Replication Archive for "Cohesive Institutions and Political Violence"

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1 Replication instructions

This document sets out instructions to replicate all figures and tables in the main paper and the online appendix. There are four main do-files that can be executed back-to-back by running the do file `run.all.do`. The do-files call the respective replication data sets and perform the various exercises producing output in latex tabular format in the "tables" and "figures" subfolders. Further, the various files also produce temporary data files. These are stored in the "temporary data files" folder.

1.1 Main data files

The main data files that are used are stored in the `data files` subfolder.

1. The data set `AB_OILPRICEl12month.dta` provides oil prices that correspond to time lags of the respective Afrobarometer survey rounds that we use.

2. `ABLGCALLOCATIONS.dta` includes the local government federation account allocations data at a monthly level, that we use in the Afrobarometer micro data analysis (*Source*: Federation Account Allocation Committee FAAC).

3. `afrobarometer_analysis_V4.dta` provides all variables used from the Afrobarometer. Included in the data set are the Afrobarometer rounds 1 (1999), 1.5 (2001), 2 (2003), 3 (2005), 3.5 (2007), 4 (2008), and 5 (2012).

4. `EVENTS_GEOPRECISE.dta` includes geo-located conflict event data points provided by ACLED.

5. `FAAC_allocation_indices_2006.dta` provides the FAAC allocation index for each local government area (LGA) (*Source*: Federal Account Allocation Committee).

6. `LGC_ELEC_FILLED.dta` provides data on local elections at a monthly level.

7. `NGA.PAN.MERGED.L7` provides the full data set.

8. `NGABUDGETOILPRICE.dta` provides yearly oil price data (*Source*: Thomson Reuters Datastream).

9. `NGGEOPRECISE.dta` provides the geo-located conflict data (ACLED).

10. `NONBOKOHARAM.dta` provides the ACLED conflict data excluding events involving Boko Haram.

11. `PERMUTATION.dta` provides the permutation data.

12. `PERMUTATION.STATELEVEL.dta` provides the permutation data set at the state level.

1.2 Replication of Figures and Tables

There are four main do-files that are called by `run.all.do`. Executing the `run.do.all` do-file produces all outputs, except some of the maps, which were compiled using ArcGIS.

1. `prepare.do`

   This file prepares all the data from raw data sets.

2. `lga-panel.do`

   This do-file produces the following: Table 1 (basic conflict results when local governments are appointed), Table 2 (elections and conflict), Table 4 (level effect), Table 5 (ethnic groups, elections, and conflict triple diff-in-diff). In addition the do-file also produces the following appendix tables: Table A2 (decomposition of variance in the allocation variables), Table A3 (oil-producing states), Table A4 (decomposition of allocations), Table A5 (election related violence), Table A6 (variance decomposition of local democracy dummy), Table A7 and A8 (residual variations), Table A9 (disruption in revenue sharing), Table A10 (fixed effects robustness), Table A11 (robustness Boko Haram), Table A12 (extraordinary allocations and conflict), Table A13 (alternative conflict data), Table A14 (transformations of dependent variable), Table A15 (different temporal resolutions), Table A16 (alternative functional forms), Table A17 (formula inputs), Table A21 (non-aligned ethnic groups level effect), and Table A22 (non-aligned ethnic groups triple difference). The

do-file also produces Panel D in Figure 2, Figure 3 (non-linear impact of resource shocks), Figure A1 (conflict around elections), Figure A2 (non-linear effects), Figure A3 (leave-one-out validation), Figure A4 (permutation test on allocations), and Figure A5 (permutation test on election status).

3. `afrobarometer.do`

   This do-file produces all the results using the Afrobarometer micro-data. Specifically, it produces Table 3 (victimization and participation), Table 6 (perception of local governance), Table A18 (validation of exclusion), Table A19 (grievances towards national institutions), and Table A20 (grievances towards state institutions).

4. `codingdiscrepancies.do`

   This do-file, that is also run within the `prepare` do-file, describes and codes all the potential deviations from the official federal allocations (see Appendix B.2 for a detailed description). The coding is based on a media analysis using the FACTIVA newspaper database. This file prepares the data for the robustness exercise presented in Table A9.

Additional remarks on figures and tables:

- Figure 1 was produced in ArcGIS using the ACLED conflict event data.
- Panels A and C in Figure 2 were produced in ArcGIS using the allocation and local election data. Panels B and Panel D in Figure 2 can be reproduced with the do-file `lga-panel.do`.
- Table A1 (revenue allocation formula index) is produced already in the do-file `prepare` that processes and prepares the data.
- Figures A6 and A7 are produced in ArcGIS using our calculations based on ethnic information in the Demographic Health Surveys (DHS 1990, 2003, 2008, 2010, 2013).

1.3 Files

The tex-version of this readme loads all the relevant output files and fragments in the tabular format as they are presented in the paper implying that the output in the readme fully replicates the output and format and structure as is in the paper. For reference, the paths to the fragments and files are also provided here for convenience as follows.

1.3.1 Figures

Figures are stored in the figures subfolder. The individual figures in the draft are comprised of the following individual files.

Figure 1

- `NG_map_ACLED_lgc_anyconflict_quartiles.pdf`

Figure 2

- Panel A: `NG_FAAC_index_20062013.pdf`
- Panel B: `statutoryallocations-oilprice.png`
- Panel C: `NG_Share_elected_19992014.pdf`
- Panel D: `elected.png`

Figure 3

- `watercolor-appointed.png`
- `watercolor-elected.png`

Appendix:

Figure A1

- `event-nearelection-anyevents-tm-timetoelectime-5.png`

Figure A2

- `quintile-effect-anypolmilitiavsciviliansevts-pre.png`
- `quintile-effect-anypolmilitiavsciviliansevts-post.png`

Figure A3

- Panel A: `leave-one-out-main-anyevents.pdf` and `leave-one-out-int-anyevents.pdf`
- Panel B: `leave-one-out-iv-main-anyevents.pdf` and `leave-one-out-iv-int-anyevents.pdf`

Figure A4

- `permutation-test-interact-both.pdf`

Figure A5

- permutation-statelevel-test.pdf

Figure A6

- NG_map_ethnic_groups_lga.pdf

Figure A7

- Panel A: (a): NG_map_akwa-ibom_ethnicities_Ibibio.pdf and (b): NG_map_akwa-ibom_ethnicities_oron.pdf
- Panel B: (a): NG_map_taraba_state_hausa_fulani_pop_share.pdf and (b): NG_map_taraba_state_mumuye_pop_share.pdf

1.3.2 Tables

Tables are stored as fragments providing the point estimates, summary statistics (where applicable) and the standard errors. They are assembled in this readme-document into the Latex tabular layout. For convenience the individual table fragments that are used to construct the tables are mapped here to the table environment.

Table 1

- fragment-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-ID_lgc-stm
- fragment-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-iv-ID_lgc-stm

Table 2

- fragment-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm
- fragment-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-iv-idelec-stm

Table 3

- fragment-ab6-victim-ols-yrmo_survey
- fragment-ab12-victim-ols-yrmo_survey
- fragment-ab18-victim-ols-yrmo_survey

Table 4

- fragment-leveleffectplain-lgc_excl_ethngr_share-lgc_elec_status-anywidelayout-ols-ID_lgc-tm
- fragment-leveleffect-dummified-aboveexc-lgc_elec_status-anywidelayout-ols-ID_lgc-tm

Table 5

- fragment-dummified-sample0-heterogenous-lgc_gsa_mo-aboveexc-anywidelayout-ols-idelec-tm
- fragment-dummified-tripplediff-lgc_gsa_mo--lgc_elec_status-anywidelayout-ols-idelec-tm

Table 6

- fragment-ab6-grievances-ols-yrmo_survey
- fragment-ab12-grievances-ols-yrmo_survey
- fragment-ab18-grievances-ols-yrmo_survey

Appendix:

Table A1 : no fragments

Table A2 : no fragments

Table A3

- fragment-sample0-heterogenous-lgc_gsa_mo-oilproducing-anywidelayout-ols-idelec-stm
- fragment-sample0-heterogenous-lgc_gsa_mo-oilgasfielddummy-anywidelayout-ols-idelec-stm

Table A4

- allocation-decomposition-brent
- allocation-decomposition-crudeNGA

Table A5

- fragment-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm-sampleelectionrestricted
- fragment-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm-sampleelectionrestricted2
- fragment-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm-sampleelectionrestricted3

Table A6

- democracy-dummy-variance-decomposition

Table A7

- decomposition-varsexplore1-lgc_elec_status-stm

Table A8

- decomposition-varsexplore2-lgc_elec_status-stm

Table A9

- fragment-rob-withholding-month-int-anypoliticalmilitiaevents-lgc_gsa_mo
- fragment-rob-withholding-int-anypoliticalmilitiaevents-lgc_gsa_mo
- fragment-rob-withholdingmax-int-anypoliticalmilitiaevents-lgc_gsa_mo

Table A10

- fragment-lgc_gsa_mo-lgc_elec_status-anywidelayout-lgcelecstmgov-tm
- fragment-int-lgc_gsa_mo-tm-lgc_elec_status-anywidelayout-lgcelecstmgov-tm

Table A11

- fragment-int-lgc_alloc_mo-brent-lgc_elec_status-anywidelayout-ols-ID_lgc-stm-bokoharamstate
- fragment-int-lgc_alloc_mo-brent-lgc_elec_status-anywidelayout-ols-ID_lgc-stm-bokoharamstatebroad

Table A12

- fragment-int-lgc_extra_alloc_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm
- fragment-int-lgc_extra_alloc_mo-brent-lgc_elec_status-anywidelayout-iv-idelec-stm

Table A13

- fragment-int-lgc_gsa_mo-tm-lgc_elec_status-anyotherdatalayout-tm
- fragment-int-lgc_gsa_mo-tm-lgc_elec_status-levotherdatalayout-tm

Table A14

- fragment-int-lgc_gsa_mo-year-lgc_elec_status-anywidelayout-ols
- fragment-int-lgc_gsa_mo-year-lgc_elec_status-levelwidelayout-ols
- fragment-int-lgc_gsa_mo-year-lgc_elec_status-logpcwidelayout-ols
- fragment-int-lgc_gsa_mo-year-lgc_elec_status-pcwidelayout-ols

Table A15

- fragment-int-lgc_gsa_mo-year-lgc_elec_status-anywidelayout-ols
- fragment-int-lgc_gsa_mo-tq-lgc_elec_status-anywidelayout-ols
- fragment-int-lgc_gsa_mo-tm-lgc_elec_status-anywidelayout-ols

Table A16

- fragment-int-reghdfe-levelwidelayout-lgc_gsa_mo
- fragment-int-ppmlhdfe-levelwidelayout-lgc_gsa_mo
- fragment-int-xtnbreg-levelwidelayout-lgc_gsa_mo

Table A17

- fragment-robqq_population_wei_tm-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm
- fragment-robqq_landmass_weigh_tm-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm
- fragment-robqq_primary_enroll_tm-int-lgc_gsa_mo-brent-lgc_elec_status-anywidelayout-ols-idelec-stm

Table A18

- fragment-ab-SometimesUnfairly-ethnicgrievances-AB_excluded_ethn-ols
- fragment-ab-AB_ethngr_treated_unfair-ethnicgrievances-AB_excluded_ethn-ols

Table A19

- fragment-ab6-grievancesnational-ols-yrmo_survey
- fragment-ab12-grievancesnational-ols-yrmo_survey
- fragment-ab18-grievancesnational-ols-yrmo_survey

Table A20

- fragment-ab6-grievancesstate-ols-yrmo_survey
- fragment-ab12-grievancesstate-ols-yrmo_survey
- fragment-ab18-grievancesstate-ols-yrmo_survey

Table A21

- fragment-leveleffectplain-lgc_excl_ethngr_share-lgc_elec_status-anywidelayout-ols-ID_lgc-tm
- fragment-leveleffect-dummified-aboveexc-lgc_elec_status-anywidelayout-ols-ID_lgc-tm

Table A22

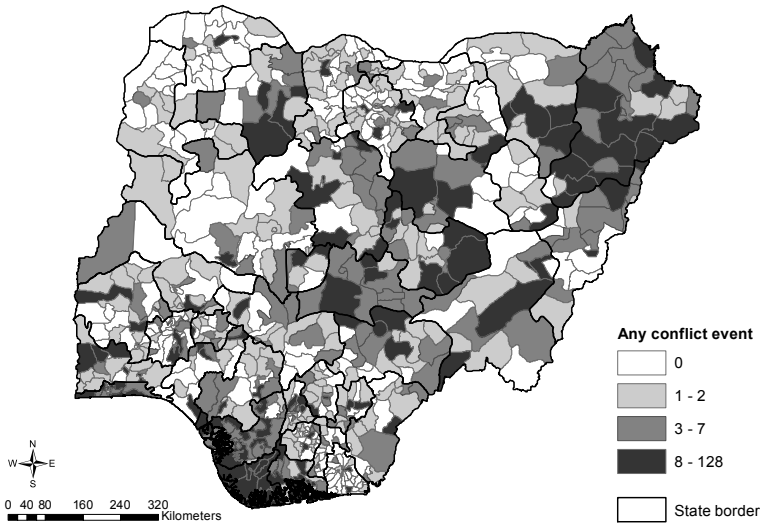
- fragment-sample0-heterogenous-lgc_gsa_mo-lgc_excl_ethngr_share-anywidelayout-ols-idelec-tm
- fragment-tripplediff-lgc_gsa_mo-lgc_excl_ethngr_share-lgc_elec_status-anywidelayout-ols-idelec-tm

2 Main Results

The main results presented in the tables and figures below can be replicated directly by running the do-file `lga-panel.do`, as described above. Before this do-file can be executed, the data is read in and prepared running the do-file `prepare.do`. This do-file calls the main data set `NGA.PAN.MERGED.L7.dta`. This `lga-panel.do` do-file then estimates the main regressions and produces the bulk of the tables and figures (see above for further detail). The do file has the individual code segments ordered and labelled with the corresponding table and figure numbers as they appear in the text. The same results are obtained just running the do-file `run.do.all`.

