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The Role of Ethnic Characteristics in the Effect of Income Shocks on African Conflict

——Appendix: Data Definitions, Descriptive Statistics, Main and Robustness Tables, and Additional Figures. —-

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1 Data Description and Sources

1.1 Structure of the dataset. Our baseline unit of analysis is a full grid of Africa divided into sub-national units of 0.5 x 0.5 grades latitude and longitude (which corresponds to a cell of roughly 55 x 55 kilometers at the equator). This is the result of intersecting grid cells provided by the PRIO-GRID¹ structure, with a map of the entire Africa and their national political borders provided by The Global Administrative Unit Layers (2010), a project from the United Nations Food and Agricultural Organization (FAO). The use of the PRIO-GRID allows us to easily include cell specific data from this dataset. All conflict events are aggregate at the level of the cell. Administrative boundaries are taken at the end of our sample period. The country which stands for the largest share of a cell's area is assigned to this cell.

1.2 Conflict events. We make use of two different datasets containing the geo-location of conflict events in Africa: the UCDP-Georeferenced Event Dataset (UCDP-GED), version 5.0 (Croicu and Sundberg, 2016), and the Armed Conflict Location and Event Dataset (ACLED Dataset) (Raleigh et al., 2017). These data cover different countries and time periods. The events are collected from various sources, including humanitarian agents, research publications, and local, regional or international press news. In each dataset the unit of observation is the event. They contain latitude and longitude information, and the precise day (in most cases) of conflict events. UCDP defines an event as an incident where armed force was used by an organised actor against another organized actor, or against civilians, resulting in at least 1 direct death at a specific location and a specific date. In addition, only events linkable to a UCDP/PRIO Armed Conflict (or State Conflict), a UCDP Non-State Conflict or a UCDP One-Sided Violence instance are included are recorded separately. Events are included for the entire period of consecutive years during which conflicts were active as long as at least one of those years have crossed the 25 battle related deaths threshold.

¹http://www.prio.no/Data/PRIO-GRID/

Meanwhile, the ACLED Dataset registers "a range of violent and non-violent actions by political agents, including governments, rebels, militias, communal groups, political parties, rioters, protesters and civilians". In a broader perspective, ACLED records violent activity both within and outside the context of a civil war. To that end, there is not specifically a battle-related deaths threshold.

More specifically, we consider the following dependent variables:

- UCDP incidence. We aggregate to the cell-year level, coding the variable as one if any conflict from UCDP data took place, zero otherwise.
- ACLED riots. We aggregate to the cell-year level, coding the variable as one if conflicts from ACLED data took place defined as "a protest [that] describes a non-violent, group public demonstration, often against a government institution", and zero otherwise.
- ACLED violence against civilians. We aggregate to the cell-year level, coding the variable as one if conflicts from ACLED data took place defined as "violence against civilians [that] occurs when any armed/violent group attacks civilians", and zero otherwise. "By definition, civilians are unarmed and not engaged in political violence. Rebels, governments, militias, rioters can all commit violence against civilians."
- ACLED battles. We aggregate to the cell-year level, coding the variable as one if conflicts from ACLED data took place defined as "battle-no change of territory", "battle-non-state actor overtakes territory" and "battle-government regains territory", and zero otherwise.

1.3 Crop cover data.

• Agricultural commodities: FAO-GAEZ. Following the approximation of Berman and Couttenier (2015), we consider as our main crop database the FAO's Global Agro-Ecological Zones (GAEZ). Specifically, the "GAEZ modeling framework for crop potential assessment using detailed agronomic-based knowledge

to assess land suitability, potential attainable yields and potential production of crops for specified management assumptions and input levels, both for rain-fed and irrigated conditions". Suitability is defined as the percentage of potential production capacity that could be attained in each cell.

For our 18 crops, we have considered the data that corresponding to low input levels conditions. Which means that yields are based on the use of traditional ways of farming without any additional mechanical, chemical or irrigation methods (only rain-fed cases). The model is applied considering the average climate conditions of the baseline period 1961-1990. A cell is suitable for crop production if it could achieve at least 40% of its maximum capacity.

• Alternative crop production database: M3 crops. Data on the actual production of agricultural crops in each cell is drawn from the M3-Crops dataset by Monfreda et al. (2008).² Total production is the crop production in metric tons per hectare of a grid cell. We aggregate the raster information for production at the 5 arc minutes x 5 arc minutes resolution (about 9.2 km x 9.2 km at the equator) at the resolution of our grid structure. Thus, we match the crop maps raster with our grid structure, taking the statistical medium value of each crop on each cell.

1.4 FAO food balance sheets: Consumer prices index. We construct our Consumer Price Index taking the approximation of McGuirk and Burke (2020). In particular, we use country-level data on food consumption patterns from the FAO Balance Sheets. This webpage gives complete information concerning three components of a particular country's food system: "1) Domestic food supply of the food commodities in terms of production, imports, and stock changes. 2) Domestic food utilization which includes feed, seed, processing, waste, export, and other uses. And 3) per capita values for the supply of all food commodities (in kilograms per person per year) and the calories, protein and fat content. Annual food balance sheets show the trends in the overall national food supply, disclose changes that may have taken place in the types of

²http://www.earthstat.org/

food consumed, and reveal the extent to which the food supply of the country is adequate in relation to nutritional requirements." For each type of commodity, "the food consumption is constructed as the calorie per person and per day available for human consumption" (McGuirk and Burke, 2020, pg. 23). Besides, we have also followed the methodology of these authors constructing time-invariant consumption shares based on averages of the series 1990-2013 because of possible lack in the quality of the data.

1.5 Climate variables.

• Drought SPEI growing season. The variable droughtcrop-speigdm as is cited by PRIO-GRID v.2.0 datasets "gives the proportion of months in the growing season that are part of the longest streak of consecutive months in that growing season with SPEI-I values below -1.5. The growing season is the growing season for the cell's main crop, defined in the MIRCA2000 dataset v.1.1. For growing seasons that cross 1 January, we define the whole season to belong to the year in which the season ended. Thus, a year with two consecutive months below -1.5 during the growing season that started in September the previous year and ended in March in the current year, is given a value of 2/7. Each year only has defined one growing season."

SPEIbase is based on precipitation and potential evapotranspiration PET) from the Climatic Research Unit (CRU) of the University of East Anglia CRU v.3.22. The PET estimation used by CRU is the Penman-Montheith method, considered to be better than the Thornthwaite estimation. Source: Standardized Precipitation and Evapotranspiration Index SPEIbase v.2.3 from the SPEI Global Drought Monitor.

• **Drought SEPI.** The variable droughtyr-speigdm from PRIO-GRID v.2.0 datasets "gives the proportion of months out of 12 months that are part of the longest streak of consecutive months ending in the given year with SPEI-I values below -1.5. For a year where the longest consecutive streak of months below -1.5 is

³This is an original text from http://www.fao.org/economic/ess/fbs/en/.

three, the cell will be given a value of 3/12 = 0.25. When the longest streak starts in the previous year, it is only counted and included in the year in which the streak ended. Theoretically, the proportion can become higher than 1". The original source is SPEI Global Drought Monitor.

- Temperature. Temperature is also taken from PRIO-GRID v.2.0 datasets and "gives the yearly mean temperature (in degrees Celsius) in the cell, based on monthly meteorological statistics from GHCN/CAMS, developed at the Climate Prediction Center, NOAA/National Weather Service". It is based on Y. Fan and H. van den Dool (2008): A global monthly land surface air temperature analysis for 1948-present, Journal of Geophysical Research, 113, D01103, doi:10.1029/2007JD008470.
- Rainfall. "Rainfall gives the yearly total amount of precipitation (in millimeter) in the cell, based on monthly meteorological statistics from the GPCP v.2.2 Combined Precipitation Data Set. Since the original data only reported the daily average for each month, the authors multiplied the daily average by the number of days in each month in order to obtain approximate monthly totals, from which yearly totals were estimated". Definition provided by PRIO-GRID v.2.0 based on G.J. Huffman, D.T. Bolvin and R.F. Adler (2012): Estimating climatological bias errors for the Global Precipitation Climatology Project (GPCP), Journal of Applied Meteorology and Climatology, 51, 84-99. Last updated 2012: GPCP Version 2.2 SG Combined Precipitation Data Set. WDC-A, NCDC, Asheville, NC. Dataset accessed 26.06.2015 at ftp://precip.gsfc.nasa.gov/pub/gpcp-v2.2/psg/

1.6 Ethnicity

• Political status.

Excluded. Excluded accounts for the quantity of excluded groups that are settled in the grid cell for the year 1997. This variable is provided in PRIO-GRID v.2.o and derived from the GeoEPR/EPR 2014 update 2 datasets.

The excluded variable "counts the number of excluded groups (discriminated or powerless)". Powerless means "that elite representatives hold no political power at either national or the regional level without being explicitly discriminated against". On the other hand, discrimination means "that group members are subjected to active, intentional, and targeted discrimination, with the intent of excluding them from both regional and national power. Such active discrimination can be either formal or informal". See Cederman, Wimmer and Min (2010).

- Monopoly. It is a dummy variable which means that a monopoly group is settled in the grid cell for the year 1997. This variable is built matching the settlement areas from Ethnic Power Relations (EPR) Dataset Core 2014 with the grid structure provided in PRIO-GRID v.2.0. Monopoly means "that elite members hold monopoly power in the executive to the exclusion of members of other ethnic groups". See Cederman, Wimmer and Min (2010).
- Spatial ethnic diversity We use data form Geo-referencing Ethnic Power Relation (GeoEPR 2014) from M. Vogt, N.C Bormann, S. Rüegger, L.E. Cederman, P. Hunziker and L. Girardin (2015), Integrating data on ethnicity, geography, and conflict: The ethnic power relations data set family, Journal of Conflict Resolution, 59(7), 1327-1342. It "codes the settlement patterns of politically relevant ethnic groups in independent states with more than 500,000 inhabitants from 1946-2009 based on the group list in the Ethnic Power Relations dataset version 2014". For each grid cell, we construct two diverse types of measures of ethnic diversity: Ethnic Fractionalization and Ethnic Polarization in 1997.
 - Spacial ethnic fractionalization and polarization. The Spatial Ethnic Fractionalization index (EF_i) is based on the standard Herfindahl-Hirschman index of ethnic diversity or fractionalization and equals:

$$EF_i = 1 - \sum_{j=1}^{N} \pi_j^2 = \sum_{j=1}^{N} \pi_j (1 - \pi_j);$$
(1)

where π_i is the proportion of area that belongs to ethnic group j.

The spatial ethnologuistic polarization index (EP), on the other side, equals

$$EP_i = 4\sum_{j=1}^{N} \pi_j^2 (1 - \pi_j).$$
 (2)

- 1.7 Natural resources. In each cell-year, we merge information on Natural Resources from PRIO-GRID v.1.2 and v.2.0 with the U.S. Geological Survey (USGS) dataset. We construct our indexes of Petrol Prices and Mineral Prices with this information. Specifically:
 - Petrol (YES=1). Source: PRIO-GRID v.1.2. It is a dummy variable for whether onshore petroleum deposits have been found within the given grid cell at any time during the period 1990-2013, based on the Petroleum Dataset v.1.2. We merge petrolium deposites with our full grid of Africa.
 - GAS (YES=1). Source: PRIO-GRID v.1.2. It is a dummy variable for whether onshore gas deposits have been found within the given grid cell at any time during the period 1990-2013, based on the Petroleum Dataset v.1.2. We merge gas deposites with our full grid of Africa.
 - OILGAS (YES=1). Source: PRIO-GRID v.1.2 It is a dummy variable for whether jointly onshore petroleum and gas deposits have been found within the given grid cell at any time during the period 1990-2013, based on the Petroleum Dataset v.1.2. We merge petrolium and gas deposites with our full grid of Africa.
 - MINES (YES=1). It is a dummy variable that records the presence of mines from the USGS data. It covers the presence of several types of mineral for active mines until 2003. We define mines=1 in cells where at least a mine has been registered as active in the period after its discovery or known production.
- 1.8 Urban area. Source: PRIO-GRID v. 2.0. "To measure the coverage of urban areas the dataset includes the percentage of urban areas in a cell extracted from the ISAM-HYDE historical land use dataset." In PRIO-GRID, this indicator is available

for the years 1950, 1960, 1970, 1980, 1990, 2000, and 2010. We interpolate these values to build our percentage of urban area in a cell.

2 TABLES

TABLE A1: CONFLICT VARIABLES STATISTICS

Variable	N	Mean	Std. Dev.	Min	Max
UCDP Incidence	170112	0.025	0.157	0	1
Riots and Violence against civilians	170112	0.061	0.240	0	1
$ACLED_Riots$	170112	0.025	0.157	0	1
ACLED_Violence	170112	0.040	0.197	0	1
ACLED_Battles	170112	0.039	0.193	0	1
events UCDP _Incidence	170112	0.110	1.699	0	245
events ACLED_Riots	170112	0.104	2.473	0	779
events ACLED_Violence	170112	0.147	1.903	0	222

TABLE A2: INDEPENDENT VARIABLES

	E AZ. INDI				
Variable	Obs	Mean	Std. Dev.	Min	Max
Ln(APP Index)	170112	1.392	2.029	0	5.918
Drought SPEI GS	170112	0.050	0.565	-8.382	3.272
$Ln(CP\ Index)$	141801	0.231	0.373	-0.380	0.970
Excluded groups	132960	0.494	0.666	0	5
Monopoly groups	132960	0.059	.236	0	1
Fractionalization Index	169488	0.164	0.221	0	0.823
Polarization Index	169488	0.300	0.393	0	1
Urban (% cell)	164704	0.127	0.66	0	23.905
Ln(Mine Price Index)	170112	0.016	0.238	-1.920	6.455
Ln(Petrol&Gas Index)	170112	0.056	0.258	-0.564	1.653
SPEIbase	164144	0.059	0.079	0	0.833
Precipitation	170112	682.84	612.294	0.123	3275.409

Note: From FAO-GAEZ, PRIO-GRID, GeoEPR/EPR 2014, USGS and author's elaboration

TABLE A3: SUMMARY UCDP-GED SAMPLE Country # events Max. # events # events Max. # events Country Algeria Libya Angola Madagascar Benin Malawi BotswanaMali Burkina Faso Mauritania Burundi Morocco Cameroon Mozambique Central African Republic Namibia Chad Niger Congo Nigeria Congo DRC Rwanda Djibouti Senegal Egypt Sierra Leone Equatorial Guinea Somalia EritreaSouth Africa Ethiopia South Sudan Gabon Sudan Gambia Swaziland Ghana Tanzania Guinea Togo Tunisia Guinea-Bissau UgandaIvory Coast Kenya Zambia Lesotho Zimbabwe Liberia

Period 1998-2013. N: Number of observations by country. # events: total number of UCDP events in the country over the sample period.

