages, 2003-2017**

Town / Village	**Number of Incidents**	**Number of Fatalities**	**Treatment Group**
Aba	0	0	No
Abuja	16	188	Yes
Ajegunle	0	0	No
Akpanya	0	0	No
Akure	0	0	No
Asun	0	0	No
Benin City	0	0	No
Calabar	0	0	No
Enugu	0	0	No
Funtua	1	7	No
Ikere	12	15	No
Ikorudi	0	0	No
Ilorin	0	0	No
Kaduna	8	118	Yes
Kano	44	385	Yes
Lagos	0	0	No
Magami	0	0	No
Mesan	0	0	No
Nnewi	0	0	No
Oguma	12	203	Yes
Ogunlenu	0	0	No
Onitsha	0	0	No
Port Harcourt	0	0	No
Sagbama	0	0	No
Uyo	0	0	No
Zaria	4	34	Yes

Table 17: **Model 3: Political Trust and Political Participation in 26 Towns and Villages in Nigeria, 2003-2017**

	President	Police	Army	Trust	Joining others	Voted	Participation
2005 × Treatment	-0.1768	0.3856**	0.2198	0.1906	0.3043*	-0.1222	0.2348
	(0.1725)	(0.1620)	(0.1577)	(0.1915)	(0.1299)	(0.0688)	(0.1431)
2008 × Treatment	-0.1916	-0.0043	-0.5115*	-0.2663	0.0243	-0.1235	-0.0011
	(0.1859)	(0.1633)	(0.2484)	(0.2240)	(0.1857)	(0.1019)	(0.2084)
2012 × Treatment	-0.3676**	0.0657	-0.4995***	-0.4011***	-0.1299	-0.1148**	-0.1925
	(0.1377)	(0.2519)	(0.1107)	(0.1120)	(0.1768)	(0.0484)	(0.1838)
2015 × Treatment	-0.6074*	0.0484	-0.3040	-0.3725	0.0881	-0.1167	0.0766
	(0.2434)	(0.2000)	(0.2278)	(0.2718)	(0.1194)	(0.0727)	(0.1548)
2017 × Treatment	0.3225*	0.1608	-0.2264	0.0885	0.5578	0.0539	0.4088
	(0.1619)	(0.1614)	(0.2230)	(0.1961)	(0.3090)	(0.0635)	(0.3762)
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
Village Town Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	4076	4054	4009	4000	4029	3806	4023
R^2	0.138	0.056	0.185	0.174	0.110	0.106	0.119

NOTE: Significance levels: *<0.10; **<0.05 ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at Village and Town Level All results are 1000 times wild bootstraped. The treatment group consists off all towns and villages being affected by Boko Haram and recording more than 25 fatalities between 2009 and 2017. The control variables are age, gender, education, urban/rural living area, poverty, occupation status, employment status and if the respondents religion matches the religion of the president

Table 18: **Model 4: Political Trust and Political Participation in 26 Towns and Villages in Nigeria, 2003-2017**

	President	Police	Army	Trust	Joining others	Voted	Participation
2005 × log(Treatment)	-0.0911	0.1162*	0.0887	0.0510	0.1167	-0.0544	0.0787
	(0.0485)	(0.0645)	(0.0511)	(0.0639)	(0.0496)	(0.0219)	(0.0489)
2008 × log(Treatment)	-0.0539	0.0143	-0.1260	-0.0552	-0.0456	-0.0661	-0.0677
	(0.0664)	(0.0488)	(0.0990)	(0.0767)	(0.0536)	(0.0259)	(0.0552)
2012 × log(Treatment)	-0.1265**	-0.0543	-0.1876**	-0.1778**	-0.0592	-0.0420*	-0.0983
	(0.0636)	(0.1069)	(0.0509)	(0.0325)	(0.0614)	(0.0160)	(0.0615)
2015 × log(Treatment)	-0.2118*	-0.0171	-0.0896	-0.1374	0.0092	-0.0425	-0.0139
	(0.0794)	(0.0766)	(0.0748)	(0.0885)	(0.0423)	(0.0251)	(0.0517)
2017 × log(Treatment)	0.1488*	0.0290	-0.0482	0.0508	0.2012	0.0160	0.1381
	(0.0559)	(0.0557)	(0.0890)	(0.0665)	(0.1176)	(0.0250)	(0.1384)
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
Village Town Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	4076	4054	4009	4000	4029	3806	4023
R^2	0.137	0.056	0.183	0.173	0.110	0.106	0.119

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at Village and Town Level All results are 1000 times wild bootstraped. The treatment group consists off all towns and villages being affected by Boko Haram and multiplied with the number of violent incidents the town/village experienced between 2009 and 2017. The control variables are age, gender, education, urban/rural living area, poverty, occupation status, employment status and if the respondents religion matches the religion of the president

