Terrorism and preference for democracy: Evidence from Africa

Philipp Kerler †

January 20, 2021

ABSTRACT. Does terrorism affect citizens' preference for democracy? It is often asserted that terrorism intimidates the public inasmuch as the public would willingly sacrifice democratic freedoms for safety. I study the effect of terrorist attacks on preference for democracy in an event-study-like setting, by comparing reported preference for democracy shortly before and after terrorist attacks in several African countries. The results alleviate concerns that the collectively experienced trauma of terrorism compromises preference for democracy. On the contrary, I document increased preference for democracy in response to terrorist attacks. Especially among individuals who evaluate their state to be undemocratic preference for democracy increases. This consideration is especially important for understanding the democratization process many young African democracies are undergoing. The empirical results are robust to a number of tests, including a correction for spatial confounding which is a so far unaddressed issue in similar empirical setups.
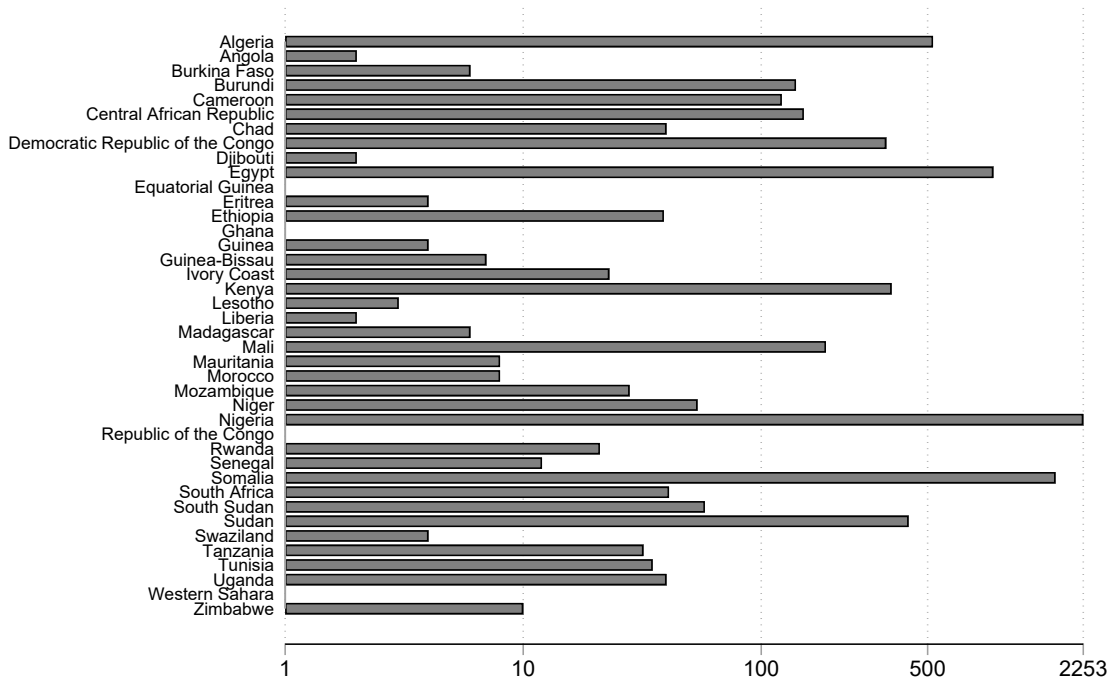
1   Introduction

Terrorism is pervasive in many African countries, but incidence varies greatly across countries (see Figure 1). From 2005-2015 the Global Terrorism Database (GTD) lists 7644 terrorist attacks on the African continent (University of Maryland, 2019). Despite the surge of scholarly interest in terrorism after September 11, 2001, terrorism in Africa remains less salient in the academic literature. This general observation holds particularly for the relationship of terrorism and democracy. Yet, many African democracies are young, and therefore, especially vulnerable (Fearon and Laitin, 2003; Przeworski, 2005). Commentators suggest that terrorist organizations try to capitalize on this vulnerability. Undermining governments' legitimacy by violently disrupting order and offering themselves as alternative providers of order instead (Byman, 2019). After all, providing public safety is a fundamental function of the state. Therefore, understanding whether terrorist attacks successfully persuade people to reject democracy is crucial. In this research, I investigate, for several African countries, how exposure to terrorist attacks impacts citizens preference for democracy. Notably, beyond Africa, a popular argument in the debate on the global crisis of democracy[1] states that voters may be willing to sacrifice some democratic freedoms to protect against terrorist threat Giavazzi et al. (2020). Existing evidence from Pakistan indeed documents a negative correlation between exposure to terrorism and preference for democracy (Rehman and Vanin, 2017). Theoretical work maintains the assumption that citizens prefer democracy over other forms of government (e.g., Przeworski, 1991, 2005; Fearon, 2011; Acemoglu and Robinson, 2001). With this assumption violated it is questionable whether a democratic equilibrium described in such theories can emerges in reality. Hence, this research adds important insights to our understanding of democratic transition, the stability of democracies (and non-democracies) and democratic resilience in the face of terrorism.

Existing research shows, collective experience and exposure to violence hold the potential to influence individuals preferences in various domains (e.g., Voigtländer and Voth, 2012; Rohner et al., 2013; Depetris-Chauvin et al., 2018). The effects of terrorism on electoral preferences have already attracted considerable scholarly interest, see, e.g., Berrebi and Klor (2008); Kibris (2011); Montalvo (2011); Getmansky and Zeitzoff (2014) and Balcells and Torrats-Espinosa (2018). Strebel and Steenbergen (2017) find increased threat perception and higher skepticism towards migrants in response to the 2015 attacks in France. Van Hauwaert

---

[1] Freedomhouse reports the 14th year of consecutive decline in global democratization (House, 2020).

Figure 1: Terrorist attacks 2005-2015 by country.

Countries with an incident of at least one attack between 2005 and 2015 are displayed. The scale is the natural logarithm of the number of attacks.

and Huber (2020) find a positive effect on in-group solidarity and out-group hostility for the same case.

Using a quasi exogenous division of survey samples from 10 country-year cases in pre and post attack groups, I document that terrorist attacks affect reported preference for democracy positively. On average, individuals become about 3 percentage points (pp) more likely to report democracy as the preferred form of government in response to an attack in their country. This corresponds to roughly 8% of those not preferring democracy ex ante changing their opinion in favor of democracy. Matching geo- and time-coded data from Afrobarometer (AfB) surveys and terrorism events from the GTD allows comparing reported preferences closely before and after an attack in a country. Therefore, I can identify a causal effect under the relatively mild assumption that within the short time frame of survey fielding the exact attack date is random. The strategy is similar to Depetris-Chauvin et al.'s (2018), who study the effect of a collective experience (national football games' outcomes) on national versus

ethnic identity. Identifying the causal effect of terrorism on any social, political or economic variable is otherwise plagued by simultaneity issues, as described by Abadie (2006). Relative to the evidence presented in Rehman and Vanin (2017), who find a negative association between terrorism and pro-democratic attitudes in Pakistan, this research adds evidence with a clear causal interpretation.

The paper is structured as follows: In section 2 I will outline the theoretical framework for analyzing terrorism's impact on preference for democracy. In section 3, I will give a descriptive account of terrorism and political attitudes in Africa and introduce the data set. Section 4 covers the empirical analysis: identification strategy, results and robustness tests. Section 5 concludes by discussing implications of the findings for democratization.

2 Terrorism and preference for democracy - conceptual framework

In this section I lay out the conceptual framework for analyzing how terrorism as a collectively experienced shock impacts preferences for democracy.