Max. # events:: maximum number of yearly UCDP events in the country over the sample period.

	TA:	BLE A4: S	SUMMARY AC	LED RIOTS S	SAMPL	E	
Country	N	# events	Max. # events	Country	N	# events	Max. # events
Algeria	13936	535	46	Libya	10448	313	62
Angola	6960	119	19	Madagascar	4064	299	72
Benin	640	59	11	Malawi	624	129	8
Botswana	3280	25	5	Mali 6816	175	37	
Burkina Faso	1392	158	23	Mauritania	5888	33	4
Burundi	176	67	7	Morocco	4480	401	41
Cameroon	2496	68	6	Mozambique	4816	161	17
Central African Republic	3232	23	4	Namibia	4912	285	44
Chad	6256	14	2	Niger	6432	90	8
Congo	1792	95	26	Nigeria	4992	1061	33
Congo DRC	12208	528	45	Rwanda	144	63	12
Djibouti	128	23	6	Senegal	1200	206	35
Egypt	6304	2648	779	Sierra Leone	480	23	5
Equatorial Guinea	192	1	1	Somalia	3872	669	31
Eritrea	816	5	4	South Africa	7728	3830	102
Ethiopia	5952	223	19	South Sudan	615	32	5
Gabon	1488	59	21	Sudan	12825	472	54
Gambia	48	9	4	Swaziland	80	93	31
Ghana	1360	74	7	Tanzania	4960	100	6
Guinea	1360	213	57	Togo	304	142	39
Guinea-Bissau	208	44	7	Tunisia	1168	754	164
Ivory Coast	1808	372	29	Uganda	1280	479	56
Kenya	3072	1363	71	Zambia	4000	478	48
Lesotho	192	3	1	Zimbabwe	2160	587	51
Liberia	592	145	27				

Period 1998-2013. N: Number of observations by country. # events: total number of ACLED riots events in the country over the sample period. Max. # events:: maximum number of yearly riots events in the country over the sample period.

TABLE A5: SUMMARY ACLED VIOLENCE SAMPLE Country Max. # events Max. # events Country # events # events Algeria Libya Angola Madagascar Benin Malawi Botswana ${\rm Mali}$ Burkina Faso Mauritania Burundi MoroccoCameroon Mozambique Central African Republic Namibia Chad Niger CongoNigeria Congo DRC Rwanda Djibouti Senegal Egypt Sierra Leone Equatorial Guinea Somalia Eritrea South Africa South Sudan ${\bf Ethiopia}$ Gabon Sudan Gambia Swaziland Ghana Tanzania Guinea Togo Guinea-Bissau Tunisia Ivory Coast Uganda Kenya Zambia Zimbabwe Lesotho

Period 1998-2013. N: Number of observations by country. # events: total number of ACLED violence events in the country over the sample period. Max. # events:: maximum number of yearly riots violence in the country over the sample period.

Liberia

TABLE A6: C	COMMO	DITY PRIC	CES. CROPS. S	ERIE 199	0-2014
Variable	Obs	Mean	Std. Dev.	Min	Max
bananas	25	1.148	0.374	0.691	1.820
barley	25	1.509	0.615	0.893	2.981
cocoa	25	1.420	0.542	0.713	2.469
coconut oil	25	2.196	0.985	0.945	5.141
coffe	25	1.403	0.598	0.677	3.065
cotton	25	0.893	0.277	0.560	1.873
groundnuts	25	1.017	0.426	0.609	2.172
maize	25	1.326	0.581	0.807	2.731
olive oil	25	1.175	0.283	0.830	1.857
oranges	25	1.283	0.432	0.684	2.085
palm oil	25	2.198	0.995	0.995	4.495
rice	25	1.283	0.536	0.638	2.587
soybeans	25	1.333	0.527	0.770	2.454
sugar	25	0.974	0.207	0.714	1.633
sunflower oil	25	1.380	0.628	0.628	2.806
tea	25	1.140	0.260	0.808	1.717
tobacco	25	1.002	0.203	0.779	1.471
wheat	25	1.271	0.437	0.725	2.117
AgPrices	25	24.718	41.168	0	371.57
-					

TABLE A7: AVER	<u>.AGE OV</u>	ER SERIES	OF FOOD	CROPS:	1990-2013.
Variable	Obs	Mean	Std. Dev.	Min	Max
Average_Bananas	14205	2.265	22.78	0	488.792
Average_Barley	14205	1.109	14.579	0	311.417
Average_Cocoa	14205	0.153	0.940	0	12.417
Average_Coconut	14205	0.836	14.325	0	345.625
Average_Coffee	14205	0.052	0.300	0	3.917
Average_Maize	14205	24.810	124.52	0	1339.75
Average_Nuts	14205	0.564	3.620	0	41.708
Average_OilPalm	14205	4.755	25.320	0	313.208
Average_OliveOil	14205	0.401	4.805	0	93.958
Average_Rice	14205	20.716	106.605	0	1004.875
Average_Sorghum	14205	7.903	48.666	0	679.591
Average_Soybean	14205	0.234	1.769	0	25.750
Average_Sugar	14205	11.461	48.369	0	365.417
Average_Sunflower	14205	1.452	10.997	0	154.625
$Average_Tea$	14205	0.029	0.181	0	2.167
Average_Wheat	14205	23.93	134.325	0	1611.875
Average_Food	14205	32158.23	11267.66	2353	60640
Consumer_Price	14205	1.286	0.071	0.0985	1.934

Food Balance Sheets. Old methodology. Author's elaboration

TABLE A8: CO	OMMODITY	PRICES.	OIL AND	GAS PRICES.	SERIE 1990-2014

Variable	Obs	Mean	Std. Dev.	Min	Max
Natural gas Russian	25	2.721	1.830	0.888	6.456
Natural gas Indonesian	23	2.011	1.333	0.736	4.847
Natural gas Henry Hub terminal in Louisiana	24	2.761	1.490	1	6.112
Medium Price Gas	25	2.462	1.315	1	5.22
Crude Oil Price Medium	25	2.022	1.461	0.569	4.569
PriceGas&Oil	25	2.242	1.371	0.831	4.721

TABLE A9: COMMODITY PRICES. MINERAL PRICES. SERIE 1990-2014

Variable	Obs	Mean	Std. Dev.	Min	Max
aluminum	25	1.064	0.266	0.695	1.610
coal	25	1.424	0.840	0.653	3.433
copper	25	1.503	0.952	0.586	3.315
iron ore	25	3.173	3.569	0.815	11.942
lead	25	1.394	0.934	0.503	3.186
nickel	25	1.443	0.892	0.522	4.190
an	25	1.703	1.157	0.667	4.281
uranium	25	2.756	2.420	0.851	10.191
zinc	25	0.996	0.454	0.513	2.152
gold	25	1.656	1.168	0.707	4.354
DAP	25	1.743	1.163	0.753	5.643
phosrock	25	1.95	1.811	0.815	8.533
platinium	25	1.779	1.047	0.763	3.646
potash	25	2.181	1.628	1	6.425
silver	25	2.196	1.846	.816	7.288
mangense	25	0.949	0.676	0.469	3.559
MineralPrices	25	1.744	1.161	0.793	4.138

TABLE A10: FACTOR CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES.

UCDP FACTOR CONFLICT	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.0200***	-0.0181***	-0.0096***	-0.0086**	-0.0170***	-0.0190***	-0.0175***	-0.0186***	0.0108***	-0.0140***	-0.0110***	-0.0138***
D 1 0DDT 00	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)
Drought SPEI GS	0.0039***	0.0030***	0.0025**	0.0005	0.0040***	0.0033***	0.0039***	0.0033***	0.0029***	0.0011	0.0028**	0.0008
CD I I	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
CP Index		0.0250**		0.0360***		0.0235**		0.0231**		0.0348***		0.0344***
		(0.011)		(0.013)		(0.011)		(0.011)		(0.013)		(0.013)
APP Index x Excluded groups			-0.0223***	-0.0226***					-0.0237***	-0.0269***	-0.0236***	-0.0265***
D 1: GDEL GG E 1 1 1			(0.004)	(0.008)					(0.005)	(0.008)	(0.005)	(0.008)
Drought SPEI GS x Excluded groups			0.0048***	0.0073***					0.0054***	0.0076***	0.0053***	0.0076***
CD I I D I I I			(0.002)	(0.002)					(0.002)	(0.002)	(0.002)	(0.002)
CP Index x Excluded groups				-0.0024						-0.0030		-0.0029
ADD I I M I				(0.004)						(0.004)		(0.004)
APP Index x Monopoly groups			-0.0607*	-0.0879**					-0.0608*	-0.0885**	-0.0609*	-0.0887**
D			(0.033)	(0.038)					(0.033)	(0.038)	(0.033)	(0.038)
Drought SPEI GS x Monopoly groups			-0.0041**	-0.0017					-0.0040**	-0.0019	-0.0040**	-0.0019
CD I1			(0.002)	(0.004)					(0.002)	(0.004)	(0.002)	(0.004)
CP Index x Monopoly groups				0.0260** (0.011)						0.0245** (0.011)		0.0245** (0.011)
APP Index x Ethnic Fraction.				(0.011)	-0.0162*	0.0051			0.0110	0.0379**		(0.011)
AFF Index x Ethnic Fraction.					(0.010)	(0.0131)			(0.011)	(0.015)		
Drought SPEI GS x Ethnic Fraction.					-0.0010	-0.0028			-0.0047	-0.0039		
Drought SFEI GS x Ethine Fraction.					(0.004)	(0.0028			(0.0047	(0.004)		
CP Index x Ethnic Fraction.					(0.004)	0.0107			(0.004)	0.0108		
Of findex x Ethinic Fraction.						(0.008)				(0.008)		
APP Index x Ethnic Polariz.						(0.008)	-0.0075	0.0014		(0.008)	0.0063	0.0195**
THE THREE A LUMING I CHAILE.							(0.006)	(0.008)			(0.006)	(0.008)
Drought SPEI GS x Ethnic Polariz.							-0.0003	-0.0012			-0.0021	-0.0014
Drought of Lr Go & Lumie rotatiz.							(0.002)	(0.002)			(0.0021	(0.002)
CP Index x Ethnic Polariz.							(0.002)	0.0070*			(0.002)	0.0066
or maon i zomno i otoria.								(0.004)				(0.004)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_Probability_FConflict %	2.530%	2.168%	2.530%	2.435%	2.539%	2.176%	2.539%	2.176%	2.539%	2.434%	2.517%	2.434%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP incidence database (INCIDENCE). The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing the for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses.

**** p<0.05, *** p<0.1. Control variables include interactions between the log of oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017), in both cases at t, t-1 and t-2.

TABLE A11: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES.

ACLED CONFLICT	Riots&Violence											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	0.0070	0.0113**	0.0162***	0.0166**	-0.0007	0.0062	0.0003	0.0079	0.0074	0.0054	0.0082	0.0065
	(0.005)	(0.005)	(0.005)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)	(0.006)	(0.007)
Drought SPEI GS	0.0027**	0.0038***	0.0028*	0.0030	0.0039***	0.0059***	0.0038***	0.0056***	0.0038**	0.0046*	0.0037**	0.0041*
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
CP Index		0.00004		0.0251		-0.0051		-0.0054		0.0249		0.0251
		(0.014)		(0.016)		(0.014)		(0.014)		(0.016)		(0.015)
APP Index x Excluded groups			-0.0171***	-0.0078					-0.0275***	-0.0159	-0.0251***	-0.0144
			(0.006)	(0.011)					(0.006)	(0.011)	(0.006)	(0.011)
Drought SPEI GS x Excluded groups			0.0001	0.0018					0.0011	0.0023	0.0009	0.0022
			(0.002)	(0.002)					(0.002)	(0.003)	(0.002)	(0.003)
CP Index x Excluded groups				0.0152***						0.0122**		0.0127**
				(0.005)						(0.006)		(0.006)
APP Index x Monopoly groups			-0.1725***	-0.2179***					-0.1745***	-0.2147***	-0.1746***	-0.2148***
			(0.040)	(0.051)					(0.043)	(0.051)	(0.043)	(0.051)
Drought SPEI GS x Monopoly groups			-0.0015	0.0280					-0.0013	0.0296	-0.0013	0.0297
			(0.006)	(0.029)					(0.006)	(0.029)	(0.006)	(0.029)
CP Index x Monopoly groups				0.0808***						0.0747***		0.0753***
				(0.017)						(0.017)		(0.017)
APP Index x Ethnic Fraction.					0.0415***	0.0386*			0.0733***	0.0778***		
					(0.016)	(0.022)			(0.017)	(0.024)		
Drought SPEI GS x Ethnic Fraction.					-0.0092**	-0.0146***			-0.0105**	-0.0105*		
					(0.005)	(0.005)			(0.005)	(0.005)		
CP Index x Ethnic Fraction.						0.0457***				0.0113		
						(0.011)				(0.012)		
APP Index x Ethnic Polariz.							0.0199**	0.0156			0.0349***	0.0376***
							(0.009)	(0.012)			(0.009)	(0.013)
Drought SPEI GS x Ethnic Polariz.							-0.0045**	-0.0067***			-0.0050**	-0.0039
							(0.002)	(0.003)			(0.002)	(0.003)
CP Index x Ethnic Polariz.								0.0248***				0.0042
								(0.006)				(0.006)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_Probability_R&V $\%$	6.138%	5.904%	6.138%	6.669%	6.156%	5.920%	6.156%	5.920%	6.156%	6.669%	6.156%	6.669%
Cell FE	YES											
Year FE	NON	YES										
Country x year FE	YES	NON										
Country-specific time trend	NON	YES										

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of ACLED riots and violence database (RIOTS &VIOLENCE), The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, *** p<0.05, ** p<0.05, ** p<0.05, ** local price index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price inpacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, in both cases at t, t-1 and t-2.