Tables and Figures for Main Text

Figure 1: Conflict intensity across Nigeria

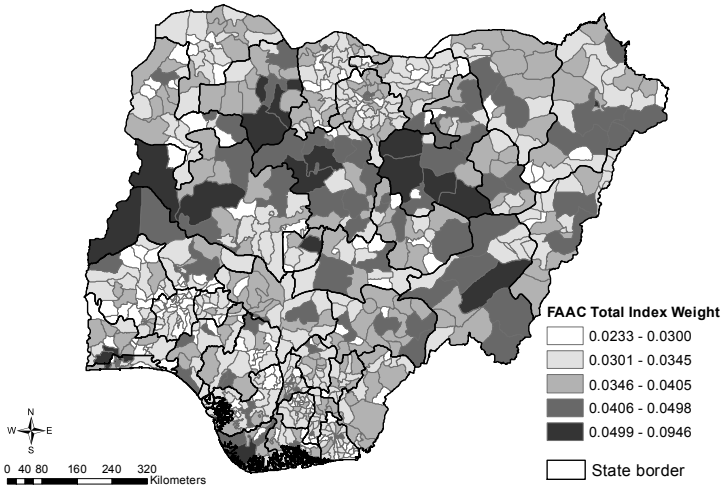


Notes: Map shows the distribution of conflict events across local government areas (LGA) in the period 1999 to 2014. *Sources*: conflict data is from *ACLED* and administrative boundaries are from Global Administrative Areas (GADM; https://gadm.org/).

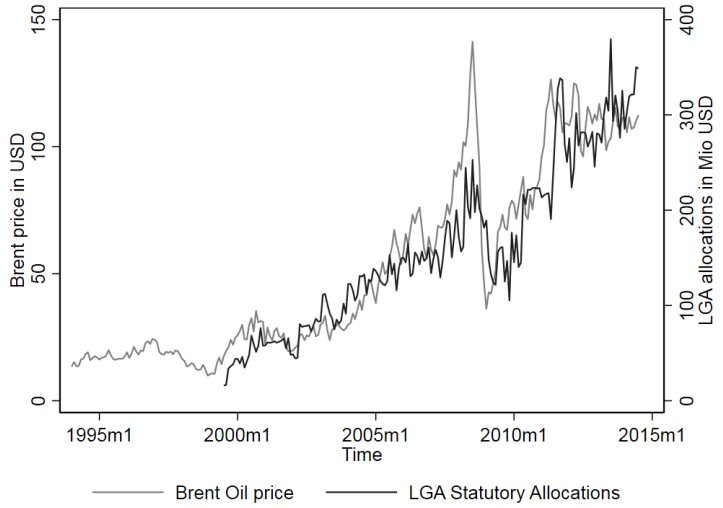
Figure 2: Spatial and temporal variation in revenue sharing and the election status across in Nigeria from 1999-2014

Spatial and temporal variation in revenue sharing

Panel A: Formula weights

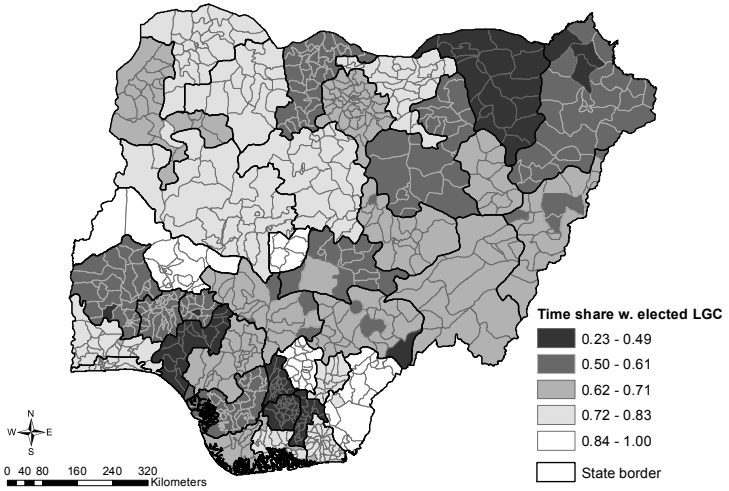


Panel B : Allocations

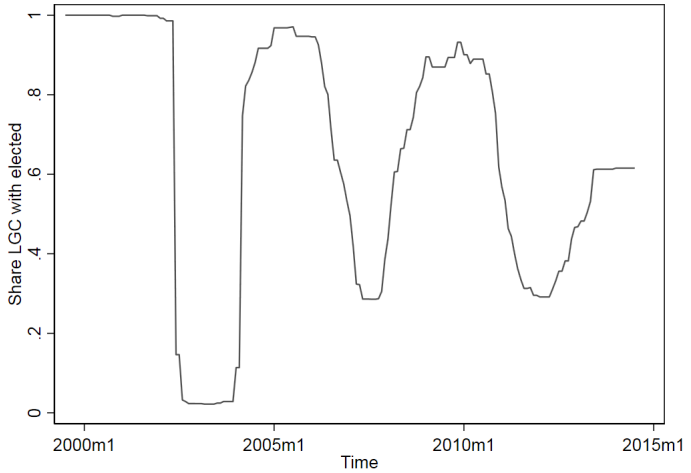


Spatial and temporal variation in election status

Panel C: Spatial variation in election status

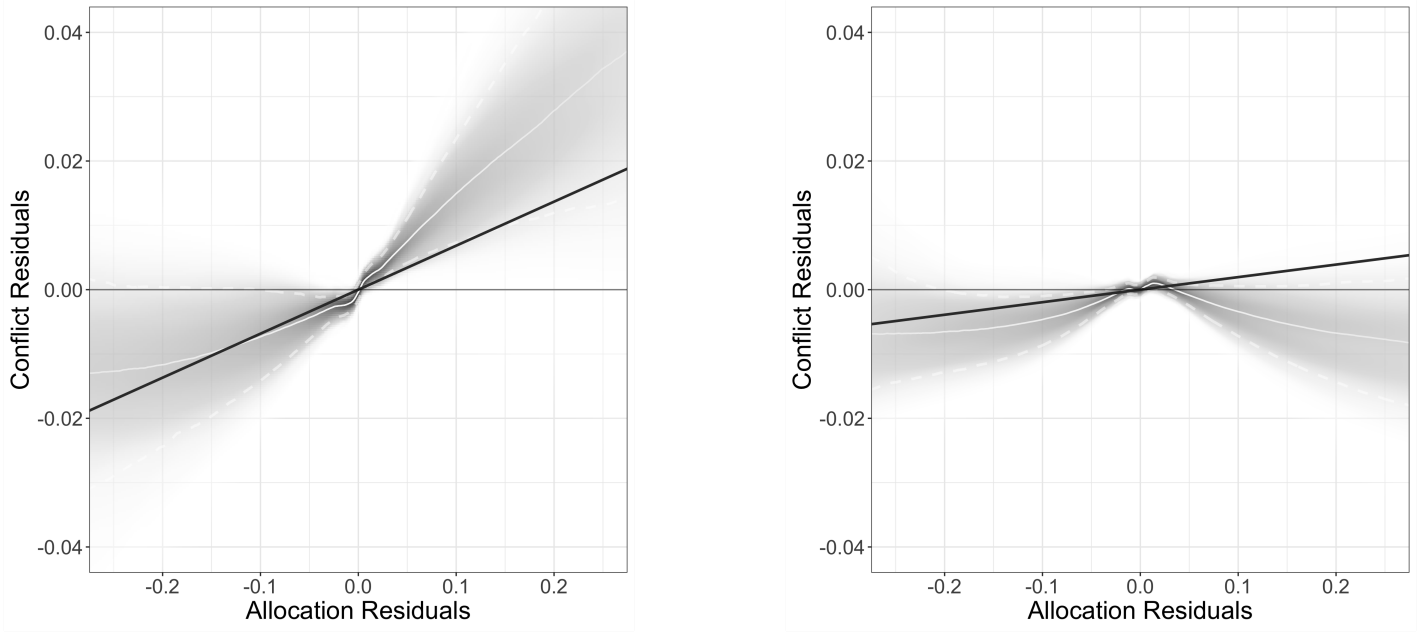


Panel B: Temporal variation



Notes: Figure presents the spatial and temporal variation exploited in the paper. The top panels focus on the revenue sharing with *Panel A* presenting the share of revenues that accrue to each local government area (LGA) based on the horizontal revenue sharing formula (Federation Allocation Account Committee FAAC), while *Panel B* presents the monthly variation in overall revenue allocations made to local governments in aggregate (right scale) along with the monthly prices of Brent Crude oil (left scale). The bottom panel focuses on the election status of local government councils (LGC) over time with *Panel C* presenting the variation across space and *Panel D* presenting the variation across all LGCs over time.

Figure 3: Positive and Negative Resource Shocks Under Elected and Appointed Regime



(a): Appointed Local Council

(b): Elected Local Council

Notes: Figure showcases the non-linear impact of positive versus negative revenue shocks on conflict. The figure presents results from bootstrapped lowess regressions on the residuals of the dependent variable, after having demeaned the data by local government area (LGA) and state-by-time fixed effects. The method first computes lowess regressions from 1000 bootstrapped samples of the demeaned data. It then calculates density estimates of the predictions from the lowess regressions for several hundred cuts along the y-axis and distributes a specified greyscale proportional to that density estimate. The resulting figure displays the uncertainty in the regressions visually. The median value of the bootstrapped lowess predictions is indicated as a solid white line, while OLS regressions are indicated as a black line. Figure *(a)* presents the results for periods with appointed local government councils, while Figure *(b)* displays the results for periods with elected local government councils.

Table 1: The effect of resource rents on political violence when local councils are *appointed*

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: OLS										
LGC Statutory Allocations	0.237***	0.116**	0.153***	0.017	0.118**	0.199***	0.065**	-0.010	0.099**	0.136**
	(0.077)	(0.048)	(0.051)	(0.035)	(0.046)	(0.062)	(0.027)	(0.007)	(0.042)	(0.055)
Observations	49662	49662	49662	49662	49662	49662	49662	49662	49662	49662
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0292	.0112	.0152	.00471	.0108	.0191	.00495	.00105	.00767	.0127
Panel B: IV										
LGC Statutory Allocations	0.341***	0.126**	0.199***	0.054	0.153***	0.252***	0.075**	-0.005	0.109**	0.160**
	(0.107)	(0.057)	(0.059)	(0.040)	(0.058)	(0.086)	(0.029)	(0.011)	(0.049)	(0.068)
Kleibergen-Paap weak IV	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
Observations	49662	49662	49662	49662	49662	49662	49662	49662	49662	49662
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0292	.0112	.0152	.00471	.0108	.0191	.00495	.00105	.00767	.0127

Notes: Table presents regression results capturing the impact of revenue shocks on conflict incidence focusing on the subsample in which local government councils (LGC) are appointed. All dependent variables are binary indicators capturing whether an event occurred in a local government area (LGA). All regressions control for state by time fixed effects and LGA fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved;* (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The main explanatory variable is the monthly revenue allocation to a LGC. The instrumental variable estimation in Panel (B) uses the index weight interacted with the oil price as instrument. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2: Resource rents and conflict – moderating effect of having an elected local government

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: OLS										
LGC Statutory Allocations	0.213***	0.115***	0.141***	0.009	0.118***	0.187***	0.054**	-0.011	0.097**	0.140***
	(0.073)	(0.043)	(0.049)	(0.030)	(0.042)	(0.060)	(0.024)	(0.008)	(0.037)	(0.051)
Elected × LGC Statutory Allocations	-0.131*	-0.083**	-0.084*	-0.006	-0.086**	-0.128**	-0.045**	0.026***	-0.082**	-0.111**
	(0.068)	(0.041)	(0.047)	(0.040)	(0.043)	(0.057)	(0.020)	(0.009)	(0.039)	(0.049)
Joint Test:										
Allocations + Elected x Allocations = 0	.082	.031	.057**	.003	.033	.059*	.009	.015**	.015	.029
	(.054)	(.024)	(.027)	(.037)	(.029)	(.034)	(.015)	(.007)	(.02)	(.025)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel B: IV										
LGC Statutory Allocations	0.310***	0.127**	0.178***	0.043	0.164***	0.242***	0.055**	-0.010	0.114**	0.161***
	(0.099)	(0.052)	(0.056)	(0.035)	(0.055)	(0.082)	(0.026)	(0.015)	(0.045)	(0.062)
Elected × LGC Statutory Allocations	-0.224**	-0.114**	-0.107**	-0.038	-0.153***	-0.183**	-0.048*	0.023	-0.112**	-0.117**
	(0.088)	(0.049)	(0.053)	(0.039)	(0.053)	(0.077)	(0.025)	(0.015)	(0.044)	(0.058)
Joint Test:										
Allocations + Elected x Allocations = 0	.086	.013	.071**	.006	.011	.059	.007	.013	.002	.044
	(.061)	(.026)	(.031)	(.037)	(.032)	(.041)	(.019)	(.01)	(.022)	(.029)
Kleibergen-Paap weak IV	148.2	148.2	148.2	148.2	148.2	148.2	148.2	148.2	148.2	148.2
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828