Preference for democracy. A regime is characterized by its location on a scale from autocratic to a fully democratic. Hence, democratization is conceived as regime change in the direction of the democratic ideal. In the same way I conceive of preference for democracy as a regime preference in terms of proximity to the democratic ideal. In classic economic theory preferences are exogenous, fixed traits. From this perspective one could argue that a philosophical positions or a worldview as a set of values would also be fixed with an individuals preferences. Yet, constraints and preferences govern decisions. So from a classical perspective, change in the preferred political system hinges on changes in the constraints, subject to which the individual optimizes her utility function, which represents her preferences including her worldview. Thus, there is a subtle but important difference between the preferred regime type, as in a hypothetical choice, and regime preference, which refers to a fixed worldview. A more modern approach which I endorse here (by speaking of preference for democracy) is to think of preferences as malleable, and hence endogenous. This added degree of freedom comes at a price: Under exogenous preferences any treatment effect can be traced back to the treatment manipulating a constraint. Under endogenous preferences a treatment can impact both the utility function and constraints simultaneously, it could

even do so in opposite directions. Consequently, regime preference and the preferred regime become indistinguishable. The endogenous preference perspective is also reflected in recent literature related to this research: Both collective experiences (Depetris-Chauvin et al., 2018) and experiences of violence (Rohner et al., 2013), but also stress (Kandasamy et al., 2014) and fear (Hatemi et al., 2013) can alter individual preferences. Studies of the effects of natural disasters on preferences suggest that time preferences, risk preferences, trust and electoral preferences are affected by traumatic events (Malmendier and Nagel, 2011; Voigtländer and Voth, 2012; Bauer et al., 2014; Lazarev et al., 2014; Callen et al., 2014; Cassar et al., 2017; Fair et al., 2017; Hanaoka et al., 2018). Further, studies suggest terrorism, too, causes changes in preferences. For electoral preferences, on the one hand, Montalvo (2011) finds weaker support for the incumbent in response to a terror attack in Spain 2004. On the other hand, Balcells and Torrats-Espinosa (2018) finds no effect of terror attacks on the incumbent's vote share but increased turnout. Van Hauwaert and Huber (2020) document higher in-group solidarity and lower out-group solidarity after the November 2015 attacks in France. Rehman and Vanin (2017) find a negative correlation between terrorism and pro-democratic attitudes in Pakistan.

Terrorism. Terrorist attacks are conceived of as use of illegal force or violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion or intimidation (University of Maryland, 2019). In economic terms I analyze the case where the general public faces a cost (in the sense of a public bad) from terrorism [2]. It is well known that even people not physically affected can suffer psychologically from terrorist attacks (Strebel and Steenbergen, 2017; Stovall-McClough and Cloitre, 2006, 118-123). Social identity theory suggest that the collective experience of trauma is channeled through joint identities of those who were directly physically targeted and those who were then psychologically affected (Hogg, 2016). The public bad characteristic works effectively for perpetrators to promote fear and intimidation, and therefore to generate political pressure. When terrorists strike, expectations about security in the future deteriorate (Bozzoli and Müller, 2011; Strebel and Steenbergen, 2017), economic (Abadie and Gardeazabal, 2003) and human rights repercussions may be feared (Dreher et al., 2010), and overall, well-being will be impaired (Frey et al., 2007). The state failed to provide public safety, one of the most fundamental public goods (the absence
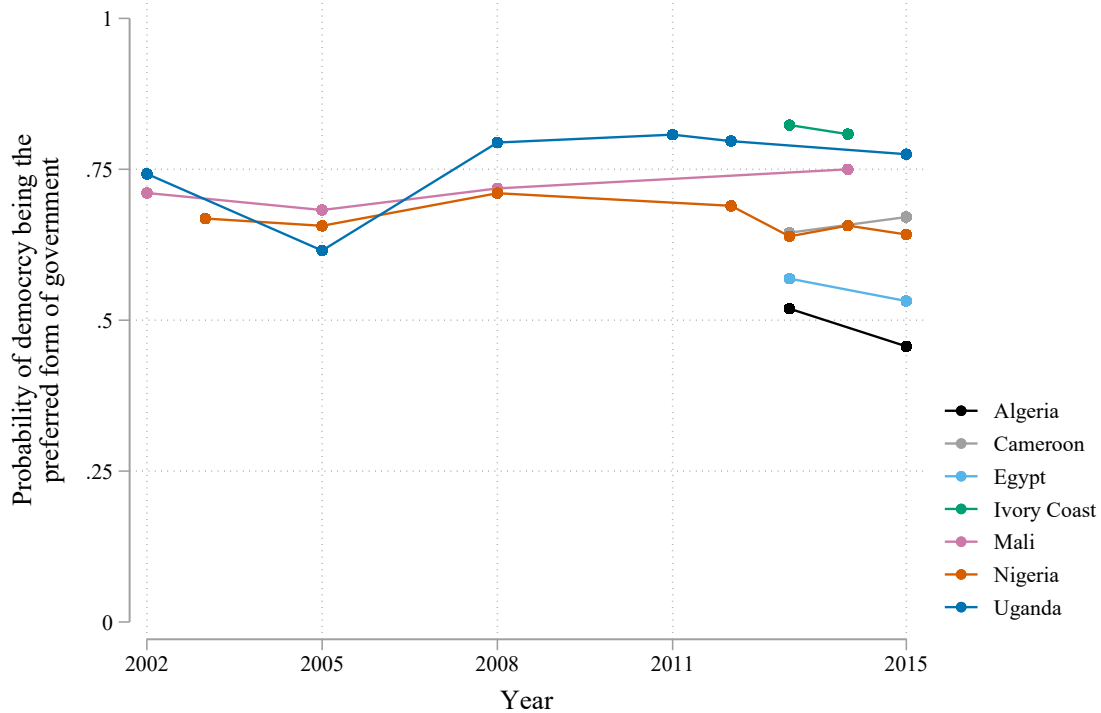
---

[2] On the conceptual level there exists a gray area between the terrorist and the freedom fighter, where terrorism may have some positive future payoffs, especially for those not physically affected. This is arguably a rare case and none of the cases I consider here are of such nature.

of the public bad violence is a public good). How does this relate to citizens preferred form of government?

Preference formation. I assume citizens to form regime preference in an instrumentally rational way. This means that an individual's preferred regime type is her utility maximizing position on the autocracy-democracy scale [3]. Often theories of democratization assume citizens to be fixed at the democracy pole (e.g., Ferejohn, 1986; Przeworski, 2005; **?**; Fearon, 2011; Acemoglu and Robinson, 2001, 2005). After all this is where we usually think citizens have the most political influence, freedom and control. The empirical picture, see Figure 2, however, shows clearly that there exists variation in preference for democracy both over time and countries. There is a number of reasons for why some citizens may not always prefer democracy: Political violence appears to be higher in democracies below a certain level of per capita income Collier and Rohner (2008), impeding democracies appeal in low income settings. Further, ethnic cleavages are a prevalent feature of the social and political life in many African countries. Fear of ethnic favoritism by democratically elected governments is a challenge for democracy and contributes to instability and conflict (Easterly and Levine, 1997; Montalvo and Reynal-Querol, 2005; Esteban et al., 2012; Burgess et al., 2015). Moreover, many African democracies are rather young, therefore more likely to experience insurgencies and civil war (Fearon and Laitin, 2003). Together, this suggests that there may indeed exist a trade-off between democracy and security for at least some citizens. Among many things, one dimension along which threats to security can be reduced is the choice of the political system. What is less clear, however, is which political system is the best choice when the objective is to reduce the threat of terrorism. Ghatak et al. (2019) provides a recent summary over the lively scholarly debate on whether democracy impedes or promotes terrorism. Hence, when terrorists strike, in a given regime, individuals will to some degree attribute the cost they incurred to the regime's type. Some individuals will attribute the incurred cost to too much democracy, following the rationale of a trade off between democratic liberty and security as proposed by Giavazzi et al. (2020) or Eubank and Weinberg (2001). Accordingly, those people would change their preferred political system towards less democracy. Some other individuals will follow the opposite rationale, "democracy prevents terrorism", implying the given regime was not democratic enough, a narrative supported by, eg., Gleditsch and

---

[3] Note here that I still maintain that both parameters of the utility function, such as risk sensitivity (Cassar et al., 2017; Hanaoka et al., 2018), and environmental constraints, such as the baseline risk, contribute to forming preference for democracy.