TABLE A12: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES.

ACLED CONFLICTS	Riots	Riots	Riots	Riots	Riots	Riots	Riots	Riots	Riots	Riots	Riots	Riots
TOBES CONTENCTS	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	0.0224***	0.0272***	0.0248***	0.0329***	0.0208***	0.0299***	0.0206***	0.0296***	0.0228***	0.0343***	0.0226***	0.0338***
	(0.003)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.006)	(0.004)	(0.006)
Drought SPEI GS	0.0015*	0.0028***	0.0024**	0.0028*	0.0028***	0.0057***	0.0026**	0.0054***	0.0033***	0.0055***	0.0032***	0.0050***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
CP Index	` ′	-0.0247***	, ,	-0.0072	, ,	-0.0029***	` ′	-0.0293***	, ,	-0.0099	` ′	-0.0135
		(0.010)		(0.011)		(0.010)		(0.010)		(0.011)		(0.010)
APP Index x Excluded groups			-0.0050	-0.0088				1	-0.0074	-0.0086	-0.0071*	-0.0095
			(0.004)	(0.007)					(0.004)	(0.008)	(0.004)	(0.011)
Drought SPEI GS x Excluded groups			-0.0017	-0.0008					-0.0009	-0.0007	-0.0011	-0.0008
			(0.001)	(0.002)					(0.001)	(0.002)	(0.001)	(0.002)
CP Index x Excluded groups				0.0021						0.0006		0.0010
				(0.004)						(0.004)		(0.004)
APP Index x Monopoly groups			-0.0205	-0.0546***					-0.0211	-0.0512**	-0.0212	-0.0509**
			(0.020)	(0.021)					(0.020)	(0.021)	(0.020)	(0.021)
Drought SPEI GS x Monopoly groups			-0.0052	0.0010					-0.0050	0.0028	-0.0050	0.0030
			(0.005)	(0.028)					(0.006)	(0.028)	(0.006)	(0.028)
CP Index x Monopoly groups				0.0419***						0.0371***		0.0372***
				(0.011)						(0.011)		(0.011)
APP Index x Ethnic Fraction.					0.0080	-0.0198			0.0162	-0.0087		
					(0.011)	(0.016)			(0.013)	(0.018)		
Drought SPEI GS x Ethnic Fraction.					-0.0098***	-0.0199***			-0.0091***	-0.0153***		
					(0.003)	(0.004)			(0.004)	(0.004)		
CP Index x Ethnic Fraction.						0.0350***				0.0207**		
						(0.008)				(0.009)		
APP Index x Ethnic Polariz.							0.0048	-0.0099			0.0089	-0.0031
							(0.006)	(0.008)			(0.007)	(0.010)
Drought SPEI GS x Ethnic Polariz.							-0.0044**	-0.0097***			-0.0041**	-0.0068***
CD I I DI I DI I							(0.002)	(0.002)			(0.002)	(0.002)
CP Index x Ethnic Polariz.								0.1805***				0.0093**
01	150 110	100 100	150 110	110 000	100 100	100 500	100 100	(0.004)	100 100	100.000	100 100	(0.005)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_Probability_Riots %	2.540%	2.696%	2.540%	3.100%	2.547%	2.704%	2.547%	2.704%	2.547%	3.100%	2.547%	3.100%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of of ACLED riots database (Riots), The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, *** p<0.05, * p<0.1. Control variables include the interactions between the log of ill prices at t, t-1 and t-2.

TABLE A13: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES.

ACLED CONFLICT	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.0076*	-0.0059	-0.0001	-0.0057	-0.0134***	-0.0124**	-0.0127***	-0.0115**	-0.0070	-0.0158**	-0.0065	-0.0154**
	(0.004)	(0.005)	(0.005)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)
Drought SPEI GS	0.0004	0.0011	-0.0006	-0.0021	0.0007	0.0012	0.0009	0.0014	-0.0001	-0.0030	0.0001	-0.0029
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
CP Index		0.0176		0.0300**		0.0146		0.0147		0.0316**		0.0322**
		(0.012)		(0.013)		(0.012)		(0.012)		(0.013)		(0.013)
APP Index x Excluded groups			-0.0148***	-0.0041					-0.0228***	-0.0111	-0.0210***	-0.0101
			(0.005)	(0.009)					(0.005)	(0.009)	(0.005)	(0.009)
Drought SPEI GS x Excluded groups			0.0037**	0.0066***					0.0044***	0.0068***	0.0044***	0.0067***
			(0.002)	(0.002)					(0.002)	(0.002)	(0.002)	(0.002)
CP Index x Excluded groups				0.0157***						0.0154***		0.0158***
				(0.005)						(0.005)		(0.005)
APP Index x Monopoly groups			-0.1150***	-0.1558***					-0.1164***	-0.1549***	-0.1166***	-0.1553***
			(0.037)	(0.044)					(0.037)	(0.044)	(0.037)	(0.044)
Drought SPEI GS x Monopoly groups			-0.0060	0.0417*					-0.0059	0.0423*	-0.0059	0.0422*
			(0.004)	(0.022)					(0.004)	(0.022)	(0.004)	(0.022)
CP Index x Monopoly groups			,	0.0827***					, ,	0.0798***		0.0805***
				(0.015)						(0.015)		(0.015)
APP Index x Ethnic Fraction.					0.0304**	0.0368**			0.0568***	0.0699***		
					(0.013)	(0.018)			(0.015)	(0.020)		
Prought SPEI GS x Ethnic Fraction.					-0.0024	-0.0015			-0.0058	0.0041		
					(0.004)	(0.004)			(0.004)	(0.004)		
CP Index x Ethnic Fraction.						0.0247***				-0.0035		
						(0.009)				(0.009)		
APP Index x Ethnic Polariz.							0.0148**	0.0174*			0.0274***	0.0362***
							(0.007)	(0.010)			(0.008)	(0.011)
Orought SPEI GS x Ethnic Polariz.							-0.0022	-0.0013			-0.0039**	0.0020
							(0.002)	(0.002)			(0.002)	(0.002)
CP Index x Ethnic Polariz.								-0.0002				-0.0046
								(0.005)				(0.005)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_Probability_Violence %	4.030%	3.743%	4.030%	4.235%	4.044%	3.757%	4.044%	3.757%	4.044%	4.235%	4.044%	4.235%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of of ACLED violence database (VIOLENCE), The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. **** p<0.01, **p<0.05. **p<0.1. Control variables include the interactions between the log of oil prices at t, t-1 and t-2.

TABLE A14: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES: URBAN CONFLICTS

Type of CONFLICT			UCDP_Incidence						ACLED_Violence			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.0189***	-0.0189***	-0.0151**	-0.0150***	0.0275***	0.0223***	0.0298***	0.0293***	-0.0070	-0.0108**	-0.0197***	-0.0193***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)	(0.006)	(0.006)	(0.005)	(0.005)	(0.007)	(0.007)
Drought SPEI GS	0.0038***	0.0038***	0.0024	0.0023	0.0035***	0.0036***	0.0073***	0.0068***	0.0026***	0.0026***	0.0005	0.0007
	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)
CP Index	0.0247**	0.0246**	0.0330***	0.0330**	-0.0224**	-0.0267***	-0.0106	-0.0114	0.0179***	0.0157***	0.0307***	0.0311***
	(0.011)	(0.011)	(0.013)	(0.013)	(0.010)	(0.010)	(0.011)	(0.011)	(0.012)	(0.012)	(0.014)	(0.014)
Urban	-0.0106**	-0.0131	-0.0103	-0.0104	0.0498***	-0.1418***	-0.1329***	-0.1333***	0.0421***	-0.0925***	-0.0816***	-0.0817***
	(0.005)	(0.008)	(0.008)	(0.008)	(0.010)	(0.022)	(0.021)	(0.021)	(0.010)	(0.021)	(0.021)	(0.021)
CP Index x Urban		0.0007	-0.0001	-0.0000		0.0704***	0.0627***	0.0628***		0.0518***	0.0454***	0.0455***
		(0.003)	(0.003)	(0.003)		(0.007)	(0.007)	(0.007)		(0.007)	(0.007)	(0.007)
APP Index x Excluded groups			-0.0302***	-0.0298***			-0.0099	-0.0103			-0.0108	-0.0099
			(0.008)	(0.008)			(0.008)	(0.008)			(0.009)	(0.009)
Drought SPEI GS x Excluded groups			0.0074***	0.0073***			-0.0018	-0.0019			0.0040**	0.0040*
			(0.002)	(0.002)			(0.002)	(0.002)			(0.002)	(0.002)
CP Index x Excluded groups			-0.0011	0.0009			0.0013	0.0016			0.0173***	0.0176***
			(0.004)	(0.004)			(0.004)	(0.004)			(0.005)	(0.005)
APP Index x Monopoly groups			-0.0878**	-0.0880**			-0.0346*	-0.0344			-0.1435***	-0.1439***
			(0.038)	(0.038)			(0.021)	(0.021)			(0.044)	(0.044)
Drought SPEI GS x Monopoly groups			-0.0056	-0.0055			-0.0127	-0.0124			0.0320	0.0320
			(0.005)	(0.005)			(0.029)	(0.029)			(0.022)	(0.022)
CP Index x Monopoly groups			0.0240**	0.0241**			0.0236**	0.0236**			0.0707***	0.0712***
			(0.011)	(0.011)			(0.011)	(0.011)			(0.015)	(0.015)
APP Index x Ethnic Fraction.			0.0456***				-0.0076				0.0655***	
			(0.015)				(0.018)				(0.020)	
Drought SPEI GS x Ethnic Fraction.			-0.0063				-0.0168***				0.0006	
			(0.004)				(0.004)				(0.004)	
CP Index x Ethnic Fraction.			0.0116				0.0176**				-0.0045	
			(0.008)				(0.009)				(0.009)	
APP Index x Ethnic Polariz				0.0240***.				-0.0024				0.0336***
				(0.008)				(0.010)				(0.011)
Drought SPEI GS x Ethnic Polariz.				-0.0030				-0.0077***				0.0003
				(0.002)				(0.002)				(0.002)
CP Index x Ethnic Polariz				0.0068*				0.0086*				-0.0045
				(0.004)				(0.005)				(0.005)
Observations	134,672	134,672	107,488	107,488	134,672	134,672	107,488	107,488	134,672	134,672	107,488	107,488
Unconditional_Probability_Conflict %		2.180%	2.420%	2.420%	2.618%	2.618%	2.985%	2.985%	3.740%	3.740%	4.192%	4.192%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

TABLE A15: FACTOR CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. CONFLICT

				INT	ENSITY							
UCDP FACTOR CONFLICT	Intensity											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.1531***	-0.1286***	-0.1144***	-0.1048***	-0.1794***	-0.1672***	-0.1776***	-0.1609***	-0.1491***	-0.1727***	-0.1474***	-0.1678***
	(0.029)	(0.031)	(0.028)	(0.040)	(0.031)	(0.034)	(0.034)	(0.032)	(0.030)	(0.042)	(0.029)	(0.042)
Drought SPEI GS	0.0148	0.0060	0.0126	-0.0130	0.0173*	0.0066	0.0173*	0.0060	0.0157	-0.0141	0.0156	-0.0158
	(0.009)	(0.010)	(0.011)	(0.018)	(0.009)	(0.010)	(0.009)	(0.010)	(0.011)	(0.020)	(0.011)	(0.020)
CP Index		0.3435***		0.4389***		0.3336***		0.3318***		0.4363***		0.4352***
		(0.093)		(0.113)		(0.094)		(0.094)		(0.113)		(0.113)
APP Index x Excluded groups			-0.0916**	-0.1055***					-0.1341***	-0.1542***	-0.1253***	-0.1447***
			(0.028)	(0.052)					(0.035)	(0.057)	(0.034)	(0.057)
Drought SPEI GS x Excluded groups			0.0167	0.0495**					0.0201	0.0515***	0.0197	0.0513**
			(0.014)	(0.019)					(0.014)	(0.019)	(0.014)	(0.019)
CP Index x Excluded groups				-0.0536*						-0.0592**		-0.0576***
				(0.029)						(0.028)		(0.028)
APP Index x Monopoly groups			0.3592*	-0.0972					0.3506	-0.1008	0.3494	-0.1026
			(0.213)	(0.166)					(0.213)	(0.165)	(0.213)	(0.166)
Drought SPEI GS x Monopoly groups			-0.0671***	0.0340					-0.0666***	0.0340	-0.0665***	0.0340
an			(0.025)	(0.025)					(0.025)	(0.026)	(0.026)	(0.026)
CP Index x Monopoly groups				0.0542						0.0401		0.0422
				(0.066)						(0.067)		(0.067)
APP Index x Ethnic Fraction.					0.1512**	0.2285**			0.3023***	0.4753***		
D. I. ODEL GG. Ed. I. E					(0.062)	(0.098)			(0.082)	(0.122)		
Drought SPEI GS x Ethnic Fraction.					-0.0195	-0.0085			-0.0318	-0.0001		
CD I I DI I D II					(0.025)	(0.018)			(0.021)	(0.023)		
CP Index x Ethnic Fraction.						0.0894*				0.0536		
ADD I I Dil : Dil :						(0.089)				(0.051)		
APP Index x Ethnic Polariz.							0.0776**	0.1039***			0.1492***	0.2361***
D 1/ CDELCC E/l : D l :							(0.036)	(0.054)			(0.046)	0.067)
Drought SPEI GS x Ethnic Polariz.							-0.0103	-0.0020			-0.0161	0.0514
CDII DIII							(0.011)	(0.009)			(0.011)	(0.012)
CP Index x Ethnic Polariz.							(0.001)	0.0515**			(0.000)	0.0262
	150 110	100 100	150 110	110.000	100 100	100 500	(0.024)	400 500	100 100	100.000	(0.026)	100.000
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_mean _events	0.109	0.086	0.109	0.101	0.113	0.086	0.110	0.086	0.110	0.101	0.110	0.101
Cell FE Year FE	YES	YES	YES	YES YES	YES NON	YES YES	YES	YES YES	YES	YES	YES	YES
	NON	YES	NON				NON		NON	YES	NON	YES
Country x year FE	YES NON	NON YES										
Country-specific time trend	NON	YES	NON	1 ES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is the number of events observed in a cell during a given year, following the definition of UCDP conflict database (#EVENTS INTENSITY), The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing or spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2.