Notes: Table presents regression results capturing the impact of revenue shocks on conflict incidence during periods when local government councils (LGC) are elected or appointed. All dependent variables are binary indicators capturing whether an event occurred in a local government area (LGA). All regressions control for state by time fixed effects and LGA by elected status fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The main explanatory variable is the monthly revenue allocation to a LGC. The variable *Elected* indicates whether an LGC is elected or appointed in a given month. The instrumental variable estimation in Panel (B) uses the index weight interacted with the oil price as instrument. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3: Resource rents, elected (vs appointed) local governments and individual level victimization and participation in conflict

	Fear of political violence		Physically attacked		Engage in violence	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:						
LGC Allocations 6 months prior to survey	0.330	0.342*	0.090	0.105*	0.046	0.067*
	(0.206)	(0.200)	(0.055)	(0.057)	(0.029)	(0.034)
Elected × LGC Allocations 6 months prior to survey	-0.138	-0.135	-0.087**	-0.099**	-0.031	-0.052*
	(0.117)	(0.118)	(0.044)	(0.046)	(0.024)	(0.028)
Observations	4570	4498	13823	12331	6837	5446
Number of LGCs	367	367	575	574	359	357
Mean of DV	.684	.683	.143	.15	.0301	.0272
Panel B:						
LGC Allocations 12 months prior to survey	0.135*	0.141*	0.049*	0.059**	0.019	0.028*
	(0.082)	(0.080)	(0.026)	(0.027)	(0.014)	(0.016)
Elected × LGC Allocations 12 months prior to survey	-0.064	-0.063	-0.046**	-0.052**	-0.013	-0.022*
	(0.051)	(0.052)	(0.020)	(0.021)	(0.011)	(0.013)
Observations	4570	4498	13823	12331	6837	5446
Number of LGCs	367	367	575	574	359	357
Mean of DV	.684	.683	.143	.15	.0301	.0272
Panel C:						
LGC Allocations 18 months prior to survey	0.102*	0.105**	0.036**	0.042**	0.013	0.019*
	(0.054)	(0.052)	(0.018)	(0.018)	(0.009)	(0.010)
Elected × LGC Allocations 18 months prior to survey	-0.049	-0.048	-0.032**	-0.036***	-0.009	-0.015*
	(0.034)	(0.034)	(0.013)	(0.014)	(0.007)	(0.009)
Observations	4570	4498	13823	12331	6837	5446
Number of LGCs	367	367	575	574	359	357
Mean of DV	.684	.683	.143	.15	.0301	.0272
Respondent controls		X		X		X

Notes: Table presents regression results using individual level data from the Afrobaromter survey. All regressions control for time fixed effects and local government area (LGA) fixed effects. The dependent variables in column (1)–(2) indicates how much a respondent personally fears to become a victim of political intimidation or violence; columns (3)–(4) indicates how often the respondent or someone in the respondent's family has been physically attacked in the past year; columns (5)–(6) indicates how often a respondent has used force or violence for a political cause. Panel (A) uses the sum of monthly revenue allocations in the last 6 months, Panel (B) in the last 12 months, and Panel (C) in the last 18 months. The variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. Respondent controls include the respondents age, educational attainment, employment status, gender and an indicator whether the household lives in an urban area. Standard errors in parentheses are clustered by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4: Inclusion of Ethnic Groups Through Elections and Conflict: Estimation of effect on conflict levels

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Level effect										
Elected	-0.007**	-0.004**	-0.006***	0.001	-0.004**	-0.009***	0.001	-0.001	-0.005***	-0.007***
	(0.003)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)
Observations	148428	148428	148428	148428	148428	148428	148428	148428	148428	148428
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0251	.0093	.0116	.00566	.0087	.0137	.00519	.000936	.00509	.00862
Panel B: Ethnic alignment heterogenous effect										
Elected	0.001	-0.002	-0.000	0.004*	-0.002	-0.003*	0.003**	-0.002*	-0.003**	-0.002
	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
Elected x Above Median Non-aligned ethnic group sh.	-0.015***	-0.005**	-0.011***	-0.003*	-0.007**	-0.012***	-0.003***	0.001**	-0.006**	-0.010***
	(0.004)	(0.003)	(0.003)	(0.001)	(0.003)	(0.004)	(0.001)	(0.001)	(0.002)	(0.003)
Observations	131107	131107	131107	131107	131107	131107	131107	131107	131107	131107
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0257	.00959	.0121	.00551	.00864	.0141	.00542	.00103	.00507	.00901

Notes: Table presents regression results documenting that local government areas (LGA) with elected local government councils (LGC) experience lower conflict levels and that this effect is driven by places that may have seen significant political exclusion during the periods in which LGCs were appointed. All dependent variables are binary indicators capturing whether an event occurred in an LGA. All regressions control for LGA fixed effects and time fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The main explanatory variable *Elected* indicates whether an LGC is elected or appointed in a given month. The variable *Non-aligned ethnic group* measures the population share that is of a different ethnic group than the state governor. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5: Inclusion of Ethnic Groups Through Elections and Conflict: Triple Difference-in-Differences with Allocated Rents

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Impact of allocations on conflict with appointed LGAs and and Exclusion										
LGC Statutory Allocations ×										
Above Median Non-aligned ethnic group sh.	0.382***	0.171***	0.261***	0.010	0.183***	0.353***	0.088***	-0.004	0.164***	0.249***
	(0.094)	(0.057)	(0.066)	(0.037)	(0.055)	(0.082)	(0.030)	(0.007)	(0.050)	(0.067)
Below Median Non-aligned ethnic group sh.	0.308***	0.132**	0.199***	0.004	0.137***	0.274***	0.074***	-0.001	0.120***	0.184***
	(0.090)	(0.053)	(0.061)	(0.034)	(0.051)	(0.078)	(0.027)	(0.007)	(0.046)	(0.062)
Joint Test:										
Above Median - Below Median = 0	.074***	.039***	.062***	.005	.047***	.078***	.014**	-.003	.044***	.066***
	(.022)	(.014)	(.016)	(.009)	(.015)	(.02)	(.006)	(.002)	(.014)	(.016)
Observations	45789	45789	45789	45789	45789	45789	45789	45789	45789	45789
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0303	.0117	.016	.00467	.0112	.02	.00524	.0012	.00795	.0133
Panel B: Impact of allocations with elected vs. appointed LGAs and differential exclusion										
LGC Statutory Allocations ×										
Elected x Above Median Non-aligned ethnic group sh.	0.172***	0.051*	0.100***	0.032	0.080***	0.096**	0.045**	0.009*	0.039**	0.060**
	(0.060)	(0.027)	(0.030)	(0.026)	(0.027)	(0.039)	(0.022)	(0.005)	(0.018)	(0.027)
Appointed x Above Median Non-aligned ethnic group sh.	0.331***	0.142***	0.221***	0.031	0.163***	0.278***	0.059**	0.004	0.131***	0.196***
	(0.072)	(0.040)	(0.046)	(0.026)	(0.040)	(0.058)	(0.025)	(0.005)	(0.034)	(0.046)
Elected x Below Median Non-aligned ethnic group sh.	0.192***	0.042	0.100***	0.067**	0.069***	0.079*	0.051*	0.011	0.027	0.044
	(0.062)	(0.029)	(0.032)	(0.030)	(0.022)	(0.041)	(0.027)	(0.008)	(0.017)	(0.031)
Appointed x Below Median Non-aligned ethnic group sh.	0.182***	0.067**	0.104***	0.028	0.073***	0.132***	0.027	0.010*	0.051**	0.080**
	(0.063)	(0.030)	(0.035)	(0.025)	(0.028)	(0.046)	(0.022)	(0.005)	(0.021)	(0.033)
Joint Test:										
Elected Above Median - Appointed Above Median = 0	-.159***	-.09***	-.121***	.001	-.082***	-.182***	-.015	.005	-.092***	-.136***
	(.044)	(.03)	(.032)	(.014)	(.03)	(.04)	(.014)	(.004)	(.028)	(.032)
Observations	127130	127130	127130	127130	127130	127130	127130	127130	127130	127130
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0243	.00934	.0115	.00491	.00836	.0135	.00515	.00106	.00485	.00857

Notes: Table presents regression results documenting that the impact of revenue shocks driving conflict is most pronounced in periods and places were local government councils (LGC) are appointed and where there may be significant share of population excluded (Panel A). Panel B documents that these places are seeing the most drastic weakening of the revenue shocks and conflict relationship. The variable *Elected* indicates whether an LGC is elected or appointed in a given month. The variable *Non-aligned ethnic group* measures the population share that is of a different ethnic group than the state governor. *LGC Allocations* captures the monthly revenue allocation to an LGC. All dependent variables are binary indicators capturing whether an event occurred in a local government area (LGA). All regressions control for LGA by election status fixed effects and time fixed effects. Panel A focuses on the sample with appointed local governments, while Panel B studies the full sample. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6: Individual Level Perception of Local Governance

	Approval of LGC Council		LGC Councillors corrupt		Trust in LGC	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 6 months						
LGC Allocations 6 months prior to survey	-0.338***	-0.337***	0.397***	0.384**	-0.257**	-0.238*
	(0.122)	(0.124)	(0.150)	(0.151)	(0.125)	(0.143)
Elected × LGC Allocations 6 months prior to survey	0.233**	0.208**	-0.203*	-0.188*	0.197**	0.170*
	(0.102)	(0.097)	(0.104)	(0.104)	(0.085)	(0.088)
Observations	12670	11284	9032	8902	13054	11614
Number of LGCs	573	572	522	522	575	574
Mean of DV	2.84	2.9	3.77	3.78	2.51	2.58
Panel B: 12 months						
LGC Allocations 12 months prior to survey	-0.165***	-0.165***	0.174***	0.168**	-0.108*	-0.098
	(0.059)	(0.060)	(0.067)	(0.068)	(0.056)	(0.063)
Elected × LGC Allocations 12 months prior to survey	0.114**	0.103**	-0.094**	-0.088*	0.084**	0.071*
	(0.047)	(0.045)	(0.047)	(0.047)	(0.039)	(0.039)
Observations	12670	11284	9032	8902	13054	11614
Number of LGCs	573	572	522	522	575	574
Mean of DV	2.84	2.9	3.77	3.78	2.51	2.58
Panel C: 18 months						
LGC Allocations 18 months prior to survey	-0.110***	-0.110***	0.120***	0.117***	-0.075**	-0.066
	(0.040)	(0.041)	(0.044)	(0.044)	(0.037)	(0.041)
Elected × LGC Allocations 18 months prior to survey	0.076**	0.068**	-0.065**	-0.061**	0.057**	0.047*
	(0.031)	(0.030)	(0.031)	(0.031)	(0.026)	(0.026)
Observations	12670	11284	9032	8902	13054	11614
Number of LGCs	573	572	522	522	575	574
Mean of DV	2.84	2.9	3.77	3.78	2.51	2.58
Respondent controls		X		X		X

Notes: All regressions control for time fixed effects and local government area (LGA) fixed effects. The dependent variable in columns (1)–(2) indicates how much a respondent approves of the performance of the local government councillor (4-point Likert scale); in columns (3)–(4) it captures how many of the local councillors a respondent thinks are involved in corruption; columns (5)–(6) indicates how much a respondent trusts the local government council (4-point Likert scale). Panel (A) uses the sum of monthly revenue allocations in the last 6 months, Panel (B) in the last 12 months, and Panel (C) in the last 18 months. The variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. Respondent controls include the respondents age, educational attainment, employment status, gender and an indicator whether the household lives in an urban area. Standard errors in parentheses are clustered by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix to "Cohesive Institutions and Political Violence"