Figure 2: Time trend of the likelihood of reporting democracy being the preferred form of government in selected countries.

Selection of countries is based on countries appearing in the final sample. Data on regime preference stems for Afrobarometer survey waves 2-6 (2002-2015), see Section 3.2 for more details on the data. Note, that not all selected countries are surveyed in all waves.

Polo (2016) and much of the literature on democratic peace. Those people would then prefer more democracy when terrorist threat is salient, e.g., directly after attacks. The aggregate net change in preference for democracy depends on the relative share of citizens following the opposing rationales.

An important scope condition to consider here is the subjective evaluation of the regime's type. For someone who experiences a terrorist attack in a state that is perceivedly very close to the ideal democracy there is only little scope to find a superior regime that is even more democratic. Therefore, it may be more likely that an optimal regime would be less democratic for someone who evaluates the present regime as very democratic. Recent evidence indeed shows that some citizens in Germany, a highly developed democracy, seem to be willing to trade off democratic liberties to protect against terrorist threat (Giavazzi et al., 2020). The same logic naturally applies in the opposite direction for perceivedly autocratic regimes.

3 Data

3.1 Terrorism in Africa

Unfortunately terrorist activity is a pervasive feature of some African countries. As a consequence of the events of September 11, 2001 and the subsequent international counter terrorism policy, also terrorism in African countries has received increased scholarly attention (Elu and Price, 2015). Elu and Price (2012) document that 4993 terrorist attacks had taken place in sub-Sahara Africa between 1974 and 2008. The GTD lists 7644 terrorism attacks during 2005-2015 on whole the continent (University of Maryland, 2019). The distribution of attacks over countries in this 10 year span shows remarkable variation in the number of incidents. A majority of countries experienced a moderate number of attacks, but some were ridden by constant terrorist attacks (compare Figure 1, note the log-scale). While those aggregate numbers certainly help underscoring the relevance of terrorism in Africa and its diverse incidence, the GTD offers much more detailed information which allows for a more detailed investigation, including exact dates and geolocation (longitude and latitude), which are especially relevant for this study [4]

3.2 Survey data from Afrobarometer

The Afrobarometer (AfB) surveys offer a unique geo and time coded data set containing questions on economic, social and political attitudes, participation and outlooks. AfB is nationally representative and covers multiple countries per round. For rounds 2-6, most questions can be compared across countries and rounds. Since I match terrorist attacks to interviews by country and timing, I initially use all interviews of rounds 2-6. After the matching procedure detailed in the following Subsection 3.3, I end up using only data selected from rounds 4, 5 and 6. The outcome of interest is an individual's regime preference. The respondent is asked to indicate which statement of the following three is closest to his or her own opinion:

A: *"Democracy is preferable to any other kind of government."*

B: *"In some circumstances, a non-democratic government can be preferable."*

---

[4] GTD also includes attack types, target/victim characteristics, perpetrator characteristics and casualties and economic damage estimates but the selection of only ten cases for the final sample does not allow for a quantitative assessment of those features.

C: *"For someone like me it doesn't matter what kind of government we have."*

In the main analysis I will pool statements B and C, since option A is clearly indicative of strong support for democracy while B and C are not. Hence, the main outcome variable is a binary indicator whether a respondent has a preference in favor of democracy, when true, or not, when false.

In general it can be observed that for all country-year tuples most people prefer democracy over any other form of government. On average around 70% of individuals report democracy as their preferred form of government but with considerable variation across time and country (compare Figure 2 and in the appendix Figures 10 and **??**, the latter comprising all countries covered in AfB round 2-6).Looking at all countries surveyed in AfB, country-year pairs display a remarkably wide range in approving of democracy (compare appendix Figure 13), from 36% (Madagascar 2008) to 88% (Senegal 2013).

Another key variable is the perceived type of the regime in the own country. The respondent is offered four answer options, coded on a 1 to 4 scale, when asked how much of a democracy the own country is.

1 *"not a democracy at all"*

2 *"a democracy with major problems"*

3 *"a democracy with minor problems"*

4 *"a full democracy"*

The distribution of the perceived regime type by country-year for the final sample is displayed in the appendix, Figure 11.

AfB additionally features a host of socio-demographic and economic questions as well as enumerator characteristics which lend themselves to use as control variables. Coding of control variables is detailed in the appendix Table 5.

3.3 Matching survey and terrorism data

With both data sets, AfB and GTD, being time- and geo-coded, I can match interviews to attacks in the same country during the interview period. This yields 19 cases where a terrorist attack divides the surveyed sample into a before and after group (see Table 1). Due to some attacks happening close in time to either the beginning or end of AfB interview periods, either

the before or after group consists of too few observations to conduct meaningful empirical analysis. Hence, 9 cases were dismissed [5]. The upper panel in Table 1 shows the 10 cases eventually selected for the main sample. A threshold of 124 observations as the lower bound of minimum observations per group seems to be a reasonably conservative choice [6]. Usually attacks or series of attacks are uniquely identified by country-year-pairs corresponding also to AfB survey rounds. In 4 cases (Cameroon 2015, Nigeria 2008, Nigeria 2012 and Uganda 2008) a series of attacks had occurred over multiple days. Every interview which was conducted after the first attack is coded as after. The remaining attacks are all singular events.

4   Empirical analysis

4.1   Identification strategy

The causal effect of terrorist attacks on the probability to report democracy as the most preferred form of government is estimated from the following linear probability model.

$$\mathbf{D}_{i,a} = \alpha + \beta\mathbf{after}_{i,a} + \gamma\mathbf{X}_{i,a} + \delta_a + \varepsilon_{i,a}, \tag{1}$$

The index i denotes the individual and a denotes the terrorist attack (which is equivalent to a country year tuple). In the main specification $\mathbf{D}_{i,a}$ is a binary indicator that takes on the value 1, when an individual reports that democracy is their preferred regime and 0 otherwise. I also report alternative specifications for $\mathbf{D}_{i,a}$, using the original 3 categories. The treatment indicator variable $\mathbf{after}_{i,a}$ takes on value 1, when an interview was conducted after an attack. Control variables populate the vector $\mathbf{X}_{i,a}$, including, in the richest specification all variables detailed in the appendix, Table 5. Attack specific fixed effects δ_a ensure that observations before and after the same attack, in the same country, are compared to each other.

Since by construction, observations which ended up in the final sample are temporally clustered in short time frames around attack dates (compare Table 1), estimates for β are causally identified under the assumption that within short time frames there is no scope for endogeneity. The obvious concern over a longer time horizon would be that changes in regime preference may directly or indirectly cause terrorism to occur or are both variables are driven

---

[5] Note that the general results are robust to including all 19 cases.
[6] Note that all general results hold up to shifting the threshold.