TABLE A16: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. RIOTS INTENSITY

ACLED CONFLICT	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots	#events Riots
ADD I	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	0.1140***	0.1472***	0.1404***	0.2049***	0.0479*	0.0862**	0.0523*	0.0898**	0.0805**	0.0666	0.0832**	0.0574
Drought SPEI GS	(0.027)	(0.032)	(0.035)	(0.055)	(0.029)	(0.037)	(0.029)	(0.038)	(0.032)	(0.062)	(0.032)	(0.066)
Drought SPEI GS	0.0234	0.0749**	0.0216	0.0231	0.0367**	0.1103***	0.0371**	0.1104***	0.0321*	0.0298 (0.023)	0.0327*	0.0270 (0.022)
CP Index	(0.015)	(0.034) -0.5700***	(0.016)	(0.0223) -0.4065***	(0.017)	(0.042) -0.5864***	(0.017)	(0.042) -0.5854***	(0.017)	-0.3265***	(0.017)	-0.3124***
C1 Ilidex		(0.1213)		(0.125)		(0.118)		(0.118)		(0.101)		(0.100)
APP Index x Excluded groups		(0.2220)	-0.0550**	-0.0117		(01220)		(0.220)	-0.1276***	-0.0907	-0.1134***	-0.0834
Ü .			(0.027)	(0.056)					(0.038)	(0.062)	(0.036)	(0.060)
Drought SPEI GS x Excluded groups			-0.0058	0.0248					0.0031	0.0274	-0.0025	0.0278
			(0.010)	(0.019)					(0.011)	(0.020)	(0.011)	(0.020)
CP Index x Excluded groups				-0.1279**						-0.1051**		-0.1031**
				(0.057)						(0.044)		(0.045)
APP Index x Monopoly groups			-0.1764**	-0.6774*				-0.1950**	-0.5873	-0.1968**	-0.5944	
D LEGDEL CG M 1			(0.075)	(0.378)					(0.077)	(0.360)	(0.077)	(0.361)
Drought SPEI GS x Monopoly groups			0.0680	3.5608**					0.0687	3.6121**	-0.0689	3.6129**
CD I. d M			(0.098)	(1.550)					(0.098)	(1.570)	(0.098)	(1.570)
CP Index x Monopoly groups				1.5961** (0.772)						1.507** (0.749)		1.5164**
APP Index x Ethnic Fraction.				(0.772)	0.3526***	0.3489**			0.4978***	0.749)		(0.753)
ATT THEX X EtHILC FLACTION.					(0.093)	(0.156)			(0.123)	(0.319		
Drought SPEI GS x Ethnic Fraction.					-0.0949**	-0.2410***			-0.0651	-0.0954**		
Diought of El Go x Ethnic Fraction.					(0.041)	(0.071)			(0.052)	(0.048)		
CP Index x Ethnic Fraction.					(0.041)	0.1296			(0.002)	-0.4034		
Of Index & Diffine Traction.						(0.129)				(0.335)		
APP Index x Ethnic Polariz.						(0.120)	0.1809***	0.1802**		(0.000)	0.2470***	0.5151***
							(0.047)	(0.082)			(0.060)	(0.183)
Drought SPEI GS x Ethnic Polariz.							-0.0518**	-0.1287***			-0.0523**	-0.0263
0							(0.022)	(0.037)			(0.023)	(0.030)
CP Index x Ethnic Polariz.								0.0596				-0.2707
								(0.069)				(0.199).
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_mean _events	0.104	0.116	0.134	0.134	0.105	0.116	0.105	0.116	0.105	0.134	0.105	0.134
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Country-specific time trend NON YES NON ON NOT NOTES: The dependent variable is the number of events observed in a cell during a given year, following the definition of ACLED riots database (#EVENTS RIOTS), The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing or spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. **** p<0.01, *** p<0.05, ** p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2.

TABLE A17: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. VIOLENCE AGAINST CIVILIAN INTENSITY

			A	GAINST CIV	ILIAN INTE	INSITY						
ACLED CONFLICT	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence	#events Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.1277***	-0.1275***	-0.0647**	-0.1112***	-0.1814***	-0.1965***	-0.1845***	-0.1984***	-0.1290***	-0.2227***	-0.1312***	-0.2301***
	(0.028)	(0.034)	(0.031)	(0.041)	(0.036)	(0.043)	(0.036)	(0.044)	(0.035)	(0.050)	(0.035)	(0.049)
Drought SPEI GS	-0.0112	0.0014	-0.0128	-0.0114	-0.0071	0.0120	-0.0068	0.0110	-0.0083	-0.0076	-0.0081	-0.0100
on T	(0.008)	(0.008)	(0.010)	(0.011)	(0.009)	(0.009)	(0.009)	(0.009)	(0.011)	(0.015)	(0.011)	(0.014)
CP Index		0.5992***		0.7623***		0.5653***		0.5688***		0.7537***		0.7609***
		(0.115)		(0.137)		(0.115)		(0.273)		(0.139)		(0.138)
APP Index x Excluded groups			-0.1472***	-0.1191					-0.2260***	-0.1991**	-0.2156***	-0.1944**
D. L. GDELGG E. L. L.			(0.037)	(0.075)					(0.046)	(0.080)	(0.045)	(0.081)
Drought SPEI GS x Excluded groups			0.0134	0.0147					0.0185	0.0174	0.01811**	0.0169
CD Indone Freelands de demons			(0.009)	(0.014)					(0.009)	(0.014)	(0.009)	(0.015)
CP Index x Excluded groups				0.0234						0.0097		0.1739
APP Index x Monopoly groups			0.3399	(0.048) -0.1074					0.3240	(0.046) -0.1011	0.3207	(0.0482) -0.1048
At 1 index x Monopoly groups			(0.281)	(0.132)					(0.281)	(0.131)	(0.281)	(0.131)
Drought SPEI GS x Monopoly groups			-0.0512	0.4437***					-0.0540	0.4450***	-0.0503	0.4508***
Drought 51 Er G5 x Monopoly groups			(0.039)	(0.161)					(0.039)	(0.163)	(0.039)	(0.163)
CP Index x Monopoly groups			(0.000)	0.1925**					0.1561	(0.100)	0.1621*	(0.100)
or index x monopoly groups				(0.098)					0.1001	(0.097)	0.1021	(0.097)
APP Index x Ethnic Fraction.				(0.000)	0.3008***	0.3939**			0.5529***	0.7776***		(0.001)
THE THOUSE IT EXHIBITED THE CONTROL					(0.103)	(0.159)			(0.128)	(0.191)		
Drought SPEI GS x Ethnic Fraction.					-0.0324	-0.0761***			-0.0484**	-0.0324		
					(0.022)	(0.025)			(0.021)	(0.026)		
CP Index x Ethnic Fraction.					(/	0.2948***			(/	0.1377*		
						(0.794)				(0.835)		
APP Index x Ethnic Polariz.						` '	0.1751***	0.2235***		, ,	0.2973***	0.4405***
							(0.060)	(0.082)			(0.072)	(0.102)
Drought SPEI GS x Ethnic Polariz.							-0.01821	-0.0371***			-0.0258**	-0.0102
							(0.012)	(0.012)			(0.011)	(0.013)
CP Index x Ethnic Polariz.								0.1365***				0.3467
								(0.313)				(0.036)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_mean _events	0.147	0.128	0.147	0.145	0.148	0.124	0.148	0.124	0.148	0.145	0.148	0.145
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

TABLE A18: FACTOR CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. BASE CROPS: M3

				I	DATA.							
UCDP FACTOR CONFLICT	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence	Incidence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.0047	-0.0078**	0.0009	-0.0073	-0.0059	-0.0168***	-0.0064	-0.0166***	-0.0020	-0.0197***	0.0022	-0.0193***
	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.007)	(0.005)	(0.007)
Drought SPEI GS	0.0033***	0.0033***	0.0026*	0.0022	0.0035**	0.0027**	0.0034**	0.0026**	0.0029*	0.0018	0.0028*	0.0016
an	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
CP Index		-0.0127		-0.0029		-0.0077		-0.0081		0.0033		0.0025
		(0.013)		(0.015)		(0.012)		(0.012)		(0.014)		(0.014)
APP Index x Excluded groups			-0.0146***	-0.0079					-0.0173***	-0.0114	-0.0169***	-0.0103
B 1 2007 62 B 1 1 1			(0.004)	(0.007)					(0.004)	(0.007)	(0.004)	(0.007)
Drought SPEI GS x Excluded groups			0.0031*	0.0047**					0.0035**	0.0051**	0.0034*	0.0051**
CD I I D I I I			(0.002)	(0.002)					(0.002)	(0.002)	(0.002)	(0.002)
CP Index x Excluded groups				-0.0054						-0.0053		-0.0056
ADD I I M I			0.0400	(0.005)					0.04.00	(0.005)	0.01.01	(0.005)
APP Index x Monopoly groups			0.0180	0.0372***					0.0163	0.0319**	0.0161	0.0321**
D 1/ CDEL CC M 1			(0.012)	(0.014)					(0.012)	(0.014)	(0.012)	(0.014)
Drought SPEI GS x Monopoly groups			-0.0040*	-0.0036					-0.0040*	-0.0032	-0.0040*	-0.0032
CP Index x Monopoly groups			(0.002)	(0.004)					(0.002)	(0.004)	(0.002)	(0.004)
CP index x Monopoly groups				-0.0131 (0.016)						-0.0116		-0.0120
APP Index x Ethnic Fraction.				(0.016)	0.0079	0.0511***			0.0226**	(0.017) 0.0626***		(0.017)
AFF IIIdex x Ethnic Fraction.					(0.0079	(0.011)				(0.014)		
Drought SPEI GS x Ethnic Fraction.					-0.0011	0.0030			(0.009) -0.0032	0.0009		
Drought 31 El G3 x Ethnic Flaction.					(0.004)	(0.0030)			(0.004)	(0.002)		
CP Index x Ethnic Fraction.					(0.004)	-0.0250***			(0.004)	-0.0092*		
CI Index x Ethnic Flaction.						(0.009)				(0.005)		
APP Index x Ethnic Polariz.						(0.003)	0.0058	0.0275***		(0.003)	0.0126**	0.0324***
ATT INGEX & Buillie I olariz.							(0.005)	(0.007)			(0.005)	(0.008)
Drought SPEI GS x Ethnic Polariz.							-0.0004	0.0018			-0.0014	0.0002
Broadin of Er oo it Etimo roman.							(0.002)	(0.002)			(0.002)	(0.002)
CP Index x Ethnic Polariz.							(0.002)	-0.0119**			(0.002)	-0.0090*
or made a reminer own.								(0.005)				(0.005)
Observations	138,216	113,048	138,216	89,375	137,709	112,606	137,709	112,606	137,709	89,349	137,709	89,349
Unconditional_Probability_FConflict %	2.414%	2.057%	2.414%	2.269%	2.422%	2.065%	2.422%	2.065%	2.422%	2.269%	2.422%	2.269%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP incidence database (INCIDENCE), The Agricultural price Index (API Index), the SPEI growing season, and the Consumer Price Index (CPI Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. **** p<0.01, *** p<0.01, *** p<0.01. *Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. Years: 2001-2013.

TABLE A19: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. BASE CROPS: M3

				D	ATA.							
ACLED CONFLICT	Riots	Riots										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	0.0316***	0.0285***	0.0240***	0.0144**	0.0289***	0.0392***	0.0292***	0.0397***	0.0231***	0.0247**	0.0235***	0.0256***
	(0.004)	(0.005)	(0.004)	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.007)	(0.005)	(0.007)
Drought SPEI GS	0.0033***	0.0044***	0.0010	0.0024	0.0021*	0.0070***	0.0018	0.0067***	0.0018	0.0062***	0.0016	0.0058***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
CP Index		-0.0480***		-0.0580***		-0.0199		-0.0582***		-0.0180		-0.0185
		(0.017)		(0.015)		(0.016)		(0.015)		(0.016)		(0.016)
APP Index x Excluded groups			0.0067*	0.0010					0.0062	0.0026	0.0065*	0.0023
			(0.004)	(0.007)					(0.004)	(0.007)	(0.004)	(0.007)
Drought SPEI GS x Excluded groups			-0.0001	0.0010					0.0005	0.0005	0.0003	0.0005
			(0.001)	(0.002)					(0.002)	(0.002)	(0.002)	(0.002)
CP Index x Excluded groups.				-0.0020						-0.0028		-0.0031
				(0.005)						(0.005)		(0.005)
APP Index x Monopoly groups			0.1233***	0.2086***					0.1228***	0.2268***	0.1230***	0.2274***
			(0.019)	(0.051)					(0.019)	(0.051)	(0.019)	(0.051)
Drought SPEI GS x Monopoly groups			-0.0024	0.0146					-0.0024	0.0166	-0.0023	0.0168
			(0.006)	(0.031)					(0.006)	(0.031)	(0.006)	(0.031)
CP Index x Monopoly groups				-0.1496***						-0.1699***		-0.1698***
				(0.042)						(0.041)		(0.041)
APP Index x Ethnic Fraction.					0.0131	-0.0662***			0.0044	-0.0540***		
					(0.010)	(0.016)			(0.011)	(0.017)		
Drought SPEI GS x Ethnic Fraction.					-0.0079*	-0.0241***			-0.0073*	-0.0206***		
					(0.004)	(0.005)			(0.004)	(0.006)		
CP Index x Ethnic Fraction.						0.0638***				0.0440***		
						(0.011)				(0.012)		
APP Index x Ethnic Polariz.							0.0063	-0.0375***			0.0012	-0.0317***
							(0.006)	(0.009)			(0.006)	(0.009)
Drought SPEI GS x Ethnic Polariz.							-0.0033	-0.0117***			-0.0028	-0.0095***
							(0.002)	(0.002)			(0.002)	(0.003)
CP Index x Ethnic Polariz.								0.0348***				0.0238***
								(0.005)				(0.006)
Observations	138,216	113,048	138,216	89,375	137,709	112,606	137,709	112,606	137,709	89,349	137,709	89,349
Unconditional_Probability_Riots %	2.817%	2.968%	2.817%	3.409%	2.826%	2.978%	2.826%	2.977%	2.826%	3.408%	2.826%	3.408%
Cell FE	YES	YES										
Year FE	NON	YES										
Country x year FE	YES	NON										
Country-specific time trend	NON	YES										