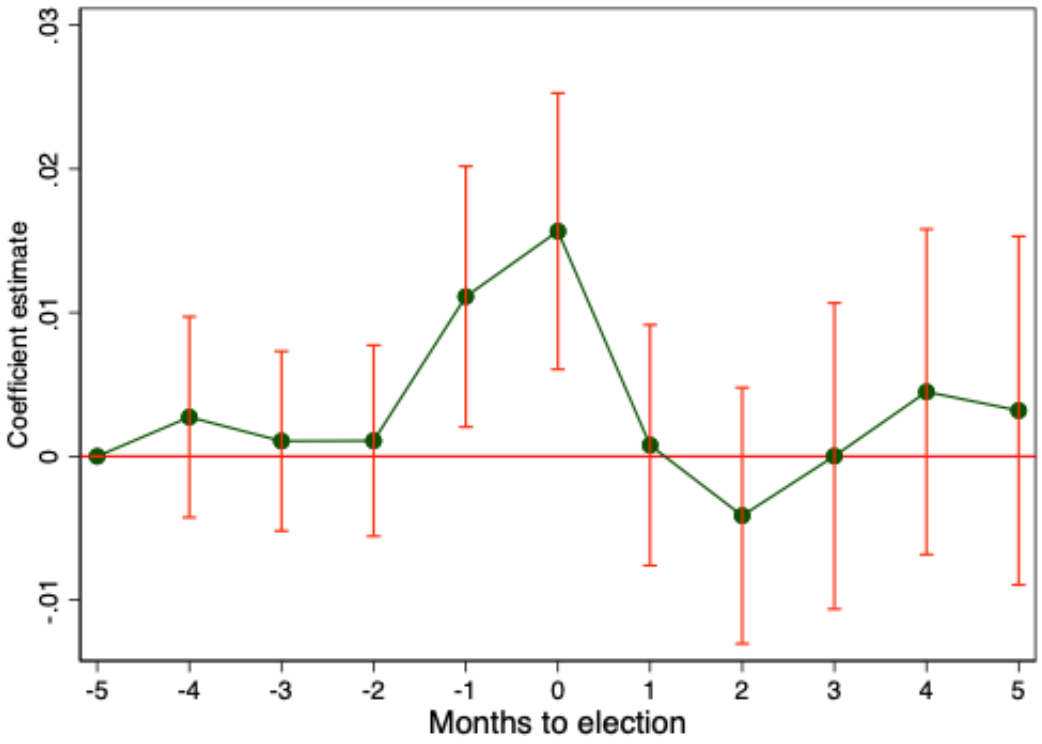
For Online Publication

Thiemo Fetzer Stephan Kyburz

December 1, 2021

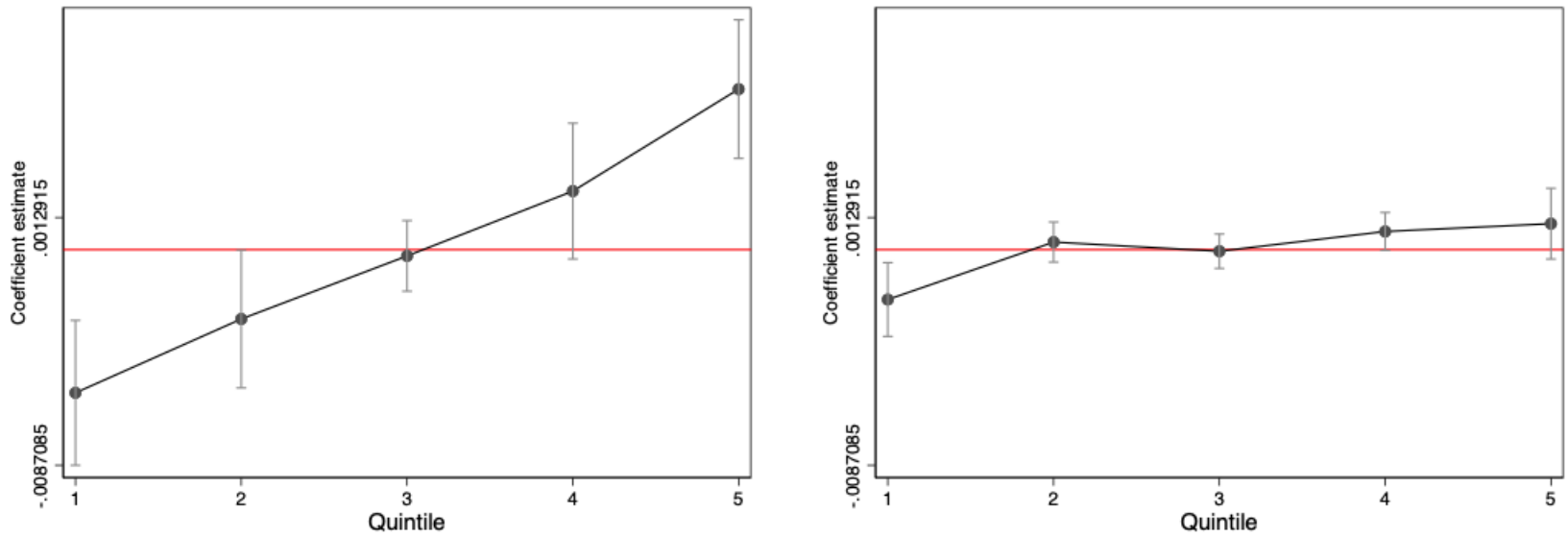
A Additional Figures and Tables

Figure A1: Conflict around election months



Notes: The figure presents estimated coefficients from a regression with the left hand side being a dummy variable indicating whether there was any conflict event in a local government area (LGA) and month. The regression removes LGA fixed effects and time fixed effects prior and then regresses the residualized dependent variable on a set of dummies capturing the time to the election date. Standard errors are clustered at the LGA level and 10% confidence bands are indicated.

Figure A2: Conventional test for non-linearities



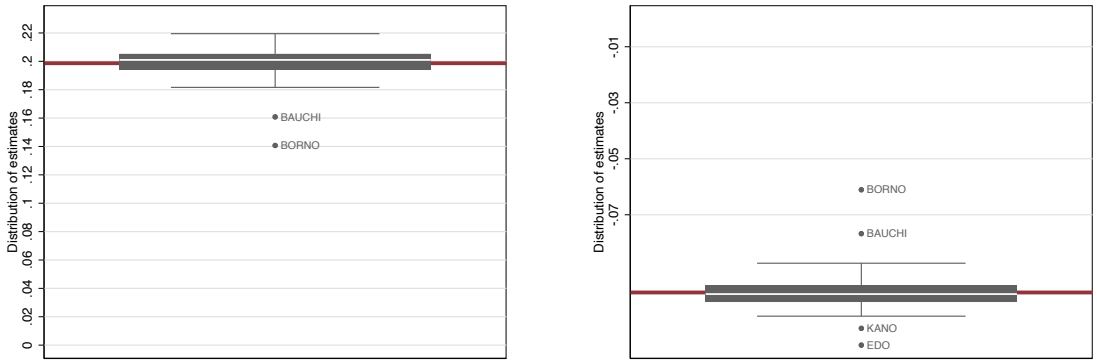
(a): Appointed Local Council

(b): Elected Local Council

Notes: The figures are constructed by demeaning the conflict outcome as well as the gross statutory allocations by the location and time fixed effects, sub-setting the sample into two parts: one with elected and one with appointed local governments. The residuals of the allocations are subdivided into quintiles and we then estimate a simple specification using the quintiles as categorical right hand side measures. The resulting point estimates per quintile are plotted out. The figure displays the effect of local government council (LGC) gross statutory allocations per month on civil conflict by quintile of the shock without (left) and with (right) elected LGC. 90% confidence intervals obtained from clustering standard errors two way by time and state are indicated.

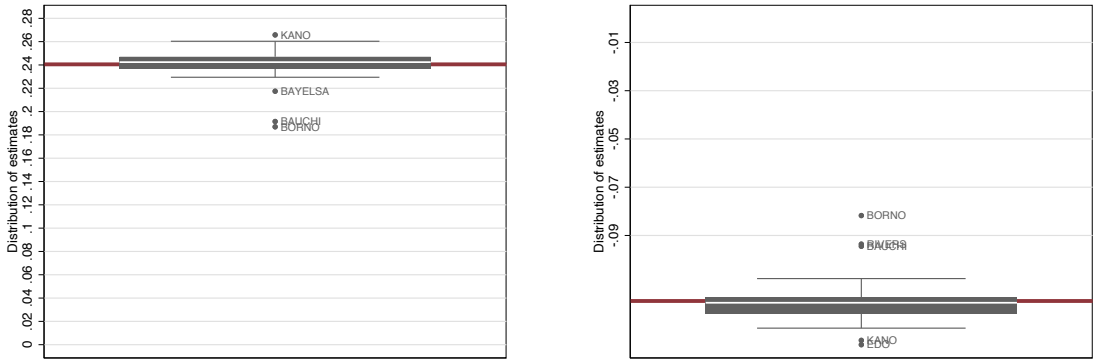
Figure A3: Leave-one-out validation: Dropping each state in turn

Panel A: Reduced form



Main effect Interaction effect

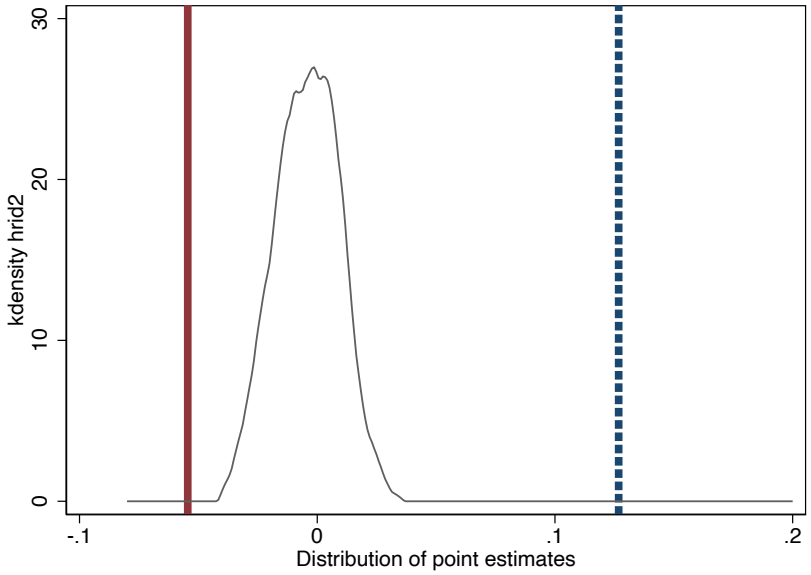
Panel B: Instrumental variables regression



Main effect Interaction effect

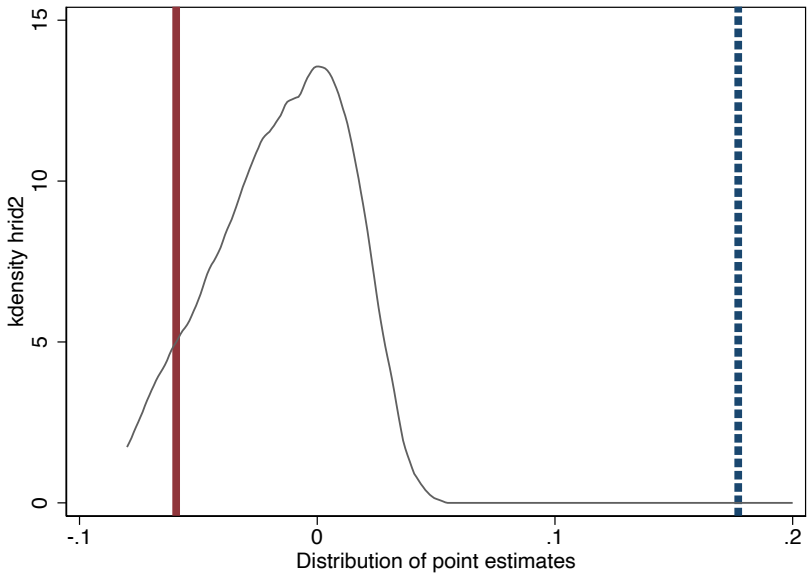
Notes: The figure presents results from a leave-one-out exercise. We estimate the main regression including state-by-time and district fixed effects but drop all data pertaining to each of the 37 individual states in turn. The boxplots provide the distribution of the point estimates that are obtained for both the reduced form as well as the instrumental variable estimation.

Figure A4: Permutation test on gross statutory allocations and election status



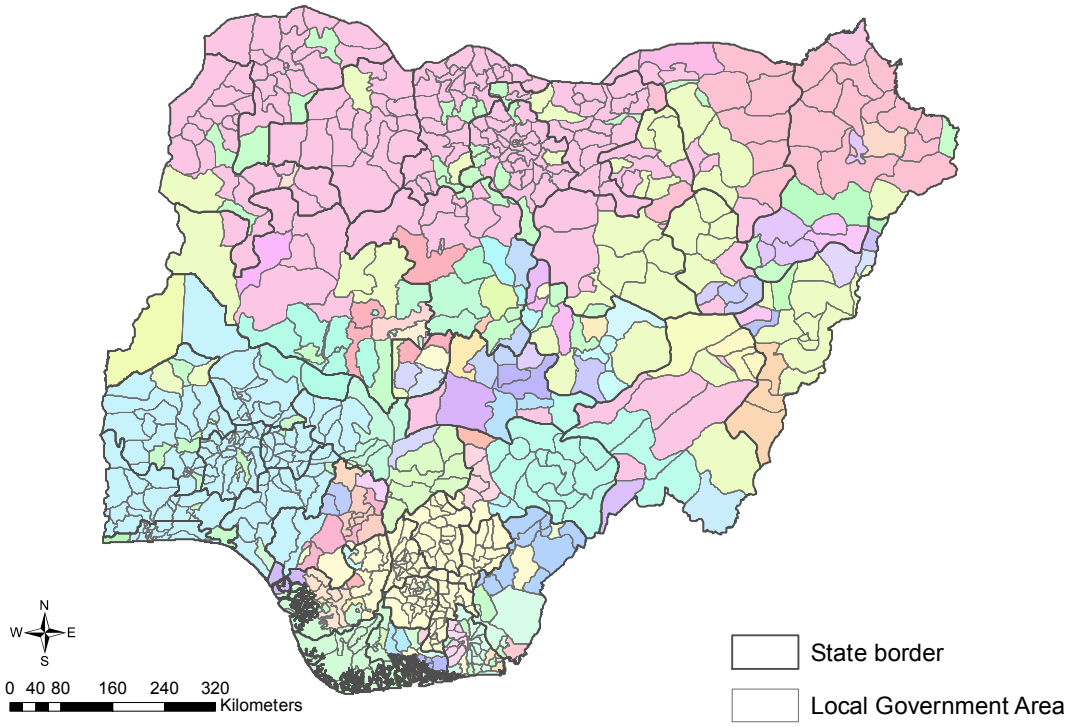
Notes: Permutation test on the interaction effect between gross statutory allocations and the elected status dummy. 100 permutations were constructed by randomly reordering spells of appointed vs. elected governments at the local government area (LGA) level. Each model is estimated including state by time and LGA fixed effects. The dashed blue line represents the main effect that is estimated on the LGA Allocations variable, while the red vertical line indicates the estimate that is obtained on the Elected x LGA Allocations interaction with the true data. The kernel density plots the distribution of the point estimates for the reshuffled Elected x LGA Allocations interaction variable. It is clear that we can safely reject the null hypothesis with a p-value of less than 0.001.