Table 1: Treated and untreated observations per matched attacks.

Attack in country year	Exact attack date	Interview period	Before attack	After attack	Total
Included in main specification					
Algeria 2015	04.06.	28.05. - 17.06.	320	880	1,200
Cameroon 2015	28.01. - 08.02.	24.01. - 08.02.	383	799	1,182
Egypt 2013	14.03.	08.03. - 19.03.	922	268	1,190
Ivory Coast 2013	23.03.	11.03. - 26.03.	1,076	124	1,200
Mali 2008	21.12.	15.12. - 31.12.	498	734	1,232
Mali 2014	02.12.	01.12. - 14.12.	168	1,032	1,200
Morocco 2015	05.11.	02.11. - 22.11.	304	896	1,200
Nigeria 2008	16.05. - 22.05.	13.05. - 25.05.	464	1,860	2,324
Nigeria 2012	30.10. - 18.11.	30.10. - 18.11.	173	2,191	2,364
Uganda 2008	15.08. - 18.09.	27.07. - 03.09.	1,408	1,007	2,415
Total			5,716	9,791	15,507
Excluded in main specification					
Algeria 2013			43	1,161	1,204
Egypt 2015			8	1,190	1,198
Mozambique 2015			809	31	840
Niger 2015			50	1,150	1,200
Nigeria 2013			11	25	36
Nigeria 2014			1	64	65
South Africa 2015			2,297	51	2,348
Sudan 2015			16	1,184	1,200
Tunisia 2013			85	1,115	1,200
Total			3,320	5,971	9,291

This table displays all cases of single terrorist attacks or series of attacks dividing the survey sample in a pre and post attack group. The top panel shos 10 case selected for the final sample. The lower panel shows 9 cases where numbers of observations were small either in the before or after group, such that those cases were not selected for the main analysis. The first column defines the country-year pair that uniquely identifies the respective case. The second column shows that date of the attack or the period from first to last attack for streaks of attacks. The third column shows the interview period. The last three columns display, for each attack, the respective numbers of observations before, after and total.

by an unobserved confounder. While the occurrence of terrorist attacks is in general not orthogonal to regime preferences, within very short time frames the occurrence of an attack is quasi random and very unlikely driven by underlying socio-political processes which may jointly determine preferences for democracy. It seems unreasonable that a terrorist attack at a certain point in time is caused by a change in regime preferences that occurred only 19[7] days or less prior. This argument is further substantiated when shrinking the time frames down successively as reported in Section 4.3. Assuming there was some underlying long term reverse causality, one may argue that changes in preferences for democracy lead to the occurrence of terrorist attacks thus determining whether or not observations ended up in the final sample. I do not argue against this. However, given the short time frame, the change I observe for this sample across the day of the attack is unlikely driven by the long term process that eventually caused the attack to happen at some point in time. The identifying assumption requires only that within the short time frame of surveying, the attack date is orthogonal to observed or unobserved variables that may influence regime preference.

A major concern about the identifying assumption is post attack sample selection, e.g., because enumerators become more careful and avoid certain groups of people or geographic areas. Therefore, before I turn to the main analysis, I provide a test for covariate balance in Table 2. I estimate pre- and post attack difference in covariates by OLS from

$$\mathbf{COV}_{i,a} = \eta + \Delta\mathbf{after}_{i,a} + \delta_a + \zeta_{i,a}. \tag{2}$$

The equation is very similar to Equation 1 without additional controls. I regress the covariates $\mathbf{COV}_{i,a}$ on the treatment indicator $\mathbf{after}_{i,a}$, while attack fixed effects δ_a ensure comparison across the same attack. Standard errors are clustered at the attack level. Table 2 shows high covariate balance across the attack date, alleviating concerns about sample selection. Most remarkably, I detect no significant difference in geographic distance between interview and attack, comparing distances before and after an attack. While absence of evidence does nor mean evidence of absence, the point estimate is even negative, which means interviews were if anything closer to attack locations after the event than before. Hence, this is evidence speaks against the logic of enumerators avoiding attack areas.

---

[7] 19 days is the longest period between attack and interview that occurs in the sample.

Table 2: Covariate balance table

	Δ (Std. Error)		N	Mean	StD
Age	-0.349	(0.410)	15444	35.25	13.36
Gender	0.00190	(0.00131)	15507	1.500	0.500
Education	-0.151	(0.175)	15472	3.572	2.387
Employment	0.0401	(0.0658)	15454	1.146	1.106
Living condition	-0.0658	(0.0433)	15426	2.798	1.174
Own condition vs. others	-0.0575	(0.0443)	15130	2.900	0.980
Dinstance (log)	-0.245	(0.271)	15507	5.687	1.069
Christian unspecified	-0.0255	(0.0274)	15507	0.108	0.310
Roman catholic	-0.0405	(0.0268)	15507	0.149	0.356
Other specified Christian	0.00740	(0.00577)	15507	0.132	0.339
Muslim	0.0499	(0.0335)	15507	0.559	0.496
Other religion	0.00870	(0.00943)	15507	0.0513	0.221
Not enough food last y.	0.0561	(0.0461)	15466	0.909	1.136
Not enough clean water last y.	0.0641	(0.0582)	15463	1.061	1.282
No medical treatment last y.	0.0676	(0.0527)	15434	1.123	1.211
No fuel to cook last y.	0.0483	(0.0379)	15407	0.917	1.159
W.o. cash income last y.	-0.00588	(0.0617)	15406	1.820	1.402
Something was stolen last y.	0.0331	(0.0239)	15507	0.294	0.456
Own a radio	0.00648	(0.0231)	15478	0.705	0.456
Own TV	-0.0101	(0.0375)	15476	0.558	0.497

Standard errors in parentheses

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

Pre- and post-attack differences (Δ) are estimated by OLS, taking the covariates from the main specification, listed in the first column, as dependent variables. Robust standard errors are clustered on the attack level and reported in parenthesis. Remaining columns show the number of observations, mean of the dependent variable, and standard deviation of the dependent variable. See Table 5 for a detailed explanation of the covariates.

4.2 The effect of terrorist attacks on preference for democracy

Main result. Estimation results for Equation 1 are shown in Table 3. On average a terrorist attack increases the likelihood to report democracy as the preferred regime type by 2.7 to 3.9 pp. It is reassuring that the estimated coefficient remains statistically significant ($p < 0.01$) and stable in all specifications. Results are very similar, statistically and in quantity when using other specifications or coding of the dependent variable. OLS results using the original three item coding are shown in the appendix Table 6. Logistic and multinomial logistic regressions (for both outcome codings) are reported in the appendix, see Tables 7 and 8. One interesting note that can be taken from the multinomial logit model is that the decline in responses for those who reported: "For someone like me, it doesn't matter what kind of government we have.", is much smaller than for those who report: "In some circumstances, a non-democratic government can be preferable.". This indicates that net change of opinion in favor of democracy comes mostly from the latter group. Overall, the detected effect constitutes a meaningful leaning towards democracy, especially, since country-year-pairs range between averages of 49.4% and 86.1% in reporting democracy as the preferred regime type. Accordingly, the estimated effect amounts to a change of about 9% of the country-year range in reported preference for democracy. In terms of net persuasion more than 8% of those not preferring democracy before a terrorist attack would change their opinion in favor of democracy after experiencing an attack.