Country-specific time trend NON YES NO

TABLE A20: OUTPUT CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. BASE CROPS: M3

				Γ	OATA.							
ACLED CONFLICT	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence	Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	0.0224***	0.0225***	0.0167***	0.0078	0.0112***	0.0181***	0.0120**	0.0198***	0.0104*	0.0020	0.0111**	0.0042
D 1 0DDT 00	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)	(0.006)	(0.008)
Drought SPEI GS	-0.0001	0.0036***	-0.0023	0.0009	-0.0005	0.0034**	-0.0001	0.0037***	-0.0020	0.0011	-0.0017	0.0016
CID T. I	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
CP Index		-0.0873***		-0.0638***		-0.0883***		-0.0891***		-0.0629***		-0.0637***
		(0.018)		(0.017)		(0.015)		(0.015)		(0.017)		(0.017)
APP Index x Excluded groups			-0.0027	0.0074					-0.0082	0.0058	-0.0066	0.0068
D. I. GDEL GG E I I I			(0.005)	(0.009)					(0.005)	(0.009)	(0.005)	(0.009)
Drought SPEI GS x Excluded groups			0.0060***	0.0080***					0.0063***	0.0081***	0.0064***	0.0080***
CD Id Eldd			(0.002)	(0.003)					(0.002)	(0.003)	(0.002)	(0.003)
CP Index x Excluded groups				0.0019						0.0002		0.0006
APP Index x Monopoly groups			0.0825***	(0.006) 0.1540***					0.0790***	(0.006)	0.0792***	(0.006) 0.1571***
APP index x Monopoly groups			(0.018)	(0.043)					(0.018)	0.1566*** (0.043)	(0.016)	(0.043)
Drought SPEI GS x Monopoly groups			-0.0040	0.0327					-0.0041	0.0332	-0.0040	0.0332
Drought 31 El G3 x Mollopoly groups			(0.005)	(0.0327)					(0.005)	(0.024)	(0.005)	(0.024)
CP Index x Monopoly groups			(0.005)	-0.1081***					(0.005)	-0.1147**	(0.003)	-0.1144***
Cr maex x monopory groups				(0.036)						(0.036)		(0.036)
APP Index x Ethnic Fraction.				(0.030)	0.0388***	0.0176			0.0442***	0.0288		(0.030)
ATT INGEX & BUILDE PRACTION.					(0.012)	(0.017)			(0.012)	(0.018)		
Drought SPEI GS x Ethnic Fraction.					-0.0004	-0.0015			-0.0034	-0.0007		
Drought of Li Go x Lumie Traction.					(0.004)	(0.004)			(0.004)	(0.005)		
CP Index x Ethnic Fraction.					(0.004)	0.0022*			(0.004)	0.0031		
of maca a Bonnic Fraction.						(0.012)				(0.012)		
APP Index x Ethnic Polariz.						(0.012)	0.0194***	0.0049		(0.012)	0.0208***	0.0094
							(0.007)	(0.009)			(0.007)	(0.010)
Drought SPEI GS x Ethnic Polariz.							-0.0015	-0.0018			-0.0029	-0.0014
							(0.002)	(0.002)			(0.002)	(0.003)
CP Index x Ethnic Polariz.							, ,	0.0133**			,	0.0026
								(0.006)				(0.006)
Observations	127,584	106,197	138,216	89,375	137,709	112,606	137,709	112,606	137,709	89,349	137,709	89,349
Unconditional_Probability_Violence %	4.180%	3.805%	4.180%	4.262%	4.195%	3.820%	4.195%	3.820%	4.195%	4.262%	4.195%	4.263%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES
Country x year FE	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON
Country-specific time trend	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES	NON	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of of ACLED riots database (VIOLENCE), The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. Years: 2001-2013.

TABLE A21: ACLED FACTOR CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. BASE

				CROPS	S: BATTLI	ES						
ACLED BATTLES	Battles	Battles	Battles	Battles	Battles	Battles	Battles	Battles	Battles	Battles	Battles	Battles
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
APP Index	-0.0159***	-0.0137***	-0.0120***	-0.0102**	-0.0189***	-0.0164***	-0.0192***	-0.0166***	-0.0154***	-0.0168***	-0.0157***	-0.0174***
	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)	(0.006)	(0.004)	(0.006)
Drought SPEI GS	-0.0000	0.0015	-0.0018	0.0006	-0.0006	0.0019	-0.0005	0.0018	-0.0020	0.0005	-0.0019	0.0002
_	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
CP Index		0.0012		0.0192		-0.0003		-0.0005		0.0210		0.0211
		(0.012)		(0.014)		(0.012)		(0.014)		(0.014)		(0.014)
APP Index x Excluded groups			-0.0052	-0.0108					-0.0090	-0.0152	-0.0088	-0.0153
			(0.005)	(0.010)					(0.006)	(0.010)	(0.006)	(0.010)
Drought SPEI GS x Excluded groups			0.0040**	0.0006					0.0039**	0.0006	0.0040**	0.0006
			(0.002)	(0.002)					(0.002)	(0.002)	(0.002)	(0.002)
CP Index x Excluded groups				0.0168***						0.0165***		0.0167***
				(0.005)						(0.005)		(0.005)
APP Index x Monopoly groups			-0.1701***	-0.2202***					-0.1702***	-0.2190***	-0.1706***	-0.2193***
			(0.043)	(0.050)					(0.042)	(0.050)	(0.042)	(0.050)
Drought SPEI GS x Monopoly groups			0.0072	0.0749***					0.0073	0.0753***	0.0074	0.0753***
			(0.005)	(0.021)					(0.005)	(0.022)	(0.005)	(0.022)
CP Index x Monopoly groups				0.0726***						0.0703***		0.0705***
				(0.016)						(0.016)		(0.016)
APP Index x Ethnic Fraction.					0.0174	0.0156		0.0287**	0.0451**			
					(0.013)	(0.018)			(0.014)	(0.020)		
Drought SPEI GS x Ethnic Fraction.					0.0033	-0.0028			0.0010	0.0004		
					(0.004)	(0.004)			(0.004)	(0.005)		
CP Index x Ethnic Fraction.						0.0161*				-0.0033		
						(0.009)				(0.009)		
APP Index x Ethnic Polariz.							0.0108	0.0098			0.0165**	0.0264**
D 1 0DDT 00 D1 1 D1 1							(0.007)	(0.010)			(0.008)	(0.011)
Drought SPEI GS x Ethnic Polariz.							0.0016	-0.0010			0.0003	0.0011
op							(0.002)	(0.002)			(0.002)	(0.002)
CP Index x Ethnic Polariz.								0.0091*				-0.0022
								(0.005)				(0.005)
Observations	170,112	139,136	170,112	110,000	169,488	138,592	169,488	138,592	169,488	109,968	169,488	109,968
Unconditional_Probability_Battles %	3.876%	3.351%	3.876%	3.812%	3.890%	3.364%	3.890%	3.364%	3.890%	3.813%	3.890%	3.813%
Cell FE	YES											
Year FE	NON	YES										
Country x year FE	YES	NON										
Country-specific time trend	NON	YES										

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of ACLED battles database (BATTLES). The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing or spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, ** p<0.01, ** p<0.01. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2.

TABLE A22: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. SPATIAL SPILLOVERS

Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
small APP Index	-0.0181***	-0.0141***	-0.0139***	0.0272***	0.0342***	0.0340***	-0.0059	-0.0160**	-0.0157**
sman At 1 muex	(0.004)	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)	(0.005)	(0.006)	(0.006)
Drought SPEI GS	0.0030***	0.0011	0.0009	0.0028***	0.0055***	0.0051***	0.0011	-0.0028	-0.0027
	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)
CP Index	0.0177	0.0344***	0.0252**	-0.0247***	-0.0099	-0.0094	0.0177	0.0318***	0.032***
	(0.011)	(0.013)	(0.013)	(0.010)	(0.011)	(0.011)	(0.012)	(0.013)	(0.013)
APP Index in neighbouring cells	0.0006	-0.0044	-0.0044	-0.0011	-0.0017	-0.0016	-0.0036	-0.0096	-0.0095
	(0.005)	(0.006)	(0.006)	(0.005)	(0.006)	(0.006)	(0.007)	(0.008)	(0.008)
Drought SPEI GS in neighbouring cells	0.0012	0.0008	0.0020	0.0011	0.0019	0.0018	0.0008	0.0040	0.0041
	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)
APP Index x Excluded groups		-0.0269***	-0.0264***		-0.0086	-0.0089		-0.0111	-0.0101
D. I. CDDI CC. D. I. I. I.		(0.008)	(0.008)		(0.008)	(0.008)		(0.009)	(0.009)
Drought SPEI GS x Excluded groups		0.0076***	0.0075***		-0.0007	-0.0008		0.0068***	0.0067***
CDII DIII		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
CP Index x Excluded groups		-0.0030	-0.0029		0.0005	0.0010		0.0155***	0.0159***
APP Index x Monopoly groups		(0.004) -0.0885**	(0.004) -0.0887**		(0.004) -0.0511**	(0.004) -0.0508**		(0.005) -0.1542***	(0.005) -0.1546***
AFF index x Monopoly groups			(0.038)					(0.044)	(0.044)
Drought SPEI GS x Monopoly groups		(0.038) -0.0019	-0.0019		(0.021) 0.0028	(0.021) 0.0029		0.044)	0.044)
Drought 51 Er G5 x Monopoly groups		(0.004)	(0.0019		(0.028)	(0.028)		(0.022)	(0.022)
CP Index x Monopoly groups		0.0245**	0.0245**		0.0370***	0.0370***		0.0798***	0.0805***
CI Index x Monopoly groups		(0.011)	(0.011)		(0.011)	(0.011)		(0.015)	(0.015)
APP Index x Ethnic Fraction.		0.0379**	(0.022)		-0.0087	(0.022)		0.0700***	(0.020)
		(0.015)			(0.018)			(0.020)	
Drought SPEI GS x Ethnic Fraction.		-0.0039			-0.0153***			0.0041	
9		(0.004)			(0.004)			(0.004)	
CP Index x Ethnic Fraction.		0.0108			0.0207**			-0.0035	
		(0.007)			(0.009)			(0.009)	
APP Index x Ethnic Polariz.			0.0195**			-0.0029			0.0362***
			(0.008)			(0.010)			(0.011)
Drought SPEI GS x Ethnic Polariz.			-0.0014			-0.0067***			0.0019
CD T 1 DI 1 DI 1			(0.002)			(0.002)			(0.002)
CP Index x Ethnic Polariz.			0.0066			0.0093**			-0.0047
			(0.004)			(0.005)			(0.005)
Observations	139,136	109,968	109,968	139,136	109,968	109,968	139,136	109,968	109,968
Unconditional_Probability_Conflict	2.168%	2.434%	2.434%	2.696%	3.100%	3.100%	3.949%	4.236%	4.236%
Cell FE Year FE	YES	YES	YES YES	YES YES	YES	YES	YES	YES	YES
Year FE Country-specific time trend	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES
Country-specific time trend	YES	1 E5	YES	1 E5				YES (De-	1 E3

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (RIOTS), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 220km radius and for five periods of correlation. p-values are reported in parentheses. **** p<0.01, *** p<0.05, ** p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. Neighboring indexes are the average contiguity AAP Index and the drought SPEI Growing season in degree 2 neighboring cells.

TABLE A23: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. SPATIAL AND SERIAL CORRELATIONS.

STANDARD ERRORS ANALYSIS

			STANDARD	ERRORS A.	NALYSIS				
Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
APP Index	-0.0181	-0.0140	-0.0138	0.0272	0.0343	0.0338	-0.0059	-0.0158	-0.0154
Standard error 55km, Time: 2 years	(0.003)	(0.004)	(0.004)	(0.003)	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)
Standard error 55km, Time: Infinite	(0.003)	(0.004)	(0.004)	(0.003)	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)
Standard error 1000km, Time: 2 years	(0.005)	(0.007)	(0.007)	(0.006)	(0.007)	(0.008)	(0.007)	(0.009)	(0.009)
Standard error 1000km, Time: Infinite	(0.005)	(0.007)	(0.007)	(0.006)	(0.008)	(0.008)	(0.007)	(0.009)	(0.009)
Drought SPEI GS	0.0030	0.0011	0.0008	0.0028	0.0055	0.0050	0.0011	-0.0029	-0.0029
Standard error 55km, Time: 2 years	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001	(0.002)	(0.002)
Standard error 55km, Time: Infinite	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
Standard error 1000km, Time: 2 years	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)	(0.002)
Standard error 1000km, Time: Infinite	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)	(0.003)
CP Index	0.0250	0.0348	0.0344	-0.0247	-0.0099	-0.0135	0.0176	0.0316	-0.0322
Standard error 55km, Time: 2 years	(0.009)	(0.011)	(0.011)	(0.009)	(0.009)	(0.010)	(0.010)	(0.012))	(0.012)
Standard error 55km, Time: Infinite	(0.009)	(0.011)	(0.011)	(0.009)	(0.009)	(0.010)	(0.010)	(0.012)	(0.012)
Standard error 1000km, Time: 2 years	(0.021)	(0.023)	(0.023)	(0.019)	(0.019)	(0.019)	(0.023)	(0.025)	(0.025)
Standard error 1000km, Time: Infinite	(0.021)	(0.023)	(0.023)	(0.019)	(0.019)	(0.019)	(0.023)	(0.025)	(0.025)
Observations	139,136	109,968	109,968	139,136	109,968	109,968	139,136	109,968	109,9681
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial and serial correlation. The table is the same as Table 3, Table 4, and Table 5 (columns (2), (10) and (12)) of main text, except that we allow different radius and time periods of spatial and serial correlation. The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2.

TABLE A23: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. SPATIAL AND SERIAL CORRELATIONS.