Figure A5: Permutation test on election status dummy across 37 states



Notes: Permutation test after permuting the election status dummy across the 37 states, thus ignoring part of the local variation. 100 permutations were constructed by randomly reordering spells of appointed vs. elected governments at the state level. Each model is estimated including time and local government area (LGA) fixed effects. The dashed blue line represents the main effect that is estimated on the LGA Allocations variable, while the red vertical line indicates the estimate that is obtained on the Elected x LGA Allocations interaction with the true data. The kernel density plots the distribution of the point estimates for the reshuffled Elected x LGA Allocations interaction variable. We can reject the null hypothesis of no effect with a p-value of 0.05.

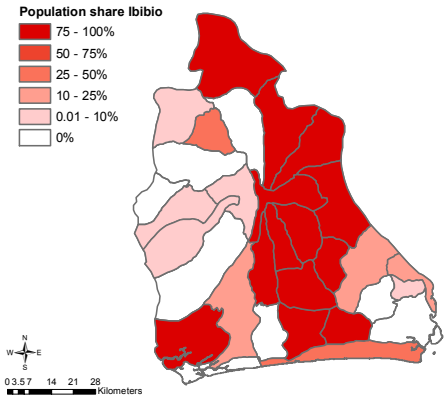
Figure A6: Distribution of Ethnic Groups across Nigeria



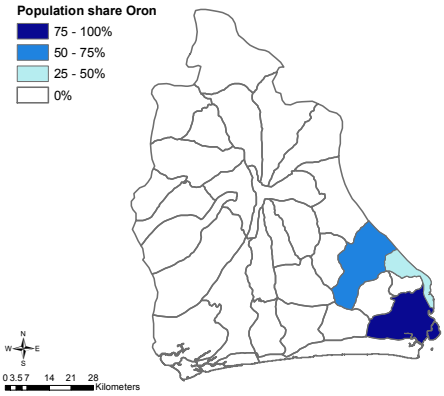
Notes: The map shows the distribution of ethnic groups across Nigeria. For each local government area (LGA) the largest ethnic group is displayed in a different color. The largest groups are the Yoruba in light blue (South-West), the Hausa-Fulani in pink (North), and the Igbo/Ibo in yellow (South-East) *Sources*: own calculations based on ethnic information in the Demographic Health Surveys (DHS 1990, 2003, 2008, 2010, 2013). Administrative boundaries are from Global Administrative Areas (GADM; https://gadm.org/).

Figure A7: Population Shares of various ethnic groups in Akwa Ibom and Taraba states

Panel A: **Akwa Ibom State**

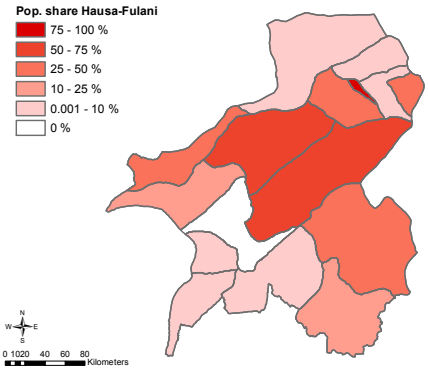


(a) Ibibio

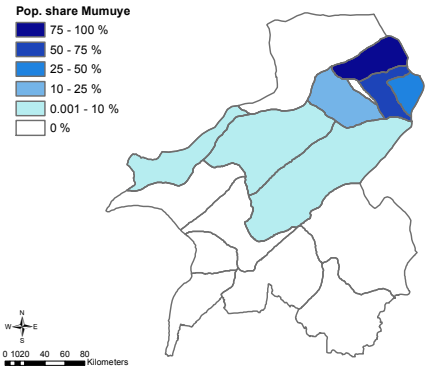


(b) Oron

Panel B: **Taraba State**



(a) Hausa-Fulani



(b) Mumuye

Notes: *Panel A* presents population shares for the (a) Ibibio and (b) Oron ethnic groups across local government areas (LGA) in Akwa Ibom State. *Panel B* presents population shares for the (a) Hausa-Fulani and (b) Mumuye ethnic groups across LGAs in Taraba State. *Sources*: Population shares of ethnic groups across LGAs are calculated based on respondents' information on ethnicity and language in 5 Demographic Health Surveys (DHS 1990, 2003, 2008, 2010, 2013). Administrative boundaries are from Global Administrative Areas (GADM; https://gadm.org/).

Table A1: Revenue Allocation Formula

Variable	Mean	Std. Dev.
Equality	0.138	0
Population	0.104	0.058
Internal Revenue Generation effort	0.009	0.004
Landmass	0.017	0.021
Terrain	0.017	0
Health - Hospital Beds	0.01	0.005
Education - Primary enrollment	0.014	0.008
Rain - Water supply spread	0.005	0.006
Rain - Rainfall share	0.005	0
Total index	0.345	0.068
N	774	

Notes: Mean and Standard deviation of the different sub-indices that feed into the overall index weight used to allocate revenues to local government areas (revenue allocation formula of 2006). *Source*: Federation Account Allocation Committee (FAAC).

Table A2: Within- and between LGA variation in different types of FAAC Allocations

Variable		Mean	Std. Dev.	Observations
Total Allocations	overall	0.305	0.243	N = 140868
	between		0.074	n = 774
	within		0.231	T = 182
Statutory Allocations	overall	0.206	0.122	N = 140868
	between		0.040	n = 774
	within		0.115	T = 182
Extraordinary Allocations	overall	0.056	0.131	N = 140868
	between		0.011	n = 774
	within		0.131	T = 182

Notes: Table presents a decomposition of the variation in the Federation Account Allocation Committee (FAAC) allocations within- and between local government areas (LGA). Statutory Allocations are calculated based on a benchmark oil price defined at the beginning of each year. Extraordinary Allocations are additional revenue transfers from the Excess Crude Account (ECA) based on the same allocation formula defined by the FAAC. These allocations are subject to idiosyncratic political decisions. *Source*: information on monthly allocations is published by the FAAC.

Table A3: Conflict in Oil-Producing States and Oil Fields

		Type of Event			Groups involved				Between pol militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol Militia	(7) Comm militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Oil producing state										
LGC Statutory Allocations	0.255***	0.142***	0.147**	0.018	0.143***	0.220***	0.070**	-0.004	0.119**	0.139**
	(0.088)	(0.054)	(0.056)	(0.038)	(0.053)	(0.073)	(0.029)	(0.004)	(0.048)	(0.064)
LGA is in Oil Producing State × LGC Statutory Allocations	-0.118	-0.174*	0.043	-0.007	-0.162	-0.140	-0.035	-0.042	-0.134	-0.016
	(0.178)	(0.095)	(0.095)	(0.092)	(0.102)	(0.125)	(0.042)	(0.045)	(0.083)	(0.088)
Observations	49662	49662	49662	49662	49662	49662	49662	49662	49662	49662
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0292	.0112	.0152	.00471	.0108	.0191	.00495	.00105	.00767	.0127
Panel B: LGA with Oil field										
LGC Statutory Allocations	0.236***	0.116**	0.154***	0.016	0.118**	0.200***	0.065**	-0.009	0.099**	0.137**
	(0.077)	(0.048)	(0.051)	(0.034)	(0.046)	(0.063)	(0.027)	(0.007)	(0.042)	(0.055)
LGA has Oil Field × LGC Statutory Allocations	0.040	-0.002	-0.006	0.037	0.024	-0.013	-0.012	-0.013	0.000	-0.014
	(0.055)	(0.029)	(0.030)	(0.034)	(0.026)	(0.037)	(0.028)	(0.008)	(0.017)	(0.024)
Observations	49662	49662	49662	49662	49662	49662	49662	49662	49662	49662
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0292	.0112	.0152	.00471	.0108	.0191	.00495	.00105	.00767	.0127

Notes: Table presents regression results exploring whether LGAs with oil production activity exhibit a different relationship between revenue shocks and conflict. All regressions control for local government area (LGA) by elected status fixed effects and state by time fixed effects. All dependent variables are binary indicators capturing whether a conflict event occurred in an LGA. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. In Panel (A) the monthly statutory allocation are interacted with a dummy variable indicating whether an LGA is in a state that has any oil-producing facilities; in Panel (B) it is interacted with a dummy variable indicating whether a LGA has any oil field. Standard errors in parentheses are clustered two way by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4: Decomposition of Allocations by Type and Oil Price used

	Overall Allocations			Statutory allocations			Extra allocations		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Brent Crude Oil Price									
Total index × brent	18.496***	18.496***	18.496***	8.710***	8.710***	8.710***	5.068***	5.068***	5.068***
	(1.406)	(1.409)	(1.438)	(0.392)	(0.393)	(0.403)	(1.157)	(1.157)	(1.196)
LGC FE		X	X		X	X		X	X
Time FE			X			X			X
R2	.693	.713	.972	.828	.833	.987	.203	.204	.967
Observations	140868	140868	140868	140868	140868	140868	140868	140868	140868
Number of LGCs	774	774	774	774	774	774	774	774	774
Mean of DV	.305	.305	.305	.206	.206	.206	.0564	.0564	.0564
Panel B: NG Oil production									
Total index × Monthly Nigerian crude production	1.209***	1.209***	1.209***	0.759***	0.759***	0.759***	0.141	0.141	0.141
	(0.329)	(0.329)	(0.339)	(0.131)	(0.132)	(0.136)	(0.183)	(0.183)	(0.189)
LGC FE		X	X		X	X		X	X
Time FE			X			X			X
R2	.132	.151	.943	.228	.233	.964	.00875	.00917	.959
Observations	140868	140868	140868	140868	140868	140868	140868	140868	140868
Number of LGCs	774	774	774	774	774	774	774	774	774
Mean of DV	.305	.305	.305	.206	.206	.206	.0564	.0564	.0564

Notes: Table presents regression results representing a decomposition of the allocation variable using different sets of fixed effects across columns. The dependent variable in columns (1)–(3) is the Overall Allocation determined by the horizontal allocation formula (index) for each local government council (LGC); in columns (4)–(6) the Statutory Allocations calculated based on a benchmark oil price set at the beginning of each year; in columns (7)–(9) the Extraordinary Allocations that are additional revenue transfers from the Excess Crude Account (ECA). The explanatory variable in Panel (A) is an interaction between the total index weight in the allocation formula times the monthly Brent Crude Oil price; in Panel (B) it is an interaction between the total index weight times the monthly Nigerian crude oil production. Standard errors in parentheses are adjusted for two way clustering by time and state-governor with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A5: Robustness: Removing election related violence from estimating sample

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Removing 1 month window around election										
LGC Statutory Allocations	0.217***	0.111**	0.150***	0.012	0.112***	0.189***	0.062**	-0.014	0.096**	0.141***
	(0.073)	(0.044)	(0.049)	(0.031)	(0.043)	(0.060)	(0.025)	(0.009)	(0.039)	(0.052)
Elected × LGC Statutory Allocations	-0.134*	-0.086*	-0.090*	-0.002	-0.080*	-0.134**	-0.052**	0.025***	-0.081**	-0.108**
	(0.073)	(0.045)	(0.049)	(0.042)	(0.044)	(0.060)	(0.023)	(0.009)	(0.040)	(0.050)
Observations	134606	134606	134606	134606	134606	134606	134606	134606	134606	134606
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0236	.00888	.011	.00504	.00827	.0131	.00484	.000973	.00478	.00822
Panel B: Removing 3 month window around election										
LGC Statutory Allocations	0.237***	0.118**	0.165***	0.013	0.119**	0.204***	0.076***	-0.014	0.102**	0.149***
	(0.080)	(0.047)	(0.053)	(0.034)	(0.047)	(0.065)	(0.027)	(0.010)	(0.043)	(0.056)
Elected × LGC Statutory Allocations	-0.151*	-0.093*	-0.102*	-0.007	-0.080	-0.148**	-0.068***	0.026**	-0.081*	-0.117**
	(0.080)	(0.050)	(0.054)	(0.044)	(0.049)	(0.066)	(0.024)	(0.010)	(0.045)	(0.056)
Observations	126340	126340	126340	126340	126340	126340	126340	126340	126340	126340
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0237	.00894	.011	.00511	.00828	.0132	.00484	.000966	.0048	.00827
Panel C: Removing 6 month window around election										
LGC Statutory Allocations	0.287***	0.144***	0.192***	0.029	0.144***	0.243***	0.089***	-0.011	0.122**	0.166***
	(0.083)	(0.054)	(0.055)	(0.037)	(0.053)	(0.068)	(0.029)	(0.010)	(0.048)	(0.059)
Elected × LGC Statutory Allocations	-0.200**	-0.112*	-0.127**	-0.024	-0.087	-0.188***	-0.076***	0.025**	-0.097*	-0.136**
	(0.084)	(0.058)	(0.053)	(0.049)	(0.058)	(0.070)	(0.026)	(0.010)	(0.053)	(0.059)
Observations	112506	112506	112506	112506	112506	112506	112506	112506	112506	112506
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0237	.0089	.011	.00525	.00822	.0131	.00492	.000933	.00474	.00831

Notes: Table presents a robustness check removing data around the actual election to document that the changed relationship between resource shocks and conflicts in local government areas (LGA) with elected governments is not confounding any level effects arising due to election related violence. All regressions control for LGA by elected status and state by time fixed effects. All dependent variables are binary indicators capturing whether a conflict event occurred in an LGA. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. Panel (A) removes the month when a local council election is held from the sample; Panel (B) removes a three months window from the sample; Panel (C) removes a six months window from the sample. *LGC Statutory Allocations* the monthly revenue allocation to a local government council (LGC). The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Standard errors in parentheses are adjusted for two way clustering by time and state-governor with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A6: Variance Decomposition of Local Democracy Dummy

	(1)	(2)	(3)	(4)
R-squared	.0817	.571	.67	.972
LGC FE	X	X	X	X
Time FE		X	X	
State Governor FE			X	
State x Time FE				X
Observations	148428	148428	145082	148428
Number of LGCs	774	774	774	774

Notes: Table presents a decomposition of the variation in the election status dummy variable after controlling for different levels of fixed effects.