Case heterogeneity. As discussed before, terrorist attacks feature some degree of contextual dependencies. Even though I present evidence for an average effect, it could be that, due to contextual differences, some attacks had opposite effects which may be masked by the average. Therefore, to assess whether the average effect is a meaningful metric for the impact of terrorist attacks on preference for democracy, it is worthwhile looking at heterogeneous effects across the cases I consider. I therefore estimate the same model as described in Equation 1 but interacting the treatment and the fixed effects:

$$\mathbf{D}_{i,a} = \alpha + \beta_0 \mathbf{after}_{i,a} * \delta_a + \beta_1 \mathbf{after}_{i,a} + \delta_a + \gamma \mathbf{X}_{i,a} + \varepsilon_{i,a}. \tag{3}$$

Marginal effects by attack are reported in Table 4. As it is to expected, not all cases perfectly conform with the pattern observed on average. Note, however, the absence of evidence

Table 3: Linear regression on democracy being the preferred form of government.

	(1)	(2)	(3)	(4)
	D	D	D	D
After attack	0.027**	0.028***	0.036***	0.039***
	(0.008)	(0.008)	(0.008)	(0.009)
Controls added				
Attack FE	✓	✓	✓	✓
Distance, day of week		✓	✓	✓
Demogr., econ.			✓	✓
Enum. demogr.				✓
Mean D	0.731	0.731	0.734	0.734
N	14728	14728	14001	14001

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

OLS regressions with preference for democracy as dependent variable. The binary indicator $\mathbf{D} = 1$ if democracy is preferred and 0 otherwise. All specifications include fixed effects at the attack level. Standard errors are robust and clustered at the attack level. The first column contains no covariates, only treatment and fixed effects. The second column features logarithmic distance between attack and interview and week day dummies. In the third column a set of demographic and economic covariates is added. In the fourth column enumerator demographics are added. Detailed information on the covariate sets and their coding can be found in Table 5.

for any effect in the opposite direction. There is indeed no hint that preference for democracy would deteriorate in any case.

Perceived regime type. As mentioned before, individuals' perception of the present regime type defines the scope of preference change. I.e., when the regime is perceived to be very democratic there exist more options that are less democratic than options that are more democratic. Hence, one may expect that in an autocratic regime citizens become more in favor of democracy while in a democracy people may loose faith in the capacity of democracy to deliver safety, and consequently prefer a less democratic regime, when exposed to terrorism. Straight forward interaction of the treatment indicator with reported perceptions of regime type, however, is not feasible. Perceived regime type may also be altered by the exposure of terror attacks and hence would constitute a bad control. Instead, I rely on imputing values for post attack observations from local averages. Specifically, I define a post attack value as the average of all pre attack with a 50km distance. Imputing values has the advantage that they are not subject to the influence of exposure to the terrorist attack. The induced measurement error is random when there is no selection into treatment. Hence, significant estimates are more difficult to detect but remain unbiased. I estimate the following equation by OLS:

$$\mathbf{D}_{i,a} = \alpha + \beta_0 \mathbf{after}_{i,a} * \mathbf{PTR}_{i,a} + \beta_1 \mathbf{after}_{i,a} + \delta_a + \gamma \mathbf{X}_{i,a} + \varepsilon_{i,a}. \tag{4}$$

Variables are the same as specified before with the addition of $\mathbf{PR}_{i,a}$ denoting the perceived regime type, using imputed values for post attack interviews. Estimated marginal effects are reported in Figure 3. Local averages are imputed from pre treatment observations within 50 km distance to post treatment observations. Varying the distance does not change the results considerably. The same holds for varying the distance for imputation. The results confirm the expectation that when regimes are perceived as autocratic, citizens change their preference in favor of democracy strongly. The opposite effect, citizens changing their preference in favor of less democracy in perceivedly very democratic regimes is not confirmed. In other word preferences for democracy seem stable when the regime is perceived as democratic, while preference for democracy increase when terrorist attacks happen in a perceived autocracy.

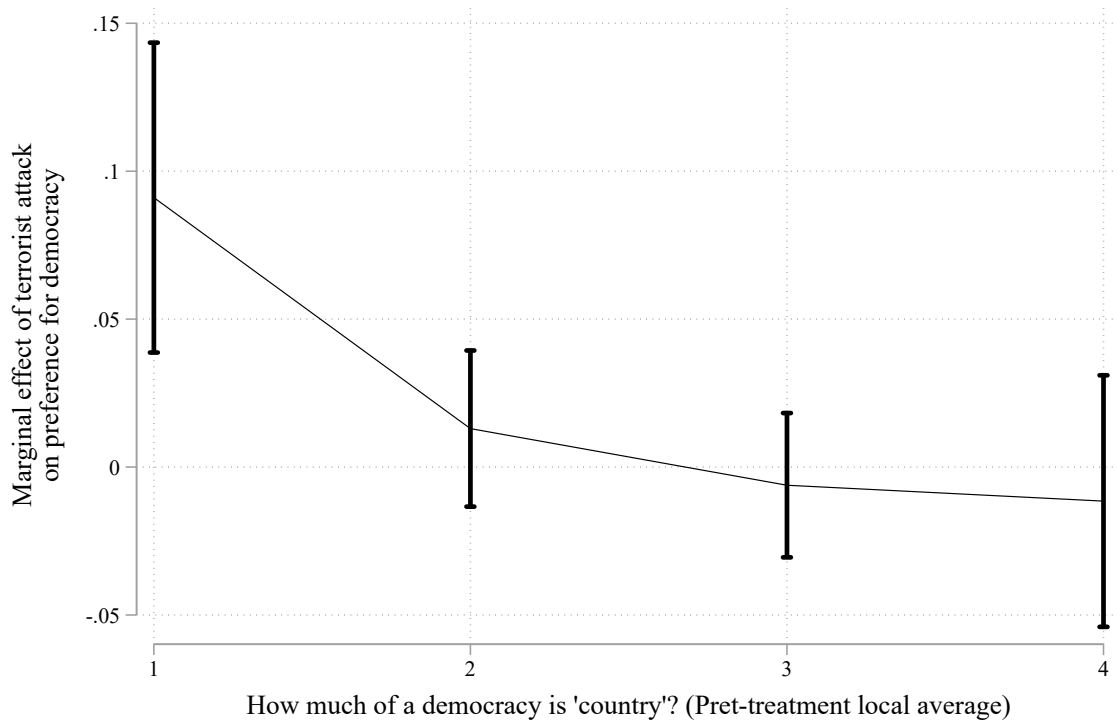Table 4: Marginal effects of linear regression on preference for democracy for single events.

	(1) MFX	(2) MFX	(3) MFX	(4) MFX
After attack				
Nigeria 2008	0.014	0.015	0.042	0.037
	(0.024)	(0.025)	(0.026)	(0.025)
Uganda 2008	0.041***	0.042***	0.053***	0.057***
	(0.016)	(0.016)	(0.016)	(0.017)
Mali 2008	0.061**	0.063**	0.055**	0.049*
	(0.026)	(0.026)	(0.027)	(0.026)
Nigeria 2012	-0.034	-0.027	-0.004	-0.004
	(0.035)	(0.037)	(0.038)	(0.038)
Egypt 2013	0.007	0.009	0.025	0.032
	(0.036)	(0.036)	(0.037)	(0.037)
Ivory Coast 2013	0.066**	0.065**	0.047	0.050*
	(0.027)	(0.028)	(0.030)	(0.030)
Mali 2014	-0.004	-0.004	0.009	0.010
	(0.036)	(0.036)	(0.036)	(0.037)
Cameroon 2015	0.006	0.003	-0.007	-0.009
	(0.029)	(0.029)	(0.031)	(0.031)
Algeria 2015	0.053	0.055*	0.066*	0.093***
	(0.034)	(0.034)	(0.034)	(0.035)
Morocco 2015	0.020	0.023	0.023	0.023
	(0.031)	(0.032)	(0.031)	(0.032)
Controls added				
Attack FE	✓	✓	✓	✓
Distance, day of week		✓	✓	✓
Demogr., econ.			✓	✓
Enum. demogr.				✓
N	14728	14728	14001	14001

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Marginal effects obtained from OLS regressions with preference for democracy as dependent variable. The binary indicator $\mathbf{D} = 1$ if democracy is preferred and 0 otherwise. All specifications include fixed effects at the attack level interacted with the treatment indicator. Standard errors are robust (note that clustering is not feasible in this specification). The first column contains no covariates, only treatment and fixed effects. The second column features logarithmic distance between attack and interview and week day dummies. In the third column a set of demographic and economic covariates is added. In the fourth column enumerator demographics are added. Detailed information on the covariate sets and their coding can be found in Table 5.