		STANDAF	<u>RD ERRORS A</u>	<u> ANALYSIS C</u>	Continuation				
Type of CONFLICT	UCDP_Incidence (1)	UCDP_Incidence (2)	UCDP_Incidence (3)	ACLED_Riots (4)	ACLED_Riots (5)	ACLED_Riots (6)	ACLED_Violence (7)	ACLED_Violence (8)	ACLED_Violence (9)
APP Index x Excluded groups		-0.0269	-0.0265		-0.0086	-0.0095		-0.0111	-0.0101
Standard error 55km, Time: 2 years		(0.007)	(0.007)		(0.007)	(0.007)		(0.008)	(0.008)
Standard error 55km, Time: Infinite		(0.007)	(0.007)		(0.007)	(0.007)		(0.008)	(0.008)
Standard error 1000km, Time: 2 years		(0.011)	(0.011)		(0.010)	(0.010)		(0.013)	(0.013)
Standard error 1000km, Time: Infinite		(0.011)	(0.011)		(0.010)	(0.010)		(0.013)	(0.013)
Drought SPEI GS x Excluded groups		0.0076	0.0076		-0.0007	-0.0008		0.0068	0.0067
Standard error 55km, Time: 2 years		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
Standard error 55km, Time: Infinite		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
Standard error 1000km, Time: 2 years		(0.003)	(0.003)		(0.002)	(0.002)		(0.003)	(0.003)
Standard error 1000km, Time: Infinite		(0.003)	(0.003)		(0.002)	(0.002)		(0.003)	(0.003)
CP Index x Excluded groups		-0.0030	-0.0029		0.0006	0.0010		0.0154	0.0158
Standard error 55km, Time: 2 years		(0.003)	(0.003)		(0.003)	(0.003)		(0.004)	(0.004)
Standard error 55km, Time: Infinite		(0.003)	(0.003)		(0.003)	(0.003)		(0.004)	(0.004)
Standard error 1000km, Time: 2 years		(0.006)	(0.006)		(0.005)	(0.005)		(0.008)	(0.007)
Standard error 1000km, Time: Infinite		(0.006)	(0.006)		(0.005)	(0.005)		(0.007)	(0.007)
APP Index x Monopoly groups		-0.0885	-0.0887		-0.0512	-0.0509		-0.1549	-0.1553
Standard error 55km, Time: 2 years		(0.032)	(0.032)		(0.021)	(0.021)		(0.041)	(0.041)
Standard error 55km, Time: 2 years Standard error 55km, Time: Infinite		(0.034)	(0.034)		(0.021)	(0.021)		(0.042)	(0.042)
Standard error 1000km, Time: 2 years		(0.032)	(0.032)		(0.023)	(0.023)		(0.037)	(0.037)
Standard error 1000km, Time: 2 years Standard error 1000km, Time: Infinite		(0.032)	(0.032)		(0.023)	(0.023)		(0.037)	(0.037)
Drought SPEI GS x Monopoly groups		-0.0019	-0.0019		0.0028	0.0030		0.0423	0.0422
Standard error 55km, Time: 2 years		(0.003)	(0.003)		(0.028)	(0.028)		(0.022)	(0.022)
Standard error 55km, Time: 2 years Standard error 55km, Time: Infinite		(0.003)	(0.003)		(0.028)	(0.028)		(0.022)	(0.021)
Standard error 1000km, Time: 2 years		(0.005)	(0.005)		(0.038)	(0.038)		(0.021)	(0.031)
Standard error 1000km, Time: 2 years Standard error 1000km, Time: Infinite		(0.005)	(0.005)		(0.037)	(0.037)		(0.031)	(0.031)
CP Index x Monopoly groups		0.0245	0.0245		0.0371	0.037)		0.0798	0.0805
Standard error 55km, Time: 2 years		(0.009)	(0.009)		(0.010)	(0.010)		(0.014)	(0.014)
Standard error 55km, Time: 2 years Standard error 55km, Time: Infinite		(0.009)	(0.009)		(0.010)	(0.010)		(0.014)	(0.014)
Standard error 199km, Time: Infilmte Standard error 1000km, Time: 2 years		(0.009)	(0.009)		(0.016)	(0.016)		(0.014)	(0.014)
Standard error 1000km, Time: 2 years Standard error 1000km, Time: Infinite		(0.015)	(0.015)		(0.016)	(0.016)		(0.025)	(0.025)
APP Index x Ethnic Fraction.		0.0379	(0.013)			(0.017)			(0.023)
Standard error 55km, Time: 2 years		(0.014)			-0.0087 (0.017)			0.0699 (0.019)	
Standard error 55km, Time: 2 years Standard error 55km, Time: Infinite		(0.014)			(0.017)			(0.019)	
Standard error 1000km, Time: 2 years		(0.014)			(0.017)			(0.019)	
Standard error 1000km, Time: 2 years Standard error 1000km, Time: Infinite		(0.018)			(0.019)			(0.022)	
Drought SPEI GS x Ethnic Fraction.		-0.0039			-0.0153			0.0041	
Standard error 55km, Time: 2 years		(0.004)			(0.004)			(0.004)	
Standard error 55km, Time: 2 years Standard error 55km, Time: Infinite		(0.004)			(0.004)			(0.004)	
		(0.004)			(0.004)				
Standard error 1000km, Time: 2 years								(0.005)	
Standard error 1000km, Time: Infinite		(0.004)			(0.004)			(0.005)	
CP Index x Ethnic Fraction.		0.0108			0.0207			-0.0035	
Standard error 55km, Time: 2 years		(0.006)			(0.008)			(0.009)	
Standard error 55km, Time: Infinite		(0.006)			(0.008)			(0.009)	
Standard error 1000km, Time: 2 years		(0.009)			(0.010)			(0.012)	
Standard error 1000km, Time: Infinite		(0.009)	0.040		(0.010)	0.0004		(0.012)	0.00004
APP Index x Ethnic Polariz.			0.0195			-0.0031			0.03621
Standard error 55km, Time: 2 years			(0.008)			(0.009)			(0.011)
Standard error 55km, Time: Infinite			(0.008)			(0.009)			(0.011)
Standard error 1000km, Time: 2 years			(0.010)			(0.010)			(0.012)
Standard error 1000km, Time: Infinite			(0.010)			(0.010)			(0.012)
Drought SPEI GS x Ethnic Polariz.			-0.0014			-0.0068			0.0020
Standard error 55km, Time: 2 years			(0.002)			(0.002)			(0.002)
Standard error 55km, Time: Infinite			(0.002)			(0.002)			(0.002)
Standard error 1000km, Time: 2 years			(0.002)			(0.002)			(0.003)
Standard error 1000km, Time: Infinite			(0.002)			(0.002)			(0.003)
CP Index x Ethnic Polariz			0.0066			0.0093			-0.0046
Standard error 55km, Time: 2 years			(0.004)			(0.004)			(0.005)
Standard error 55km, Time: Infinite			(0.004)			(0.004)			(0.005)
Standard error 1000km, Time: 2 years			(0.004)			(0.005)			(0.006)
Standard error 1000km, Time: Infinite			(0.005)			(0.005)			(0.006)
Observations	139,136	109,968	109,968	139,136	109,968	109,968	139,136	109,968	109,968
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial and serial correlation. The table is the same as Table 3, Table 4, and Table 5 (columns (2), (10) and (12)) of main text, except that we allow different radius and time periods of spatial and serial correlation. The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2.

TABLE A24: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES: ONE DEGREE AGGREGATION

			AGGREGAT	ION					
Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
APP Index	-0.0330***	-0.0224**	-0.0257**	0.0338***	0.0670***	0.0665***	-0.0199*	-0.0214	-0.0273*
	(0.009)	(0.011)	(0.011)	(0.010)	(0.012)	(0.013)	(0.011)	(0.014)	(0.014)
Drought SPEI GS	0.0114***	0.0061	0.0056	0.0171***	0.0186***	0.0176***	0.0080***	0.0066	0.0062
	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.004)
CP Index	0.0314	0.0283	0.0260	-0.0623	-0.0739***	-0.0622***	-0.0208	-0.0286	-0.0260
	(0.026)	(0.027)	(0.027)	(0.027)	(0.026)	(0.027)	(0.030)	(0.031)	(0.031)
APP Index x Excluded groups		-0.0112***	-0.0114**		-0.0098*	-0.0101*		-0.0065	-0.0069
		(0.005)	(0.005)		(0.005)	(0.005)		(0.006)	(0.006)
Drought SPEI GS x Excluded groups		0.0035***	0.0035**		-0.0010	-0.0012		0.0018	0.0018
		(0.002)	(0.001)		(0.001)	(0.001)		(0.001)	(0.001)
CP Index x Excluded groups		-0.0018	-0.0022		0.0033	0.0038		0.0072**	0.0075**
		(0.003)	(0.003)		(0.003)	(0.003)		(0.003)	(0.003)
APP Index x Monopoly groups		-0.1923***	-0.1926***		-0.2250***	-0.2246***		-0.2804***	-0.2837**
		(0.047)	(0.047)		(0.045)	(0.045)		(0.053)	(0.053)
Drought SPEI GS x Monopoly groups		0.0109	0.0108		-0.1052**	-0.1044*		0.0430	0.0424
		(0.011)	(0.010)		(0.052)	(0.052)		(0.042)	(0.042)
CP Index x Monopoly groups		0.0544***	0.0525***		0.1755***	0.1750***		0.2056***	0.2071***
		(0.017)	(0.017)		(0.024)	(0.024)		(0.030)	(0.030)
APP Index x Ethnic Fraction.		0.0475			-0.0522			0.0854**	
		(0.030)			(0.040)			(0.040)	
Drought SPEI GS x Ethnic Fraction.		0.0074			-0.0406***			-0.0762	
-		(0.011)			(0.010)			(0.011)	
CP Index x Ethnic Fraction.		-0.0019			0.0795***			-0.0370	
		(0.019)			(0.022)			(0.023)	
APP Index x Ethnic Polariz.			0.0365**			-0.0275			0.0662***
			(0.018)			(0.022)			(0.024)
Drought SPEI GS x Ethnic Polariz.			0.0055			-0.0232***			-0.0031
			(0.006)			(0.006)			(0.006)
CP Index x Ethnic Polariz.			0.0062			0.0450***			-0.0273**
			(0.011)			(0.013)			(0.013)
Observations	35,216	35,216	35,216	35,216	35,216	35,216	35,216	35,216	35,216
Unconditional_Probability_Conflict	5.608%	5.608%	5.608%	8.067%	8.067%	8.067%	9.873%	9.873%	9.873%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (RIOTS), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 220km radius and for five periods of correlation. p-values for linear combination are reported in parentheses *** p<0.01, ** p<0.05, * p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. Each cell is 110km x 110km at the equator.

TABLE A25: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES: TWO DEGREE

			AGGREGAT						
Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
APP Index	-0.0234	0.0141	0.0210	-0.0170	0.0634	0.0503	-0.0491*	0.0002	0.0031
	(0.021)	(0.034)	(0.035)	(0.024)	(0.040)	(0.041)	(0.026)	(0.045)	(0.047)
Drought SPEI GS	0.0294***	-0.0190	-0.0222	-0.0127	0.0063	0.0022	-0.0001	0.0072	0.0012
	(0.009)	(0.015)	(0.016)	(0.009)	(0.015)	(0.015)	(0.009)	(0.017)	(0.0173)
CP Index	-0.0702	-0.1273*	-0.1373*	-0.0081	-0.0523	-0.0679	-0.1714**	-0.2123**	-0.2037**
	(0.070)	(0.075)	(0.075)	(0.069)	(0.076)	(0.078)	(0.080)	(0.088)	(0.089)
APP Index x Excluded groups		-0.0042	-0.0042		-0.0069**	-0.0001		0.0003	0.0002
		(0.003)	(0.003)		(0.003)	(0.003)		(0.004)	(0.004)
Drought SPEI GS x Excluded groups		0.0044***	0.0046***		0.0008	0.0014		0.0008	0.0008
		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
CP Index x Excluded groups		0.0009	0.0010		-0.0025	-0.0001		0.0028	0.0029
		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
APP Index x Monopoly groups		-0.0859	-0.0781		-0.0895	-0.0784		-0.0572	-0.0568
		(0.073)	(0.073)		(0.093)	(0.093)		(0.105)	(0.104)
Drought SPEI GS x Monopoly groups		0.0076	00071		-0.2782**	-0.1691*		-0.1164	-0.1178
		(0.056)	(0.051)		(0.108)	(0.108)		(0.122)	(0.122)
CP Index x Monopoly groups		0.1426***	0.0721		0.1467**	0.1395*		0.2900***	0.2930***
		(0.052)	(0.053)		(0.075)	(0.075)		(0.082)	(0.082)
APP Index x Ethnic Fraction.		-0.0383			-0.0927			-0.1416	
		(0.073)			(0.086)			(0.095)	
Drought SPEI GS x Ethnic Fraction.		0.1101***			-0.0532			-0.0360	
		(0.038)			(0.036)			(0.039)	
CP Index x Ethnic Fraction.		0.0665			0.1065*			0.0377	
		(0.053)			(0.063)			(0.068)	
APP Index x Ethnic Polariz.			-0.0367			-0.0354			-0.0947
			(0.047)			(0.057)			(0.064)
Drought SPEI GS x Ethnic Polariz.			0.0685***			-0.0258			-0.0089
			(0.023)			(0.019)			(0.022)
CP Index x Ethnic Polariz.			0.0622*			0.0934**			0.0015
			(0.034)			(0.038)			(0.043)
Observations	8,912	8,176	8,176	8,912	8,176	8,176	8,912	8,176	8,176
Unconditional_Probability_Conflict	12.803%	13.650%	13.650%	21.061%	22.272%	22.272%	22.576%	24.009%	24.009%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (RIOTS), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 220km radius and for five periods of correlation. p-values for linear combination are reported in parentheses *** p<0.01, ** p<0.05, * p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. Each cell is 220km x 220km at the equator.