Table A7: Residual Variation to Hold Local Elections: Allocations and Conflict

	Allocations					ACLED			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LGC Allocations	-0.006								0.046
	(0.018)								(0.078)
LGC Extra Allocations		-0.017							-0.050
		(0.023)							(0.086)
LGC Allocations (last 3 months)			-0.002						-0.004
			(0.005)						(0.006)
LGC Allocations (last 6 months)				-0.001					-0.000
				(0.003)					(0.005)
LGC Allocations (last 12 months)					-0.001				-0.002
					(0.002)				(0.004)
ACLED events (last 3 months)						-0.000			-0.001
						(0.001)			(0.001)
ACLED events (last 6 months)							-0.000		-0.000
							(0.000)		(0.001)
ACLED events (last 12 months)								-0.000	0.000
								(0.000)	(0.000)
R2	.967	.967	.967	.966	.966	.967	.967	.967	.966
Observations	140713	140713	138406	136099	131485	148428	148428	148428	131485

Notes: Table presents a series of regressions of the elected status indicator variable (*Elected*) on the different types of allocations for different periods prior to local elections, and conflict events prior to local elections. The residuals in the *Elected* variable are calculated after controlling for state by time fixed effects and local government area (LGA) fixed effects. Column (9) presents the estimation with all relevant explanatory variables included. Standard errors in parentheses are adjusted for two way clustering by time and state-governor with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A8: Residual Variation in Local Elections: Formula Inputs and Ethnicity

	Weather		Index and Geography					Demographics			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Temperature	-0.002										-0.005*
	(0.003)										(0.003)
Rainfall (annual avg)		-0.000									-0.000
		(0.000)									(0.000)
Total index			-5.905								63.527
			(19.725)								(121.180)
Population				-8.599							-75.004
				(24.536)							(131.132)
Landmass					-13.324						-39.040
					(74.721)						(163.646)
Rain - Water supply spread						-44.413					0.000
						(249.070)					(0.000)
LGA has Oil Field							0.002				0.008
							(0.003)				(0.006)
Non-aligned ethnic family								0.010			0.014
								(0.007)			(0.009)
Non-aligned ethnic group									0.007		0.002
									(0.007)		(0.008)
Share of LGC population non-aligned w. Gov. religion										-0.005	-0.009
										(0.008)	(0.008)
R2	.967	.967	.967	.967	.967	.967	.967	.966	.966	.967	.968
Observations	148428	148428	148428	148428	148428	148428	148428	131107	131107	126187	123947

Notes: Table presents a series of regressions of the elected status indicator variable (*Elected*) on two weather indicators in columns (1)–(2), temperature and annual rainfall, on the allocation index and its sub-indices in columns (3)–(6), on a local government area (LGA) oil field indicator in column (7), and on three ethnic/religious alignment variables in columns (8)–(10), indicating what share of the population is aligned with the state governor's ethnicity and religion, respectively. Column (10) includes all covariates. The residuals in the *Elected* variable are calculated after controlling for state by time fixed effects and LGA fixed effects. Standard errors in parentheses are adjusted for two way clustering by time and state-governor with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A9: Sensitivity of results to data where there may have been disruption to revenue sharing

	New LGA's	Emergency rule			Non-verified claims	All instances
		Plateau	Ekiti	Boko Haram		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Dropping State x Month's which may have been affected by FAAC disruption						
LGC Statutory Allocations	0.175***	0.170***	0.171***	0.123***	0.198***	0.146***
	(0.050)	(0.049)	(0.050)	(0.040)	(0.053)	(0.043)
Elected × LGC Statutory Allocations	-0.094***	-0.095***	-0.096***	-0.062**	-0.109***	-0.070***
	(0.035)	(0.034)	(0.034)	(0.025)	(0.037)	(0.026)
Observations	139560	140594	140601	139222	127439	126263
Number of LGCs	774	774	774	774	774	774
Mean of DV	.0132	.0133	.0133	.0119	.0132	.012
Panel B: Dropping State x Year's which may have been affected by FAAC disruption						
LGC Statutory Allocations	0.175***	0.170***	0.171***	0.108***	0.198***	0.130***
	(0.051)	(0.049)	(0.050)	(0.037)	(0.053)	(0.042)
Elected × LGC Statutory Allocations	-0.095***	-0.095***	-0.096***	-0.050**	-0.109***	-0.058**
	(0.035)	(0.034)	(0.034)	(0.023)	(0.037)	(0.025)
Observations	138577	140509	140329	138446	127439	122528
Number of LGCs	774	774	774	774	774	774
Mean of DV	.0132	.0133	.0133	.0113	.0132	.0113
Panel C: Dropping all data from all states which may have been affected by FAAC disruption						
LGC Statutory Allocations	0.197***	0.171***	0.174***	0.110***	0.353***	0.235***
	(0.058)	(0.050)	(0.050)	(0.040)	(0.093)	(0.073)
Elected × LGC Statutory Allocations	-0.096**	-0.100***	-0.099***	-0.063**	-0.201***	-0.132***
	(0.041)	(0.035)	(0.034)	(0.024)	(0.069)	(0.047)
Observations	121603	137619	137801	121239	59754	51018
Number of LGCs	669	757	758	667	329	281
Mean of DV	.0134	.013	.0134	.0116	.0169	.0142

Notes: Table presents a robustness check removing data from periods where there *may* have been some disruption to revenue sharing. In Panel A we drop all data for state and month pairs in which there is some indication that transfers may have been disrupted even if they only affected a select few individual local government areas (LGA) within a state. In Panel B we drop all state and year pairs where we know that some LGA by months may have seen some disruption. In Panel C we drop all data for all states for which we ever noted some disruption. The different reasons for disruptions are indicated in the column head and further described in the text. Column (5) drops all data that was affected by disruption irrespective of the underlying reason for disruption. All regressions control for LGA by elected status and state by time fixed effects. The dependent variable is a binary indicator measuring whether an LGA month had a violent event recorded in ACLED. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A10: Robustness: Controlling for State-Governor Specific and Election Status specific LGA Fixed Effects

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: without elected LGCs										
LGC Statutory Allocations	0.170**	0.080*	0.134**	-0.013	0.046	0.172***	0.039	-0.007	0.053*	0.155***
	(0.075)	(0.041)	(0.056)	(0.044)	(0.040)	(0.056)	(0.033)	(0.016)	(0.032)	(0.053)
Observations	50021	50021	50021	50021	50021	50021	50021	50021	50021	50021
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0294	.0112	.0152	.0047	.0109	.0193	.00496	.0011	.00774	.0127
Panel B: with elected LGCs										
LGC Statutory Allocations	0.193***	0.067**	0.106***	0.046*	0.060**	0.113***	0.045*	0.005	0.035*	0.082***
	(0.059)	(0.029)	(0.037)	(0.026)	(0.027)	(0.039)	(0.026)	(0.008)	(0.020)	(0.031)
Elected × LGC Statutory Allocations	-0.046	-0.030*	-0.035*	0.010	-0.009	-0.068***	-0.003	-0.005	-0.021	-0.056***
	(0.031)	(0.016)	(0.018)	(0.019)	(0.017)	(0.020)	(0.013)	(0.005)	(0.013)	(0.016)
Observations	139537	139537	139537	139537	139537	139537	139537	139537	139537	139537
Number of LGCs	768	768	768	768	768	768	768	768	768	768
Mean of DV	.0233	.00895	.011	.00471	.00808	.013	.00489	.000982	.00474	.00812

Notes: Table documents that results are similar when controlling for a separate set of district fixed effects for each state governor and for whether a local government area (LGA) has an elected or appointed local government council (LGC). This amounts to estimating, on average, more than five different sets of LGA fixed effects and introduces a large number of irrelevant controls understandably inflating the variance. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. Panel (A) presents estimation results for periods with an appointed LGC, and Panel (B) includes periods with an elected LGC. The main explanatory variable is the monthly allocation to a LGC. The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A11: Dropping all data from states that may have been impacted by the Boko Haram insurgency: Resource rents and conflict – moderating effect of having an elected local government

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Dropping Yobe, Borno, Adamawa										
LGC Statutory Allocations	0.084***	0.022	0.041***	0.017	0.025*	0.067***	0.007	-0.002	0.018	0.044**
	(0.031)	(0.015)	(0.012)	(0.016)	(0.013)	(0.022)	(0.008)	(0.004)	(0.011)	(0.018)
Elected × LGC Statutory Allocations	-0.044*	-0.012	-0.014	-0.004	-0.015	-0.047**	-0.005	0.005*	-0.022*	-0.027*
	(0.023)	(0.018)	(0.010)	(0.014)	(0.014)	(0.019)	(0.007)	(0.003)	(0.013)	(0.014)
Observations	128883	128883	128883	128883	128883	128883	128883	128883	128883	128883
Number of LGCs	709	709	709	709	709	709	709	709	709	709
Mean of DV	.0229	.00821	.0102	.00542	.00747	.0117	.00493	.00107	.00373	.00708
Panel B: Dropping Yobe, Borno, Adamawa, Niger and Plateau										
LGC Statutory Allocations	0.084***	0.022	0.040***	0.016	0.024*	0.068***	0.006	-0.002	0.019	0.043**
	(0.031)	(0.016)	(0.011)	(0.017)	(0.014)	(0.022)	(0.008)	(0.005)	(0.012)	(0.019)
Elected × LGC Statutory Allocations	-0.047**	-0.012	-0.013	-0.006	-0.017	-0.051**	-0.005	0.006*	-0.025*	-0.026*
	(0.024)	(0.019)	(0.010)	(0.014)	(0.015)	(0.020)	(0.007)	(0.003)	(0.014)	(0.014)
Observations	121239	121239	121239	121239	121239	121239	121239	121239	121239	121239
Number of LGCs	667	667	667	667	667	667	667	667	667	667
Mean of DV	.0226	.008	.00974	.00552	.00734	.0116	.00428	.00112	.00372	.00695

Notes: Table presents regression results suggesting that the observed effects are robust to dropping data pertaining to states that may have been affected by the Boko Haram insurgency. All regressions control for local government area (LGA) by elected status and state by time fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The main explanatory variable is the monthly revenue allocation to a local government council (LGC). The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A12: LGC Extraordinary Allocations and Conflict

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: OLS										
LGC Extra Allocations	0.077**	0.046*	0.026	0.029	0.030	0.074***	-0.009	-0.013*	0.025	0.042**
	(0.034)	(0.025)	(0.016)	(0.021)	(0.021)	(0.024)	(0.008)	(0.007)	(0.019)	(0.019)
Elected × LGC Extra Allocations	-0.038	-0.037	-0.014	0.000	-0.030	-0.061*	0.007	0.015**	-0.037	-0.028*
	(0.036)	(0.036)	(0.013)	(0.009)	(0.027)	(0.032)	(0.010)	(0.007)	(0.022)	(0.016)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel B: IV										
LGC Extra Allocations	0.563**	0.231**	0.324**	0.079	0.299**	0.441**	0.100	-0.018	0.208**	0.293**
	(0.252)	(0.109)	(0.147)	(0.068)	(0.137)	(0.196)	(0.061)	(0.025)	(0.101)	(0.146)
Elected × LGC Extra Allocations	-0.421**	-0.208**	-0.208*	-0.069	-0.277**	-0.341**	-0.087	0.038	-0.201**	-0.220*
	(0.208)	(0.096)	(0.123)	(0.070)	(0.128)	(0.167)	(0.056)	(0.026)	(0.096)	(0.128)
Kleibergen-Paap weak IV	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828

Notes: Table focuses on the extraordinary revenue allocations as a shock measure contrasting with the automatically triggered statutory allocations studied in the main paper. All regressions control for local government area (LGA) by elected status fixed effects and state by time fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The variable *LGC Extra Allocations* indicates the extraordinary allocations to each local government council (LGC) from the Excess Crude Account (ECA) on a monthly basis. Extraordinary allocations are based on idiosyncratic political decisions. The variable *Elected* indicates whether an LGC is elected or appointed in a given month. The instrumental variable estimation in Panel (B) uses the index weight interacted with the oil price as instrument. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A13: Effect of Resource rents on civil conflict: Alternative conflict data

	ACLED			UCDP GED		GTD	
	(1) Events	(2) Fatalities	(3) Non Boko Haram	(4) Events	(5) Fatalities	(6) Events	(7) Fatalities
Panel A: Any conflict							
LGC Statutory Allocations	0.279***	0.206***	0.100***	0.166***	0.140***	0.159***	0.144***
	(0.061)	(0.045)	(0.027)	(0.046)	(0.039)	(0.042)	(0.040)
Elected × LGC Statutory Allocations	-0.063**	-0.060***	-0.030***	-0.071***	-0.069***	-0.073***	-0.068***
	(0.027)	(0.021)	(0.011)	(0.023)	(0.021)	(0.022)	(0.020)
Observations	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774
Mean of DV	.0239	.0121	.0106	.00703	.00465	.00767	.00671
Panel B: Levels							
LGC Statutory Allocations	0.642***	5.705***	0.122***	0.424**	3.444**	0.344***	4.509*
	(0.190)	(1.825)	(0.036)	(0.186)	(1.411)	(0.121)	(2.601)
Elected × LGC Statutory Allocations	-0.143	-3.017***	-0.044***	-0.224**	-2.257***	-0.186***	-3.160***
	(0.098)	(1.049)	(0.016)	(0.100)	(0.865)	(0.062)	(1.192)
Observations	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774
Mean of DV	.0405	.224	.0134	.0133	.0735	.0127	.189