Figure 3: Preference for democracy by country-year pair.

Marginal effects are reported for the specification without additional controls. The imputation for post treatment values assumes the local average of pre treatment observations within a distance of 50 km. The results are robust to both successively including covariates and changing the distance between observations considered for imputation. On the x-axis 4 referes to "full democracy" and 1 refers to "no democarcy at all".
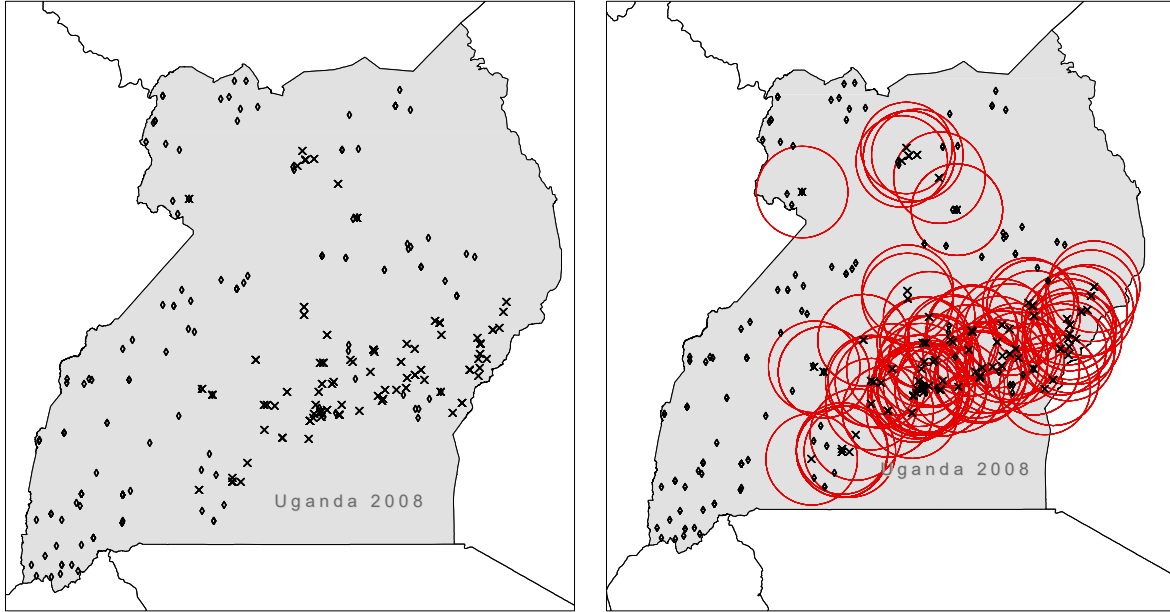
4.3 Robustness

4.3.1 Spatial confounding

Spatial confounding poses a major threat to identification. Within countries, regions likely differ in preferences for democracy for various reasons. Since treatment is a function of time and interview locations could potentially be a function of time, e.g., when interviewers moved from east to west or along any other non random path. For some country year tuples eyeballing reveals clear spatial patterns of interview timing, while others at least seem rather random. The example of Uganda 2008, displayed in Figure 4, serves as an illustrative example of spatial confounding, where pre-attack observations are more prevalent in the north and west, while post-attack observations are more densely clustered to the south-east.

To ensure that results are not driven by spatial confounding I estimate Equation 1 using

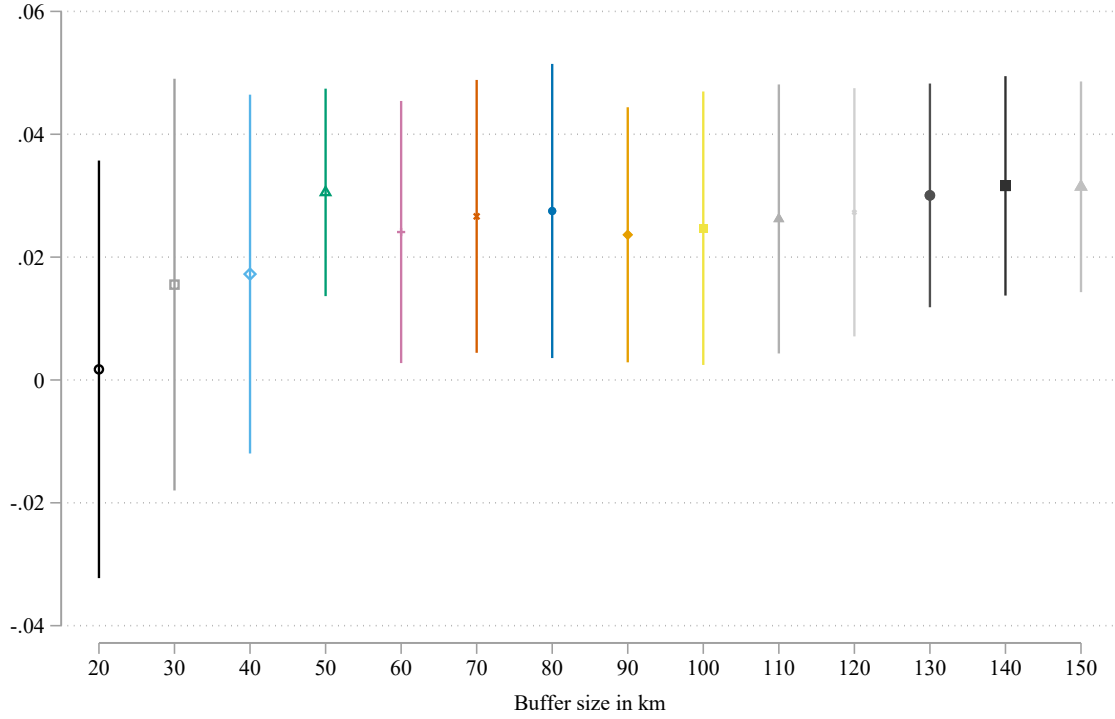Figure 4: Interviews conducted before and after attacks in Uganda 2008

The case of Uganda 2008 illustrates the issue of spatial confounding. ◇ represent pre-attack observations, × represents post-attack observations. Buffer zones with 0.5° radius (approx. 56km at the equator) are drawn around post-attack observations in the right hand panel.

only observations within a range of predefined buffer zones. A buffer zone is a circle with a specified radius, drawn around an interview location. Using buffer zones I can ensure to only include observations in the estimation which fall within the a zone around an observation with opposite treatment status. Treated (untreated) observations that are not within any untreated (treated) observations buffer zone are dismissed. Hence, I end up dropping spatial clusters of homogeneous treatment status, leaving me with a smaller but spatially balanced sample that includes only geographically comparable observations. Figure 4 illustrates this process.