TABLE A26: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. PRICE LAGS

Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
APP Index	-0.0228***	-0.0373***	-0.0375***	0.0481***	0.0581***	0.0582***	0.0123*	-0.0043	-0.0034
	(0.005)	(0.006)	(0.006)	(0.005)	(0.008)	(0.008)	(0.007)	(0.009)	(0.009)
Drought SPEI GS	0.0048**	0.0001	-0.0001	0.0030**	0.0005	0.0002	0.0003	-0.0116***	-0.0112***
0	(0.001)	(0.003)	(0.003)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
CP Index	0.1285**	0.1426***	0.1422***	-0.0459***	-0.0335*	-0.0328*	0.1207***	0.1277***	0.1283***
	(0.019)	(0.022)	(0.022)	(0.015)	(0.018)	(0.018)	(0.021)	(0.024)	(0.024)
APP Index x Excluded groups		0.0000	0.0004		-0.0045	-0.0043	1 7	0.0028	0.0044
		(0.011)	(0.010)		(0.011)	(0.011)		(0.014)	(0.014)
Drought SPEI GS x Excluded groups		0.0167***	0.0167***		0.0040	0.0038		0.0175***	0.0174***
0 1		(0.003)	(0.003)		(0.003)	(0.003)		(0.003)	(0.003)
CP Index x Excluded groups		-0.0077	-0.0077		-0.0099*	-0.0114**		0.0103	0.0107***
•		(0.005)	(0.006)		(0.005)	(0.005)		(0.007)	(0.007)
APP Index x Monopoly groups		-0.0901**	-0.0905**		-0.0964***	-0.0960***		-0.1927***	-0.1934***
- • • -		(0.042)	(0.042)		(0.027)	(0.027)		(0.051)	(0.051)
Drought SPEI GS x Monopoly groups		0.0200***	0.0200***		-0.0063	-0.0062		-0.0232	-0.0234
		(0.006)	(0.006)		(0.044)	(0.044)		(0.036)	(0.036)
CP Index x Monopoly groups		0.0536***	0.0538***		0.1100***	0.1102***		0.1143***	0.1151**
		(0.011)	(0.011)		(0.022)	(0.022)		(0.022)	(0.022)
APP Index x Ethnic Fraction.		0.0786***			-0.0128			0.0903***	
		(0.020)			(0.026)			(0.029)	
Drought SPEI GS x Ethnic Fraction.		-0.0148**			-0.0087			0.0074	
		(0.006)			(0.006)			(0.006)	
CP Index x Ethnic Fraction.		-0.0128			0.0258*			-0.0054	
		(0.010)			(0.013)			(0.013)	
APP Index x Ethnic Polariz.			0.0431***			-0.0077			0.0447***
			(0.011)			(0.014)			(0.016)
Drought SPEI GS x Ethnic Polariz.			-0.0073**			-0.0039			0.0030
			(0.003)			(0.003)			(0.003)
CP Index x Ethnic Polariz.			-0.0059			0.0112			-0.0063
			(0.005)			(0.007))			(0.007)
Observations	139,136	109,968	109,968	139,136	109,968	109,968	139,136	109,968	109,968
Unconditional_Probability_Conflict	2.168%	2.434%	2.434%	2.696%	3.100%	3.100%	3.743%	4.236%	4.236%
Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (RIOTS), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, t-2, t-3, t-4, and t-5. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 110km radius and for five periods of correlation. p-values for the linear combination are reported in parentheses. *** p<0.01, *** p<0.01, *** p<0.01. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017), in both cases at t, t-1, t-2, t-3, t-4, and t-5.

TABLE A27: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. CONDITIONAL LOGIT

APP Index	Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
Drought SPEI GS (0.285) (0.285) (0.286) (0.156) (0.355) (0.309) (0.130) (0.281) (0.281) (0.281) (0.166) (0.166) (0.166) (0.166) (0.167) (0.107		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Drought SPEI GS	APP Index	-0.8742***	-0.5113*	-0.4393*	0.2589*	0.4887	0.4830	-0.3167**	-0.4772*	-0.4681
CP Index		(0.258)	(0.285)	(0.268)	(0.156)	(0.355)	(0.369)	(0.130)	(0.281)	(0.284)
CP Index -0.882 -0.1914 -0.2700 -0.8207 -0.2601 -0.2728 -1.0874* -0.3004 -0.3826 -0.6868	Drought SPEI GS	0.1911	-0.0110	-0.0377	-0.0032	0.2156	0.2095	-0.1897*	-0.3319*	-0.3164
Company Comp		(0.136)	(0.188)	(0.188)	(0.116)	(0.141)	(0.147)	(0.107)	(0.198)	(0.197)
APP Index x Excluded groups	CP Index	-0.8821	-0.1914	-0.2700	-0.8207	-0.2601	-0.2728	-1.0874*	-0.3904	-0.3826
O.1413 O.425 O.315 O.181 O.466 O.488		(1.641)	(1.786)	(1.763)	(0.774)	(1.821)	(1.776)	(0.648)	(1.865)	(1.863)
Drought SPEI GS x Excluded groups	APP Index x Excluded groups		-0.4808	-0.4512		-0.4782	-0.4745		-0.1857	-0.1629
CP Index x Excluded groups			(0.413)	(0.425)		(0.315)	(0.181)		(0.466)	(0.468)
CP Index x Excluded groups	Drought SPEI GS x Excluded groups		0.5482	0.5259		-0.0695	-0.0862		0.2400	0.2514
APP Index x Monopoly groups			(0.408)	(0.407)		(0.378)	(0.365)		(0.307)	(0.311)
APP Index x Monopoly groups	CP Index x Excluded groups		-0.2146	-0.2246		0.2914	0.2756		0.0018	0.0020
1.299 1.316 1.649 1.627 1.670 1.500 1.594			(0.434)	(0.428)		(0.328)	(0.323)		(0.387)	(0.385)
Drought SPEI GS x Monopoly groups	APP Index x Monopoly groups		-2.809**	-2.7472**		-2.3641	-2.3318		-1.6226	-1.6008
CP Index x Monopoly groups			(1.299)	(1.316)		(1.649)	(1.627)		(1.560)	(1.594)
CP Index x Monopoly groups 3.7850*** (0.723) (0.794) (0.786) (0.766) (0.774) (0.766) (0.774) (0.516) (0.516) (0.524) APP Index x Ethnic Fraction. 0.2238 (1.313) (0.599) (0.653) Drought SPEI GS x Ethnic Fraction. 0.0387 (0.882) (0.682) (0.673) CP Index x Ethnic Fraction. 0.0906 (0.679) (0.679) (0.673) CP Index x Ethnic Polariz. APP Index x Ethnic Polariz. 0.0163 (0.919) 0.0229 APP Index x Ethnic Polariz. 0.029 0.05397 0.05397 0.05397 0.05397 0.05397 0.0631* 0.0381 0.0381 0.0381 0.0381 0.0452 0.0486 0.0381) 0.0452 0.0486 0.0389 0.	Drought SPEI GS x Monopoly groups		-1.5771	-1.7767		0.3102*	0.3277*		0.6109***	0.6108***
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			(2.267)	(2.366)		(0.167)	(0.171)		(0.229)	(0.224)
APP Index x Ethnic Fraction. 0.2238	CP Index x Monopoly groups		3.7850***	3.9449***		1.9608**	1.9419**		2.6357***	2.6611***
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 0 0 1		(0.723)	(0.794)		(0.786)	(0.774)		(0.516)	(0.524)
Drought SPEI GS x Ethnic Fraction.	APP Index x Ethnic Fraction.		0.2238			0.0543			1.2352*	
CP Index x Ethnic Fraction.			(1.313)			(0.599)			(0.653)	
CP Index x Ethnic Fraction. 0.9036 (0.919) APP Index x Ethnic Polariz. -0.1229 (0.678) 0.05397 (0.384) (0.337) 0.0337 0.0337 0.0337 0.0337 0.0452) CP Index x Ethnic Polariz. 0.0582) 0.05899 (0.419) 0.05899 0.0154 (0.419) 0.05899 0.0154 (0.294) 0.05899 0.0154 (0.294) 0.05899 0.0154 (0.294) 0.05899 0.0154 (0.294) 0.05899 0.0154 (0.294) 0.05899 0.0154 (0.367) (0.419) 0.05899 0.0194 0.0194 0.0294 0.0294 0.0294 0.0294 0.0367 0.037 0.037 0.0486 0.0361 0.0592 0.0419 0.05899 0.0194 0.0294 0.0419 0.0294 0.0294 0.0499 0.05899 0.0194 0.0294 0.0	Drought SPEI GS x Ethnic Fraction.		0.0387			-1.7459**			0.6749	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Č		(0.800)			(0.825)			(0.673)	
APP Index x Ethnic Polariz. -0.1229 (0.678) (0.684) (0.384) (0.384) (0.387) Drought SPEI GS x Ethnic Polariz. 0.1584 (0.452) (0.486) (0.486) (0.361) CP Index x Ethnic Polariz. 0.6720 (0.532) (0.419) (0.294) Observations 17,874 15,516 15,516 20,145 17,730 17,730 29,248 25,056 25,056 Unconditional_Probability_Conflict 2.168% 2.434% 2.434% 2.434% 2.434% 2.696% 3.100% 3.100% 3.100% 3.949% 4.236%	CP Index x Ethnic Fraction.		0.9036			-0.0604			-0.1663	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			(0.919)			(0.679)			(0.566)	
Drought SPEI GS x Ethnic Polariz.	APP Index x Ethnic Polariz.		` ′	-0.1229		, ,	0.05397		` ′	0.6331*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				(0.678)			(0.384)			(0.337)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Drought SPEI GS x Ethnic Polariz.						-0.9390*			
CP Index x Ethnic Polariz. 0.6720 (0.532) 0.3899 (0.419) -0.1154 (0.294) Observations 17,874 15,516 15,516 20,145 17,730 17,730 29,248 25,056 25,056 Unconditional_Probability_Conflict 2.168% 2.434% 2.434% 2.696% 3.100% 3.100% 3.949% 4.236% 4.236% Cell FE YES YES </td <td>o .</td> <td></td> <td></td> <td>(0.452)</td> <td></td> <td></td> <td>(0.486)</td> <td></td> <td></td> <td>(0.361)</td>	o .			(0.452)			(0.486)			(0.361)
Observations 17,874 15,516 15,516 20,145 17,730 17,730 29,248 25,056 25,056 Unconditional_Probability_Conflict 2.168% 2.434% 2.434% 2.696% 3.100% 3.100% 3.949% 4.236% 4.236% Cell FE YES <	CP Index x Ethnic Polariz.									
Unconditional_Probability_Conflict 2.168% 2.434% 2.434% 2.696% 3.100% 3.100% 3.949% 4.236% 4.236% Cell FE YES							(0.419)			
Unconditional_Probability_Conflict 2.168% 2.434% 2.434% 2.696% 3.100% 3.100% 3.949% 4.236% 4.236% Cell FE YES	Observations	17,874	15,516		20,145	17,730		29,248	25,056	
Year FE YES YES YES YES YES YES YES YES YES YE	Unconditional_Probability_Conflict	2.168%	2.434%	2.434%		3.100%	3.100%	3.949%	4.236%	4.236%
	Cell FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country-specific time trend YES	Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
	Country-specific time trend	YES	YES	YES	YES	YES	YES	YES	YES	YES

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (RIOTS), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the drought SPEI growing season, and the Consumer Price Index (CP Index) coefficients displayed capture the sum of price impacts at t, t-1, and t-2. Conditional Logit estimations with fixed effects. Standard errors clustered at the country level. p-values for the linear combination are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Control variables include he interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the price for the main mineral produced in a cell following the approximation of Berman et al. (2017), in both cases at t, t-1 and t-2.

TABLE A28: CONFLICT: AGRICULTURAL PRODUCER PRICES, DROUGHT SPEI GROWING SEASON AND CONSUMER PRICES. CLIMATE VARIABLES

Type of CONFLICT	UCDP_Incidence	UCDP_Incidence	UCDP_Incidence	ACLED_Riots	ACLED_Riots	ACLED_Riots	ACLED_Violence	ACLED_Violence	ACLED_Violence
ADD I	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
APP Index	-0.0173***	-0.0143***	-0.0142***	0.0270***	0.0353***	0.0349***	-0.0060	-0.0149**	-0.0145***
D. I. SDET GG	(0.004)	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)	(0.005)	(0.007)	(0.007)
Drought SPEI GS	0.0042***	0.0023	0.0021	0.0031***	0.0080***	0.0075***	0.0026***	0.0010	0.0010
on to	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
CP Index	0.0228**	0.0317**	0.0314**	-0.0207**	-0.0047	-0.0043	0.0174	0.0318**	0.0323**
	(0.011)	(0.013)	(0.013)	(0.010)	(0.011)	(0.011)	(0.012)	(0.014)	(0.014)
Drought SPEI	0.0485***	0.0708***	0.0707***	-0.0478***	-0.0460***	-0.0463***	-0.0057	0.0172	0.0171
	(0.011)	(0.014)	(0.014)	(0.010)	(0.012)	(0.012)	(0.013)	(0.016)	(0.016)
APP Index x Excluded groups		-0.0296***	-0.0292***		-0.0131*	-0.0133**		-0.0134	-0.0124
		(0.008)	(0.008)		(0.008)	(0.007)		(0.009)	(0.009)
Drought SPEI GS x Excluded groups		0.0082***	0.0081***		-0.0033*	-0.0033**		0.0034*	0.0033
		(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)
CP Index x Excluded groups		-0.0021	-0.0020		0.0022	0.0026		0.0174***	0.0179***
		(0.004)	(0.004)		(0.004)	(0.004)		(0.005)	(0.005)
APP Index x Monopoly groups		-0.0883**	-0.0885**		-0.0480**	-0.0477**		-0.1537***	-0.1541***
1 0 0 1		(0.037)	(0.038)		(0.021)	(0.021)		(0.044)	(0.044)
Drought SPEI GS x Monopoly groups		-0.0042	-0.0042		-0.0081	-0.0080		0.0360	0.0360
		(0.005)	(0.004)		(0.030)	(0.030)		(0.023)	(0.023)
CP Index x Monopoly groups		0.0208*	0.0208*		0.0352***	0.0353***		0.0772***	0.0778***
1 0 0 1		(0.011)	(0.011)		(0.011)	(0.011)		(0.015)	(0.015)
APP Index x Ethnic Fraction.		0.0459***			-0.0030	,		0.0696***	
		(0.015)			(0.018)			(0.020)	
Drought SPEI GS x Ethnic Fraction.		-0.0073*.			-0.0195**			-0.0013	
Drought of Li oo i Lumio Fraction		(0.004)			(0.009)			(0.004)	
CP Index x Ethnic Fraction.		0.0122			0.0195**			-0.0029	
or made a bomie fraction		(0.008)			(0.009)			(0.009)	
APP Index x Ethnic Polariz.		(0.000)	0.0243***		(0.000)	-0.0001		(0.000)	0.0357***
THE THREE A LIMITE I CHAILE.			(0.008)			(0.010)			(0.011)
Drought SPEI GS x Ethnic Polariz.			-0.0034*			-0.0083***			-0.0006
Drought of Li Go x Lennic i ofariz.			(0.002)			(0.002)			(0.002)
CP Index x Ethnic Polariz.			0.002)			0.002)			-0.0043
Of findex x Ethinic I diariz.			(0.004)			(0.005)			(0.005)
Observations	134,208	107,264	107,264	134,208	107,264	107,264	134,208	107,264	107,264
Unconditional_Probability_Conflict	2.186%	2.424%	2.424%	2.731%	2.977%	2.977%	3.794%	4.192%	4.192%
Cell FE	2.180% YES	YES	YES	YES	YES	YES	3.79470 YES	4.192% YES	4.192% YES
Year FE	YES YES	YES	YES	YES	YES	YES	YES YES	YES YES	YES
	YES YES	YES YES	YES	YES	YES	YES	YES YES	YES YES	YES YES
Country-specific time trend									

Notes: The dependent variable is a binary variable that takes a value of one for conflicts following the definition of UCDP-GED datase (UCDP_INCIDENCE) and ACLED riots (Riots), and violence against civilians (VIOLENCE) database. The Agricultural price Index (APP Index), the SPEI growing season, the Consumer Price Index (CP Index) and the drought SPEI coefficients displayed capture the sum of price impacts at t, t-1, and t-2. LPM estimations. Conley (2008) standard errors in parentheses, allowing for spatial correlation within a 220km radius and for five periods of correlation. p-values for linear combination are reported in parentheses. ****** p<0.01, ******* p<0.05, *** p<0.1. Control variables include the interactions between oil prices and oil dummy indicating the presence of an oil field in a given cell, and the interaction between the log of the main mineral produced in a cell following the approximation of Berman et al. (2017) in both cases at t, t-1 and t-2. We also control for other weather variables as Temperature, the cell-year mean temperature in degrees celsius, and Rainfall, the yearly total amount of precipitation (in millimeter) in the cell.