Table 19: **Model 5: Political Trust and Political Participation in 107 LGA's in Nigeria, Cameroon and Niger**

	President	Police	Army	Trust	Joining others	Voted	Participation
During × Treatment	-0.3416**	0.1033	-0.3248**	-0.2519	0.1981	-0.0943	0.3503
	(0.1559)	(0.1629)	(0.1537)	(0.1694)	(0.2037)	(0.0697)	(0.1865)
After × Treatment	-0.1966	0.1397	0.0443	-0.0321	0.3584	0.0469	0.3973
	(0.1289)	(0.2062)	(0.2069)	(0.1850)	(0.1886)	(0.0643)	(0.2411)
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	330	330	330	330	330	330	330
R^2	0.178	0.092	0.301	0.222	0.137	0.187	0.149

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the LGA-level. All results are 1000 times wild bootstraped. The treatment group consists off all LGA's being affected by Boko Haram and recording more than 25 fatalities in the treatment period. The control variables are age, gender, education, urban/rural living area, poverty and the employment status.

Table 20: **Model 6: Political Trust and Political Participation in 107 LGA's in Nigeria, Cameroon and Niger**

	President	Police	Army	Trust	Joining others	Voted	Participation
During × log(Treatment)	-0.0876*	0.0162	-0.0803*	-0.0680	0.0212	-0.0202	0.0675
	(0.0384)	(0.0514)	(0.0391)	(0.0480)	(0.0637)	(0.0158)	(0.0577)
After × log(Treatment)	-0.0476	0.0688	0.0358	0.0171	0.0752	0.0074	0.0816
	(0.0278)	(0.0502)	(0.0400)	(0.0386)	(0.0476)	(0.0174)	(0.0541)
Controls	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes
LGA Fixed Effects	yes	yes	yes	yes	yes	yes	yes
N	330	330	330	330	330	330	330
R^2	0.178	0.097	0.304	0.225	0.134	0.184	0.143

NOTE: Significance levels: *<0.10; **<0.05; ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the LGA-level. All results are 1000 times wild bootstraped. The treatment group consists off all LGA's being affected by the conflict multiplied with the number of violent incidents the LGA experienced during the treatment period. The control variables are age, gender, education, urban/rural living area, poverty and the employment status.

Table 21: **Model 1: Political Trust and Political Participation in Nigeria, Cameroon and Niger, 2003-2017**

	President	Police	Army	Trust	Meetings	Joining others	Voted	Participation
treated	-0.1477	-0.1928	-0.1742	-0.2935	-0.0392	-0.1049	-0.0522	-0.0719
	(0.2006)	(0.1716)	(0.2607)	(0.2234)	(0.2095)	(0.2803)	(0.0612)	(0.2539)
2012 × Treatment	-0.3303***	-0.3488*	-0.2373	-0.3278*	-0.0162	-0.0749	-0.0105	-0.0543
	(0.1218)	(0.1804)	(0.1649)	(0.1730)	(0.1536)	(0.1518)	(0.0633)	(0.1578)
2015 × Treatment	-0.4309**	-0.2195	-0.3574*	-0.3781*	-0.0390	0.2396*	-0.0880	0.1021
	(0.1703)	(0.1780)	(0.1841)	(0.2149)	(0.1651)	(0.1361)	(0.0989)	(0.1424)
2017 × Treatment	0.5432***	0.0870	0.0527	0.3773***	-0.2080	-0.0537	-0.0101	-0.1609
	(0.1653)	(0.1580)	(0.1708)	(0.1336)	(0.1338)	(0.1482)	(0.0625)	(0.1369)
Controls	yes	yes	yes	yes	yes	yes	yes	yes
Interacted Controls	yes	yes	yes	yes	yes	yes	yes	yes
Time Fixed Effects	yes	yes	yes	yes	yes	yes	yes	yes
Village Town Fixed Effects	yes	yes	yes	yes	yes	yes	yes	yes
N	17887	17887	17887	17887	17887	17782	16547	17782
R^2	0.067	0.022	0.067	0.078	0.090	0.096	0.068	0.111

NOTE: Significance levels: *<0.10; **<0.05 ***<0.01. Reported are treatment effects and standard errors. All treatment effects are standardized, except for having voted, which is binary (0=No, 1=Yes). Robust standard errors are clustered at the Local Government Area Level. All results are 1000 times wild bootstraped. The treatment group consists off all individuals being surveyed not further than 11 km from a violent incident, the control group of all individuals being surveyed 21 km away from a violent incident, which includes solely Boko Haram and civilians. The control variables are age, gender, education, urban/rural living area, media exposure, interest into political affairs and if the respondents religion corresponds to the religion of the president