Notes: Table documents that we find similar results when studying alternative conflict event data. The dependent variable in columns (1)–(3) is based on the ACLED data; in columns (4)–(5) on the Uppsala Conflict Data Program Geo-referenced Event Data, and in columns (6)–(7) on the Global Terrorism Database. All regressions control for time fixed effects and local government area (LGA) fixed effects. Columns (1), (4), and (6) indicate any conflict event; columns (2), (5), and (7) indicate the number of fatalities in conflict; column (3) only includes conflict events that are *not* associated with the Jihadist militant organization "Boko Haram" in northeastern Nigeria. The variable *LGC Statutory Allocations* captures the monthly revenue allocations to each local government council (LGC). The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Panel (A) reports results for any conflict event, and Panel (B) conflict levels. Standard errors in parentheses are adjusted for clustering by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A14: Effect of Resource rents on civil conflict: Different transformations of dependent variables

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Any conflict										
LGC Statutory Allocations	0.030*	0.022*	0.041***	0.018*	0.031**	0.044***	0.013	0.001	0.040***	0.035***
	(0.016)	(0.013)	(0.014)	(0.011)	(0.015)	(0.016)	(0.011)	(0.004)	(0.013)	(0.013)
Elected × LGC Statutory Allocations	-0.020	-0.002	-0.031***	-0.002	-0.017	-0.020	-0.008	0.004	-0.023**	-0.028**
	(0.015)	(0.012)	(0.012)	(0.009)	(0.011)	(0.013)	(0.012)	(0.003)	(0.011)	(0.011)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.139	.0689	.079	.0341	.0599	.0889	.0415	.00728	.0366	.0614
Panel B: Levels										
LGC Statutory Allocations	0.626***	0.174***	0.252***	0.071	0.218***	0.427***	0.079**	0.010	0.166***	0.227***
	(0.192)	(0.062)	(0.072)	(0.059)	(0.071)	(0.145)	(0.035)	(0.008)	(0.059)	(0.080)
Elected × LGC Statutory Allocations	-0.130	-0.069**	-0.089***	0.048	-0.070**	-0.201***	0.011	-0.000	-0.084***	-0.106***
	(0.079)	(0.027)	(0.029)	(0.034)	(0.031)	(0.059)	(0.014)	(0.003)	(0.027)	(0.031)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.516	.153	.189	.0968	.149	.262	.0875	.0145	.0868	.142
Panel C: log(Levels per capita)										
LGC Statutory Allocations	0.121***	0.053***	0.082***	0.019	0.072***	0.102***	0.027**	0.005	0.059***	0.068***
	(0.026)	(0.015)	(0.017)	(0.013)	(0.016)	(0.024)	(0.013)	(0.004)	(0.013)	(0.018)
Elected × LGC Statutory Allocations	-0.032***	-0.016**	-0.029***	0.011	-0.023***	-0.042***	0.003	-0.000	-0.026***	-0.032***
	(0.010)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)	(0.006)	(0.001)	(0.006)	(0.007)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	-.315	-.412	-.4	-.443	-.419	-.386	-.439	-.473	-.444	-.42
Panel C: Levels per capita										
LGC Statutory Allocations	0.173	0.082**	0.079*	-0.019	0.078*	0.156*	0.034**	0.003	0.071*	0.076
	(0.108)	(0.039)	(0.044)	(0.024)	(0.047)	(0.093)	(0.016)	(0.004)	(0.040)	(0.049)
Elected × LGC Statutory Allocations	-0.091*	-0.043**	-0.049**	0.013	-0.048**	-0.108***	0.002	0.001	-0.050***	-0.054***
	(0.048)	(0.019)	(0.019)	(0.015)	(0.021)	(0.041)	(0.007)	(0.002)	(0.019)	(0.020)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.31	.0952	.116	.0534	.0898	.166	.0529	.00816	.0563	.0892

Notes: Table presents regression results documenting that we find similar results when exploring different transformations of the dependent variable. To study the intensive margin the data is aggregated to the yearly level. All regressions control for local government area (LGA) by time fixed effects. The variable *LGC Statutory Allocations* captures the monthly revenue allocations to each local government council (LGC). The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Standard errors in parentheses are adjusted for clustering by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A15: Different temporal resolution of the data

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Annual										
LGC Statutory Allocations	0.030*	0.022*	0.041***	0.018*	0.031**	0.044***	0.013	0.001	0.040***	0.035***
	(0.016)	(0.013)	(0.014)	(0.011)	(0.015)	(0.016)	(0.011)	(0.004)	(0.013)	(0.013)
Elected × LGC Statutory Allocations	-0.020	-0.002	-0.031***	-0.002	-0.017	-0.020	-0.008	0.004	-0.023**	-0.028**
	(0.015)	(0.012)	(0.012)	(0.009)	(0.011)	(0.013)	(0.012)	(0.003)	(0.011)	(0.011)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.139	.0689	.079	.0341	.0599	.0889	.0415	.00728	.0366	.0614
Panel B: Quarterly										
LGC Statutory Allocations	0.091***	0.042**	0.079***	0.019	0.062***	0.093***	0.034**	0.003	0.051***	0.069***
	(0.032)	(0.019)	(0.021)	(0.021)	(0.022)	(0.028)	(0.013)	(0.005)	(0.018)	(0.024)
Elected × LGC Statutory Allocations	-0.039	-0.020	-0.033**	-0.003	-0.036**	-0.041**	-0.021	0.005	-0.033**	-0.036**
	(0.025)	(0.017)	(0.017)	(0.018)	(0.016)	(0.020)	(0.013)	(0.004)	(0.015)	(0.018)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0566	.0236	.0287	.0133	.0218	.0327	.0134	.00251	.0127	.0212
Panel C: Monthly										
LGC Statutory Allocations	0.160***	0.055**	0.099***	0.014	0.072**	0.136***	0.039**	0.003	0.059**	0.094**
	(0.053)	(0.028)	(0.034)	(0.026)	(0.029)	(0.044)	(0.016)	(0.006)	(0.025)	(0.038)
Elected × LGC Statutory Allocations	-0.081**	-0.030	-0.044	-0.001	-0.037	-0.084**	-0.027*	0.006	-0.047**	-0.062**
	(0.041)	(0.025)	(0.027)	(0.023)	(0.024)	(0.033)	(0.016)	(0.004)	(0.021)	(0.028)
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0251	.0093	.0116	.00566	.0087	.0137	.00519	.000936	.00509	.00862

Notes: Table presents results documenting that the results are robust to studying different temporal resolutions of the data. Panel A focuses on annual aggregation of the data; panel B focuses on quarterly while Panel C focuses on monthly data. All regressions control for time fixed effects and local government area (LGA) fixed effects. The variable *LGC Statutory Allocations* captures the monthly revenue allocations to each local government council (LGC). The variable *Elected* indicates whether an LGC is elected or appointed in a given month. Panel (A) reports results for an annual resolution of the data, Panel (B) for a quarter yearly resolution, and Panel (C) for a monthly resolution. Standard errors in parentheses are adjusted for clustering by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A16: Effect of Resource rents on civil conflict: Alternative functional forms to account for count data

		Type of Event			Groups involved				Between pol militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol Militia	(7) Comm militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: OLS										
LGC Allocations	0.853***	0.220***	0.343***	0.134**	0.266***	0.530***	0.111***	0.011	0.193***	0.290***
	(0.211)	(0.068)	(0.079)	(0.066)	(0.072)	(0.156)	(0.041)	(0.010)	(0.060)	(0.087)
Elected x LGC Allocations	-0.147*	-0.075***	-0.093***	0.043	-0.075**	-0.207***	0.010	-0.002	-0.086***	-0.108***
	(0.076)	(0.027)	(0.030)	(0.033)	(0.030)	(0.058)	(0.014)	(0.003)	(0.026)	(0.031)
Observations	12369	12369	12369	12369	12369	12369	12369	12369	12369	12369
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.516	.153	.189	.0968	.149	.262	.0875	.0145	.0868	.142
Panel B: Poisson										
LGC Allocations	0.430**	0.459	0.601**	0.153	0.312	0.568*	0.382	1.005**	0.459	0.597*
	(0.208)	(0.285)	(0.296)	(0.186)	(0.253)	(0.319)	(0.406)	(0.499)	(0.434)	(0.353)
Elected x LGC Allocations	-0.071	-0.129	-0.152	0.010	-0.129	-0.211**	0.119	0.105	-0.224	-0.218**
	(0.081)	(0.108)	(0.100)	(0.073)	(0.110)	(0.101)	(0.135)	(0.263)	(0.143)	(0.109)
Observations	8257	5498	6215	2726	4999	6452	4234	552	3578	5143
Number of LGCs	517	344	389	195	313	404	265	46	224	322
Mean of DV	.773	.344	.376	.439	.368	.501	.256	.324	.3	.342
Panel C: NB										
LGC Allocations	0.160**	0.176*	0.320***	0.263	0.229**	0.207**	0.116	0.629	0.260*	0.314***
	(0.066)	(0.095)	(0.097)	(0.173)	(0.103)	(0.086)	(0.117)	(0.506)	(0.141)	(0.119)
Elected x LGC Allocations	-0.062	-0.038	-0.102*	0.051	-0.115*	-0.089	0.043	0.009	-0.165*	-0.139**
	(0.043)	(0.064)	(0.058)	(0.082)	(0.066)	(0.054)	(0.087)	(0.256)	(0.088)	(0.066)
Observations	8257	5498	6215	3114	4999	6452	4234	736	3578	5143
Number of LGCs	517	344	389	195	313	404	265	46	224	322
Mean of DV	.773	.344	.376	.384	.368	.501	.256	.243	.3	.342

Notes: Table presents regression results documenting that the main results are robust to alternative functional forms. All regressions control for local government area (LGA) and time fixed effects fixed effects. The dependent variables throughout are the count number of conflict events per LGA and year for the period covering 1999-2014. The dependent variable includes the count number of (1) violent conflict events defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The variable *LGC Allocations* captures the monthly revenue allocations to each local government council (LGC). The variable *Elected* indicates whether a LGC is elected or appointed in a given month. Panel (B) employs a Poisson estimation, and Panel (C) a negative-binomial estimation. Standard errors in parentheses are adjusted for clustering by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A17: Robustness: Controlling flexibly for formula inputs

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Population Weight Decile x Time FE										
LGC Statutory Allocations	0.096	0.117**	0.117*	-0.075	0.098*	0.160**	0.022	-0.012	0.115***	0.134**
	(0.090)	(0.053)	(0.061)	(0.059)	(0.052)	(0.071)	(0.033)	(0.010)	(0.044)	(0.062)
Elected × LGC Statutory Allocations	-0.099	-0.086*	-0.075	0.007	-0.090*	-0.131*	-0.031	0.029**	-0.094**	-0.115**
	(0.080)	(0.044)	(0.058)	(0.051)	(0.050)	(0.067)	(0.022)	(0.013)	(0.045)	(0.057)
Elected	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(0.000)	(.)	(0.000)	(.)	(.)	(.)	(0.000)
Constant	0.016	-0.005	-0.004	0.020*	-0.001	-0.004	0.004	-0.000	-0.007	-0.005
	(0.013)	(0.008)	(0.008)	(0.012)	(0.008)	(0.009)	(0.005)	(0.001)	(0.006)	(0.008)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel B: Landmass Weight Decile x Time FE										
LGC Statutory Allocations	0.185**	0.079**	0.113**	0.019	0.098**	0.149**	0.044*	-0.014	0.062*	0.118**
	(0.072)	(0.038)	(0.050)	(0.032)	(0.041)	(0.058)	(0.024)	(0.009)	(0.034)	(0.050)
Elected × LGC Statutory Allocations	-0.110	-0.061	-0.065	-0.007	-0.064	-0.100*	-0.042**	0.029***	-0.057	-0.094*
	(0.067)	(0.038)	(0.047)	(0.043)	(0.043)	(0.057)	(0.018)	(0.011)	(0.038)	(0.049)
Elected	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(.)	(.)	(0.000)	(.)	(.)	(.)	(.)	(0.000)	(.)
Constant	-0.001	0.000	-0.004	0.002	-0.004	-0.005	0.001	0.000	-0.001	-0.005
	(0.012)	(0.005)	(0.007)	(0.007)	(0.006)	(0.008)	(0.004)	(0.001)	(0.004)	(0.006)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel C: Public Good Access Index Deciles x Time FE										
LGC Statutory Allocations	0.198**	0.109**	0.102**	0.018	0.111**	0.166***	0.052**	-0.014	0.089**	0.112**
	(0.076)	(0.046)	(0.052)	(0.032)	(0.044)	(0.062)	(0.025)	(0.009)	(0.039)	(0.053)
Elected × LGC Statutory Allocations	-0.123*	-0.083*	-0.050	-0.012	-0.080*	-0.113*	-0.044**	0.027***	-0.076*	-0.085*
	(0.071)	(0.043)	(0.049)	(0.043)	(0.045)	(0.059)	(0.020)	(0.010)	(0.040)	(0.051)
Elected	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(0.000)	(.)	(0.000)	(.)	(.)	(0.000)
Constant	-0.002	-0.003	-0.004	0.003	-0.005	-0.007	-0.000	0.000	-0.004	-0.004
	(0.011)	(0.006)	(0.007)	(0.006)	(0.006)	(0.008)	(0.004)	(0.001)	(0.005)	(0.006)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel D: Water supply spread Index Deciles x Time FE										
LGC Statutory Allocations	0.185**	0.079**	0.113**	0.019	0.098**	0.149**	0.044*	-0.014	0.062*	0.118**
	(0.072)	(0.038)	(0.050)	(0.032)	(0.041)	(0.058)	(0.024)	(0.009)	(0.034)	(0.050)
Elected × LGC Statutory Allocations	-0.110	-0.061	-0.065	-0.007	-0.064	-0.100*	-0.042**	0.029***	-0.057	-0.094*
	(0.067)	(0.038)	(0.047)	(0.043)	(0.043)	(0.057)	(0.018)	(0.011)	(0.038)	(0.049)
Elected	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(.)	(.)	(0.000)	(.)	(.)	(.)	(.)	(0.000)	(.)
Constant	-0.001	0.000	-0.004	0.002	-0.004	-0.005	0.001	0.000	-0.001	-0.005
	(0.012)	(0.005)	(0.007)	(0.007)	(0.006)	(0.008)	(0.004)	(0.001)	(0.004)	(0.006)
Observations	140713	140713	140713	140713	140713	140713	140713	140713	140713	140713
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0239	.00906	.0112	.00507	.0084	.0133	.00491	.000981	.00487	.00828
Panel E: Hospital beds Index Deciles x Time FE										
LGC Statutory Allocations	0.206***	0.114***	0.139***	0.007	0.118***	0.180***	0.055**	-0.010	0.095**	0.134***
	(0.071)	(0.043)	(0.048)	(0.029)	(0.041)	(0.059)	(0.024)	(0.008)	(0.038)	(0.050)