3 Additional Figures



Figure A1: Cells Africa. Source: PRIO-GRID grid structure matched with the African countries by the Global Administrative Unit Layers.

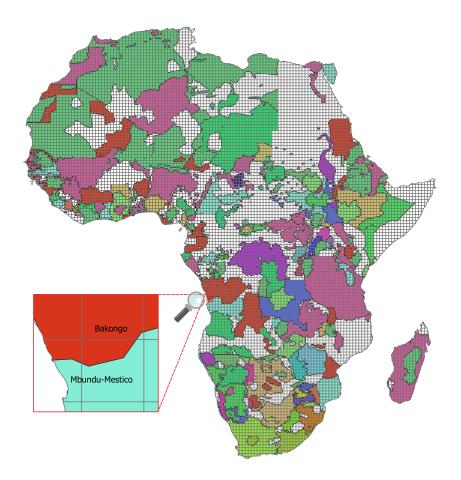


Figure A2: Ethnic groups from Geo-referencing Ethnic Power Relation. Year 1997. Each color represents a settlement group of politically relevant ethnic groups in independent states with more than 500,000 inhabitants from 1946-2009, based on the group list in the Ethnic Power Relations dataset version 2014. The database is filtered by the year 1997.

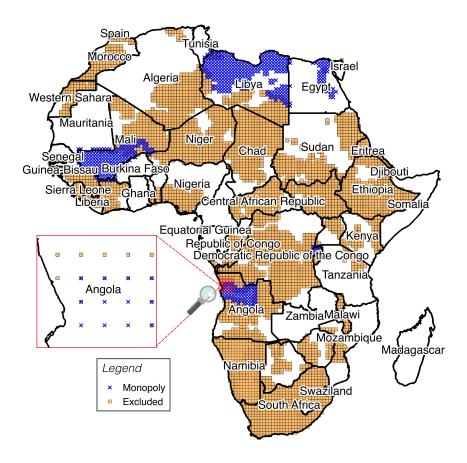


Figure A3: Excluded and monopoly groups. Source: Ethnic Power Relations (EPR) Dataset Core 2014. Year 1997.

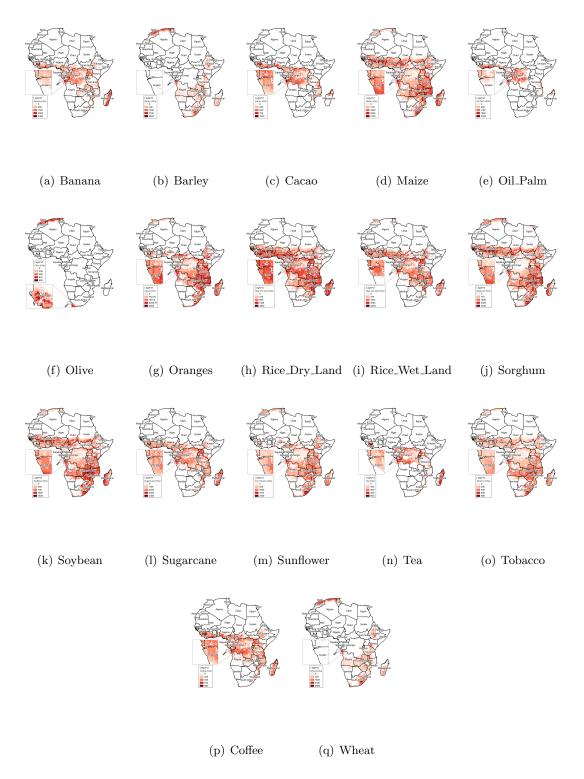


Figure A4: Crops potential production based on the FAO's Global Agro-Ecological Zones (GAEZ).

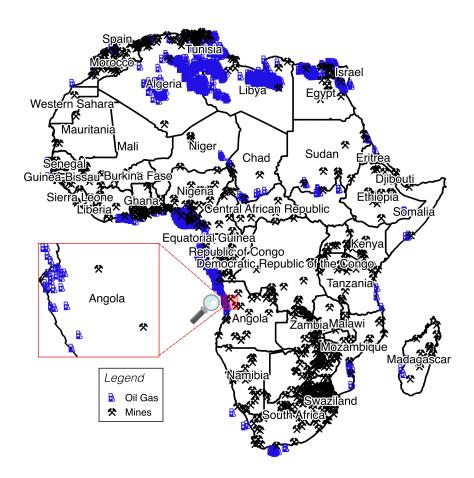
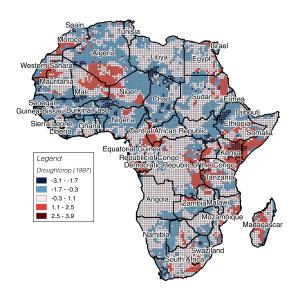
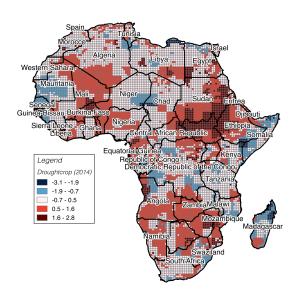


Figure A5: Natural Resources. Sources: Petroleum Dataset v. 1.2 and U.S. Geological Survey (USGS) dataset.

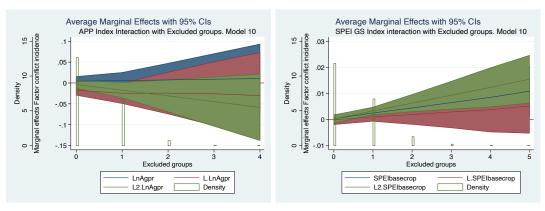


(a) Drought SPEI growing season 1997

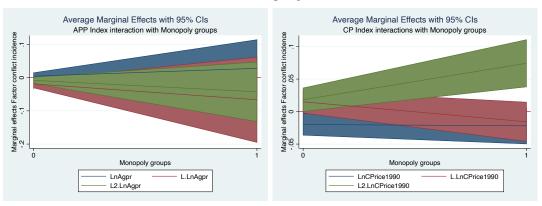


(b) Drought SPEI growing season 2014

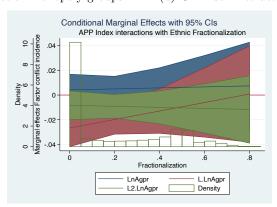
Figure A6: Droughts SPEI growing season. Source: SPEI Global Drought Monitor.



- (a) APP index interaction excluded groups
- (b) Drought SPEI GS index interaction excluded groups

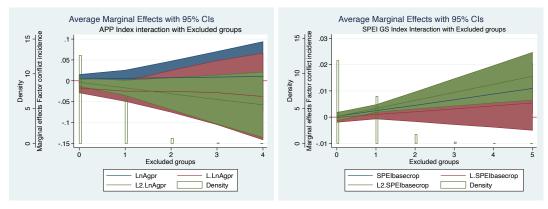


- (c) APP index interaction monopoly groups
- (d) CP index interaction monopoly groups

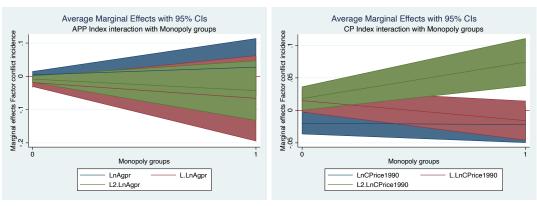


(e) APP index interaction Ethnic fractionalization

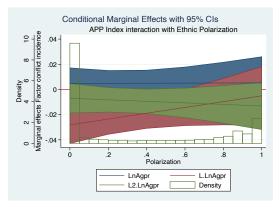
Figure A7: Factor conflict - Significant interaction variables in full model with ethnic fractionalization



- (a) APP index interaction excluded groups
- (b) Drought SPEI GS index interaction excluded groups

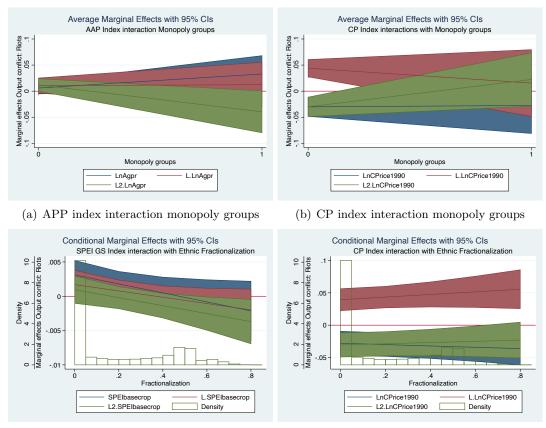


- (c) APP index interaction monopoly groups
- (d) CP index interaction monopoly groups



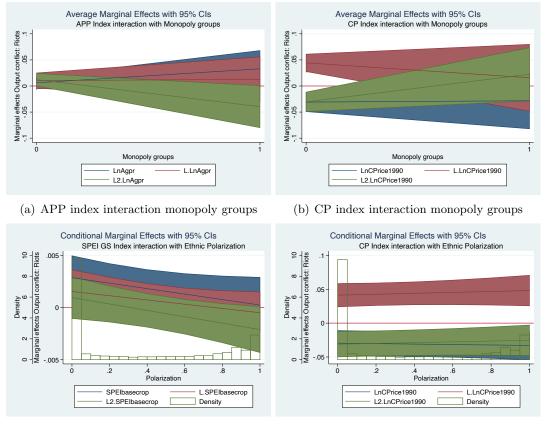
(e) APP index interaction Ethnic Polarization

Figure A8: Factor conflict - Significant interaction variables in full model with ethnic polarization



(c) Drought SPEI GS index interaction Ethnic (d) CP index interaction Ethnic fractionalization fractionalization

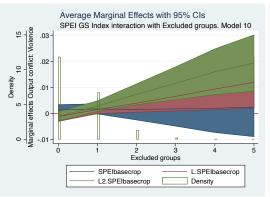
Figure A9: Riots - Significant interaction variables in full model with ethnic fractionalization

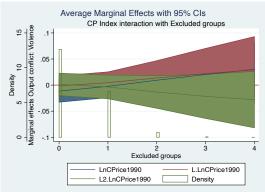


(c) Drought SPEI GS index interaction Ethnic polarization

(d) CP index interaction Ethnic polarization

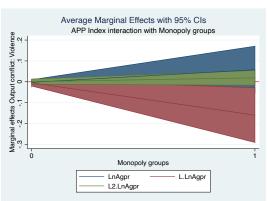
Figure A10: Riots - Significant interaction variables in full model with ethnic polarization ${\bf r}$

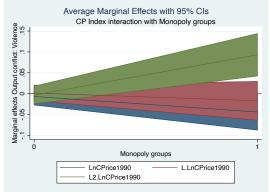




(a) Drought SPEI GS index interaction excluded groups

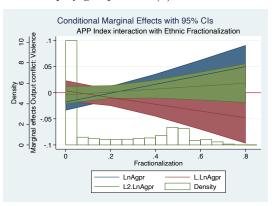
(b) CP index interaction excluded groups





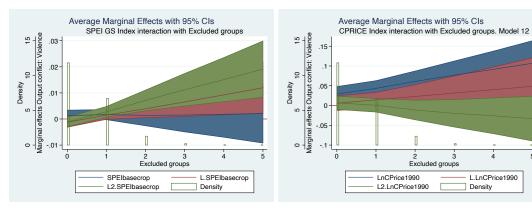
(c) APP index interaction monopoly groups

(d) CP index interaction monopoly groups

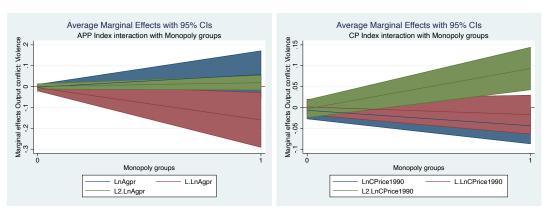


(e) APP index interaction Ethnic fractionalization

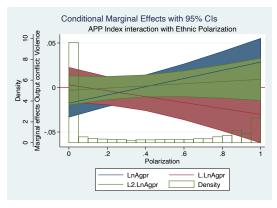
Figure A11: Violence against civilians - Significant interaction variables in full model with ethnic fractionalization



- (a) Drought SPEI GS index interaction excluded groups
- (b) CP index interaction excluded groups



- (c) APP index interaction monopoly groups
- (d) CP index interaction monopoly groups



(e) APP index interaction Ethnic polarization

Figure A12: Violence against civilians - Significant interaction variables in full model with ethnic polarization