Results indicate that even if spatial confounding was present it does not lead to substantially biased results. Figures 5 and 15 show estimated effects along 20 km to 150 km buffer zones and already for relatively small buffer zones the positive effect appears and remains remarkably stable within close range of the initial estimate.

Figure 5: Marginal effect of terrorist attack on preference for democracy accounting for spatial confounding by a range of buffer zone radii.
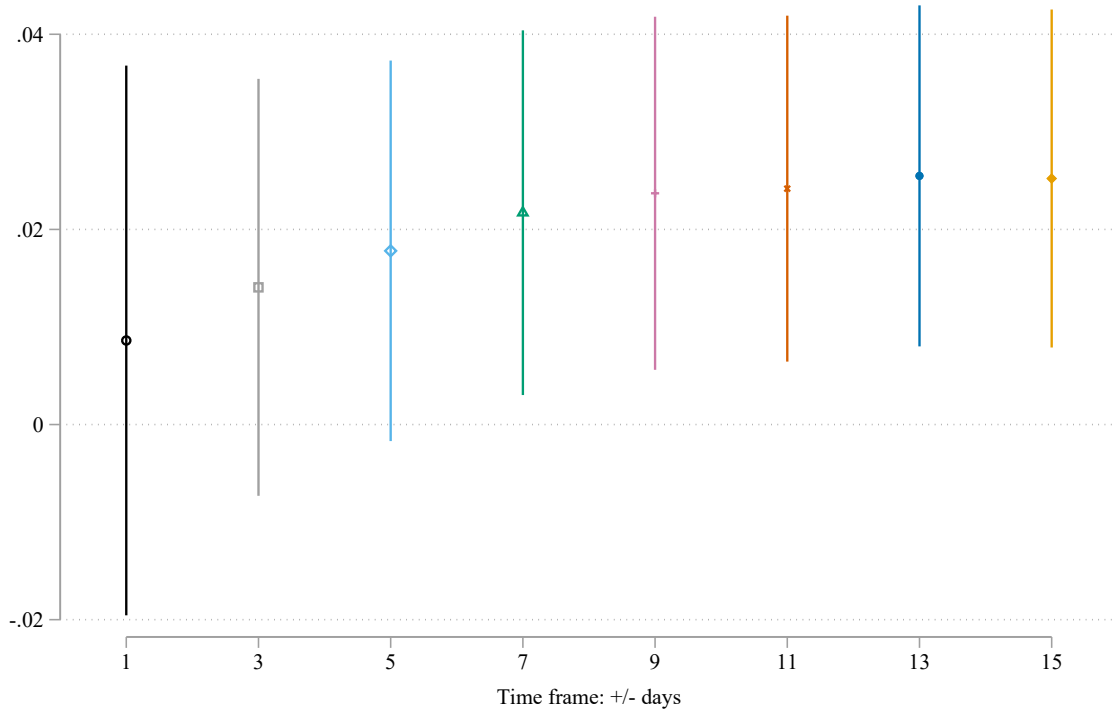

Specification without controls. Spikes represent 95% confidence intervals. See appendix for added controls.

4.3.2 Narrow time frames

A further concern is that time frames may actually be large enough to allow for ongoing trends in regime preferences to cause terrorist attacks to happen, hence, violating the basic identifying assumption. While I believe that this is already quiet unlikely given the small size of time frames in the main sample, there is an easy way to corroborate the argument. To alleviate any concerns about too wide time frames, I re-estimate Equation 1 with restricted samples by shrinking time frames. The results, displayed in Figures 6 and appendix Figure 17, corroborate the initial result. Despite the considerable loss of numbers of observations, even for time frames as narrow as 3-5 days, depending on the specification, the effect appears and remains stable throughout.

Figure 6: Marginal effect of terrorist attack on preference for democracy, restricting the estimation sample by time frames of increasing length.

Specifications including no additional controls. Spikes represent 95% confidence intervals. Note that the sample size shrinks considerably with shorter time frames. See appendix for added controls.
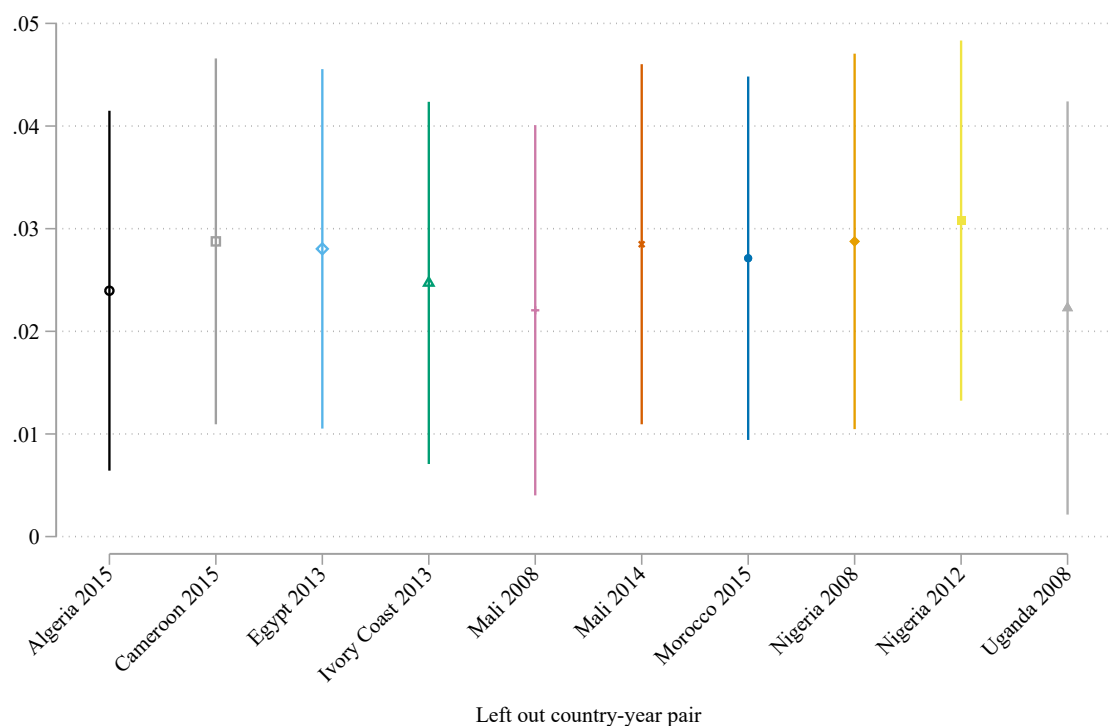
4.3.3 Successive exclusion of attacks

To rule out the concern that the effect is driven by a single case of an attack, I successively exclude attacks while re-estimating Equation 1. Results prove to be robust against excluding single cases (compare Figure 7). Estimates do vary, but only slightly and within close range of the initial estimate.

5 Preferences for democracy and democratization

Since many African democracies are rather young and in many places not fully developed it is important to discuss the presented evidence in the light of theories of democratization in order to understand the larger implications.

Conventional models of democratization and democratic consolidation describe democracy

Figure 7: Marginal effect of terrorist attack on preference for democracy, while repeatedly leaving out one case.