Table A18: Validation of measure of exclusion of ethnic groups

	Alignment with ethnic group of state governor			
	(1)	(2)	(3)	(4)
Panel A: Own ethnic group treated unfairly (dummy)				
Person not aligned with governor's ethnicity	0.046***	0.034**	0.042***	0.026*
	(0.012)	(0.014)	(0.013)	(0.015)
Observations	15980	15980	15978	15978
Number of LGCs	579	579	577	577
Mean of DV	.803	.803	.803	.803
Panel B: Own ethnic group treated unfairly				
Person not aligned with governor's ethnicity	0.117***	0.086***	0.085***	0.045
	(0.029)	(0.033)	(0.032)	(0.038)
Observations	15980	15980	15978	15978
Number of LGCs	579	579	577	577
Mean of DV	3.32	3.32	3.32	3.32
State FE	X	X		
LGA FE			X	X
Time FE		X		X

Notes: The explanatory variable measures whether a respondent perceives the own ethnic group treated unfairly on a 4-point Likert scale (Panel A), or at least sometimes (Panel B) to be treated unfairly by the government. The dependent variable indicates whether a respondent is of the same ethnic group as the state governor. Standard errors in parentheses are clustered by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A19: LGC Allocations and Grievances towards National Political Institutions

	Approval of MP		National MP's are corrupt		Trust in National Assembly	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 6 months						
LGC Allocations 6 months prior to survey	-0.163	-0.161	0.067	0.040	-0.169	-0.162
	(0.117)	(0.112)	(0.135)	(0.135)	(0.118)	(0.128)
Elected × LGC Allocations 6 months prior to survey	0.044	0.042	0.115	0.128	0.033	0.034
	(0.100)	(0.095)	(0.101)	(0.101)	(0.087)	(0.090)
Observations	12624	11237	8993	8868	12943	11495
Number of LGCs	575	574	522	522	573	572
Mean of DV	2.83	2.9	3.73	3.73	2.51	2.59
Panel B: 12 months						
LGC Allocations 12 months prior to survey	-0.080	-0.077	0.023	0.008	-0.081	-0.078
	(0.057)	(0.055)	(0.066)	(0.066)	(0.057)	(0.060)
Elected × LGC Allocations 12 months prior to survey	0.026	0.024	0.048	0.055	0.017	0.018
	(0.047)	(0.045)	(0.048)	(0.047)	(0.041)	(0.042)
Observations	12624	11237	8993	8868	12943	11495
Number of LGCs	575	574	522	522	573	572
Mean of DV	2.83	2.9	3.73	3.73	2.51	2.59
Panel C: 18 months						
LGC Allocations 18 months prior to survey	-0.059	-0.055	0.020	0.011	-0.058	-0.055
	(0.038)	(0.036)	(0.046)	(0.045)	(0.040)	(0.041)
Elected × LGC Allocations 18 months prior to survey	0.021	0.019	0.027	0.031	0.015	0.015
	(0.031)	(0.029)	(0.032)	(0.032)	(0.028)	(0.029)
Observations	12624	11237	8993	8868	12943	11495
Number of LGCs	575	574	522	522	573	572
Mean of DV	2.83	2.9	3.73	3.73	2.51	2.59
Respondent controls		X		X		X

Notes: All regressions control for time fixed effects and local government area (LGA) fixed effects. The dependent variable in columns (1)–(2) indicates how much a respondent approves of the performance of the Members of Parliament at the federal government level; in columns (3)–(4) it captures perception of corruption of Members of Parliament; columns (5)–(6) indicates how much a respondent trusts the National Assembly. The variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. Respondent controls include the respondents age, educational attainment, employment status, gender and an indicator whether the household lives in an urban area. Standard errors in parentheses are clustered by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A20: LGC Allocations and Grievances towards State level Political institutions

	Approval State Governor		State Assembly corrupt		Trust State governor	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 6 months						
LGC Allocations 6 months prior to survey	-0.660*	-0.235	1.613	1.393	-0.292	-0.316
	(0.400)	(0.373)	(1.600)	(1.549)	(0.271)	(0.303)
Elected × LGC Allocations 6 months prior to survey	0.120	-0.074	0.170	0.081	0.126	0.174
	(0.311)	(0.271)	(1.746)	(1.720)	(0.226)	(0.259)
Observations	4327	3596	2340	2301	6537	5157
Number of LGCs	309	309	198	198	359	358
Mean of DV	2.82	2.92	3.68	3.68	2.39	2.48
Panel B: 12 months						
LGC Allocations 12 months prior to survey	-0.288	-0.090	-0.841	-0.678	-0.119	-0.130
	(0.190)	(0.176)	(2.328)	(2.526)	(0.123)	(0.139)
Elected × LGC Allocations 12 months prior to survey	0.044	-0.042	0.644	0.516	0.048	0.071
	(0.145)	(0.127)	(0.973)	(1.003)	(0.103)	(0.119)
Observations	4327	3596	2340	2301	6537	5157
Number of LGCs	309	309	198	198	359	358
Mean of DV	2.82	2.92	3.68	3.68	2.39	2.48
Panel C: 18 months						
LGC Allocations 18 months prior to survey	-0.195	-0.073	1.447	1.202	-0.090	-0.097
	(0.122)	(0.111)	(1.008)	(0.983)	(0.080)	(0.089)
Elected × LGC Allocations 18 months prior to survey	0.027	-0.026	0.312	0.290	0.044	0.059
	(0.094)	(0.081)	(0.606)	(0.607)	(0.066)	(0.076)
Observations	4327	3596	2340	2301	6537	5157
Number of LGCs	309	309	198	198	359	358
Mean of DV	2.82	2.92	3.68	3.68	2.39	2.48
Respondent controls		X		X		X

Notes: All regressions control for time fixed effects and local government area (LGA) fixed effects. The dependent variable in columns (1)–(2) indicates how much a respondent approves of the performance of the State Governor; in columns (3)–(4) it captures perception of corruption among members of the State assembly; columns (5)–(6) indicates how much a respondent trust the state governor. The variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. Respondent controls include the respondents age, educational attainment, employment status, gender and an indicator whether the household lives in an urban area. Standard errors in parentheses are clustered by LGA with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A21: Continuous measure of non-aligned ethnic group share - Inclusion of Ethnic Groups Through Elections and Conflict: Estimation of effect on conflict levels

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Level effect										
Elected	-0.007**	-0.004**	-0.006***	0.001	-0.004**	-0.009***	0.001	-0.001	-0.005***	-0.007***
	(0.003)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)
Observations	148428	148428	148428	148428	148428	148428	148428	148428	148428	148428
Number of LGCs	774	774	774	774	774	774	774	774	774	774
Mean of DV	.0251	.0093	.0116	.00566	.0087	.0137	.00519	.000936	.00509	.00862
Panel B: Ethnic alignment heterogenous effect										
Elected	-0.007**	-0.004**	-0.006***	0.002	-0.005**	-0.009***	0.001	-0.001	-0.006***	-0.007***
	(0.003)	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.001)	(0.001)	(0.002)	(0.002)
Elected × Non-aligned ethnic group	-0.015***	-0.005*	-0.011***	-0.003**	-0.007**	-0.012***	-0.004**	0.002**	-0.006**	-0.011***
	(0.005)	(0.003)	(0.003)	(0.002)	(0.003)	(0.004)	(0.002)	(0.001)	(0.003)	(0.003)
Non-aligned ethnic group	0.004	0.002	0.004	0.001	0.003	0.005	-0.001	-0.000	0.003	0.005
	(0.005)	(0.003)	(0.004)	(0.002)	(0.003)	(0.005)	(0.002)	(0.001)	(0.003)	(0.003)
Observations	131107	131107	131107	131107	131107	131107	131107	131107	131107	131107
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0257	.00959	.0121	.00551	.00864	.0141	.00542	.00103	.00507	.00901

Notes: All regressions control for local government area (LGA) fixed effects and time fixed effects. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The main explanatory variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. The variable *Non-aligned ethnic group* measures the population share that is of a different ethnic group than the state governor. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A22: Continuous measure of non-aligned ethnic group share - Inclusion of Ethnic Groups Through Elections and Conflict: Triple Difference-in-Differences with Allocated Rents

		Type of Event			Groups involved				Between Pol. Militias &...	
	(1) Overall	(2) Battle	(3) Civilian Violence	(4) Protest	(5) Military	(6) Pol. Militia	(7) Comm. Militia	(8) Rebels	(9) Military	(10) Civilians
Panel A: Appointed local governments										
LGC Statutory Allocations	0.336***	0.150***	0.222***	0.010	0.156***	0.310***	0.077***	-0.002	0.140***	0.214***
	(0.093)	(0.054)	(0.062)	(0.037)	(0.052)	(0.081)	(0.028)	(0.007)	(0.046)	(0.066)
Non-aligned ethnic group × LGC Statutory Allocations	0.138***	0.059**	0.118***	-0.003	0.083***	0.128***	0.033***	-0.006	0.071***	0.104***
	(0.041)	(0.024)	(0.030)	(0.018)	(0.025)	(0.035)	(0.012)	(0.004)	(0.023)	(0.028)
Observations	45789	45789	45789	45789	45789	45789	45789	45789	45789	45789
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0303	.0117	.016	.00467	.0112	.02	.00524	.0012	.00795	.0133
Panel B: including interaction terms										
LGC Statutory Allocations	0.263***	0.108***	0.168***	0.029	0.122***	0.213***	0.044*	0.007	0.095***	0.145***
	(0.068)	(0.035)	(0.040)	(0.024)	(0.033)	(0.053)	(0.024)	(0.005)	(0.027)	(0.040)
Elected × LGC Statutory Allocations	-0.076**	-0.058***	-0.064***	0.021	-0.044**	-0.119***	0.005	0.003	-0.059***	-0.088***
	(0.032)	(0.020)	(0.021)	(0.016)	(0.020)	(0.028)	(0.011)	(0.005)	(0.018)	(0.022)
Non-aligned ethnic group × LGC Statutory Allocations	0.149***	0.064**	0.126***	-0.003	0.088***	0.139***	0.036***	-0.006	0.076***	0.112***
	(0.041)	(0.025)	(0.031)	(0.018)	(0.025)	(0.036)	(0.012)	(0.004)	(0.024)	(0.029)
Elected × Non-aligned ethnic group × LGC Statutory Allocations	-0.174***	-0.060**	-0.122***	-0.035	-0.078***	-0.118***	-0.050***	0.005	-0.062***	-0.092***
	(0.047)	(0.028)	(0.032)	(0.024)	(0.028)	(0.036)	(0.017)	(0.006)	(0.024)	(0.029)
Observations	127130	127130	127130	127130	127130	127130	127130	127130	127130	127130
Number of LGCs	706	706	706	706	706	706	706	706	706	706
Mean of DV	.0243	.00934	.0115	.00491	.00836	.0135	.00515	.00106	.00485	.00857

Notes: All regressions control for local government area (LGA) by election status fixed effects and time fixed effects. Panel A is estimated off the sample with appointed local governments and includes LGA fixed effects, while Panel B includes the periods with elected local governments and a separate set of LGA fixed effects for periods in which governments are elected. The dependent variable includes (1) any violent conflict event defined as the use of force by a group with a political purpose. *Type of events* include (2) battles defined as violent interactions between two politically organized armed groups; (3) violence involving civilians are violent acts by an organized political group against unarmed non-combatants; (4) protests are demonstrations and spontaneous acts of violence by disorganised groups. Columns (5)–(8) include the specific *groups involved*; (6) political militias are armed agents to influence political processes; (7) communal militias are (ethnic or religious) groups engaged in local political competition; (8) rebels are political organizations to counter an established national government. Columns (9)–(10) present results for the specific *dyadic interaction of actors involved*. The variable *Elected* indicates whether a local government council (LGC) is elected or appointed in a given month. The variable *Non-aligned ethnic group* measures the population share that is of a different ethnic group than the state governor. *LGC Allocations* captures the monthly revenue allocation to an LGC. Standard errors in parentheses are adjusted for two way clustering by LGA and time with stars indicating *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.