Left out country-year pair

Specifications include no additional controls. Spikes represent 95% confidence intervals. Labels on the x-axis denote ommitted cases.

as a a self enforcing equilibrium of the power struggle of citizens against the elite (Locke, 1690; Barro, 1973; Ferejohn, 1986; Przeworski, 2005; **?**; Fearon, 2011; Acemoglu and Robinson, 2001, 2005). Crudely summarized, elites choose either to make concession or to repress, the former leading to democratization, the latter to the opposite. Citizens can fight for democratization. When the threat of fighting is credible, elites are willing to make concessions to avoid costly revolt. A crucial input to this tug of war is citizens' preference for democracy. Acemoglu and Robinson cite factors impacting the constraints for elites' and citizens' decision problem as the governing force of regime transitions. However, Acemoglu and Robinson, like most theorists modeling democratization, assume all citizens homogeneously always prefer more democracy[8]. Figures 10, 12 , 13, and 2 show clearly that citizens tend to prefer democracy on average but it is far from always true. There is a number of theoretical arguments explaining why the assumption that citizens always prefer democracy, especially in the African context, may be

---

[8] Given the objective a large scope of those theories I consider it a fair choice to assume such simplification.

violated. Political violence appears to be higher in democracies below a certain level of per capita income Collier and Rohner (2008), impeding democracies appeal in low income settings. Further, ethnic cleavages are a prevalent feature of the social and political life in many African countries. Fear of ethnic favoritism by democratically elected governments is a challenge for democracy and contributes to instability and conflict (Easterly and Levine, 1997; Montalvo and Reynal-Querol, 2005; Esteban et al., 2012; Burgess et al., 2015). Moreover, many African democracies are rather young, therefore more likely to experience insurgencies and civil war (Fearon and Laitin, 2003). Together, this suggests that there may indeed exist a trade-off between democracy and security for citizens of African states. Further, the recent global surge of right-wing populism proves that marketing non-democratic policies based on perceived threats can be successfully applied to convince citizens to voluntarily surrender civil liberties (Couttenier et al., 2019). The larger the share of citizens willing to accept non-democratic institutions the less credible the threat of violent pushback, which is necessary for elites to commit to democracy. In the tug of war between citizens and the elite the weight shifts away from the democratic ideal. The empirical evidence I present, however, is optimistic. One may have feared, citizens become intimidated by the traumatic experience of terrorism and in turn become more willing to concede democratic freedoms. I find the opposite to be the case.

It lays outside the scope of this work to inspect elites' reactions to terrorist attacks which is why I am careful in drawing a conclusion on the general effect of terrorist attacks on the democratization process. An investigation into the elites reactions to terrorist attacks may prove as a fruitful avenue for future research. At least for the citizens' side I can robustly document that preference for democracy increases in response to terrorist attacks.

References

Abadie, Alberto. Poverty, political freedom, and the roots of terrorism. *American Economic Review*, 96(2):50–56, 2006.

Abadie, Alberto and Gardeazabal, Javier. The economic costs of conflict: A case study of the basque country. *American economic review*, 93(1):113–132, 2003.

Acemoglu, Daron and Robinson, James A. A theory of political transitions. *American Economic Review*, 91(4):938–963, 2001.

Acemoglu, Daron and Robinson, James A. *Economic origins of dictatorship and democracy.* Cambridge University Press, 2005.

Balcells, Laia and Torrats-Espinosa, Gerard. Using a natural experiment to estimate the electoral consequences of terrorist attacks. *Proceedings of the National Academy of Sciences*, 115(42):10624–10629, 2018. ISSN 0027-8424. doi: 10.1073/pnas.1800302115. URL https://www.pnas.org/content/115/42/10624.

Barro, Robert J. The control of politicians: an economic model. *Public choice*, pages 19–42, 1973.

Bauer, Michal, Cassar, Alessandra, Chytilová, Julie, and Henrich, Joseph. War's enduring effects on the development of egalitarian motivations and in-group biases. *Psychological science*, 25(1):47–57, 2014.

Berrebi, Claude and Klor, Esteban F. Are voters sensitive to terrorism? direct evidence from the israeli electorate. *American Political Science Review*, 102(3):279–301, 2008.

Bischof, Daniel. New graphic schemes for stata: plotplain and plottig. *The Stata Journal*, 17 (3):748–759, 2017.

Bozzoli, Carlos and Müller, Cathérine. Perceptions and attitudes following a terrorist shock: Evidence from the uk. *European Journal of Political Economy*, 27:S89–S106, 2011.

Burgess, Robin, Jedwab, Remi, Miguel, Edward, Morjaria, Ameet, and Miquel, Gerard-Padró i. The value of democracy: evidence from road building in kenya. *American Economic Review*, 105(6):1817–51, 2015.

Byman, Daniel. Terrorism and the threat to democracy. *Brookings Policy Brief, February*, 2019.

Callen, Michael, Isaqzadeh, Mohammad, Long, James D, and Sprenger, Charles. Violence and risk preference: Experimental evidence from afghanistan. *American Economic Review*, 104(1):123–48, 2014.

Cassar, Alessandra, Healy, Andrew, and Von Kessler, Carl. Trust, risk, and time preferences after a natural disaster: experimental evidence from thailand. *World Development*, 94: 90–105, 2017.

Collier, Paul and Rohner, Dominic. Democracy, development, and conflict. *Journal of the European Economic Association*, 6(2-3):531–540, 2008.

Couttenier, Mathieu, Hatte, Sophie, Thoenig, Mathias, and Vlachos, Stephanos. The logic of fear-populism and media coverage of immigrant crimes. 2019.

Dehdari, Sirus H and Gehring, Kai. The origins of common identity: Evidence from alsace-lorraine. 2019.

Depetris-Chauvin, Emilio, Durante, Ruben, and Campante, Filipe R. Building nations through shared experiences: Evidence from african football. Technical report, National Bureau of Economic Research, 2018.

Dreher, Axel, Gassebner, Martin, and Siemers, Lars-H. Does terrorism threaten human rights?

evidence from panel data. *The Journal of Law and Economics*, 53(1):65–93, 2010.

Easterly, William and Levine, Ross. Africa's growth tragedy: policies and ethnic divisions. *The quarterly journal of economics*, 112(4):1203–1250, 1997.

Elu, Juliet U and Price, Gregory N. Remittances and the financing of terrorism in sub-saharan africa: 1974-2006. *Peace Economics, Peace Science and Public Policy*, 18(1), 2012.

Elu, Juliet U and Price, Gregory N. The causes and consequences of terrorism in africa. In *The Oxford Handbook of Africa and Economics*. 2015.

Esteban, Joan, Mayoral, Laura, and Ray, Debraj. Ethnicity and conflict: An empirical study. *American Economic Review*, 102(4):1310–42, 2012.

Eubank, William and Weinberg, Leonard. Terrorism and democracy: Perpetrators and victims. *Terrorism and political violence*, 13(1):155–164, 2001.

Fair, C Christine, Kuhn, Patrick M, Malhotra, Neil, and Shapiro, Jacob N. Natural disasters and political engagement: Evidence from the 2010–11 pakistani floods. *Quarterly Journal of Political Science*, 12:99–141, 2017.

Fearon, James D. Self-enforcing democracy. *The Quarterly Journal of Economics*, 126(4): 1661–1708, 2011.

Fearon, James D. and Laitin, David D. Ethnicity, insurgency, and civil war. *American Political Science Review*, 97(1):75–90, 2003. doi: 10.1017/S0003055403000534.

Ferejohn, John. Incumbent performance and electoral control. *Public choice*, pages 5–25, 1986.

Frey, Bruno S, Luechinger, Simon, and Stutzer, Alois. Calculating tragedy: Assessing the costs of terrorism. *Journal of Economic Surveys*, 21(1):1–24, 2007.

Getmansky, Anna and Zeitzoff, Thomas. Terrorism and voting: The effect of rocket threat on voting in israeli elections. *American Political Science Review*, 108(3):588–604, 2014.

Ghatak, Sambuddha, Gold, Aaron, and Prins, Brandon C. Domestic terrorism in democratic states: Understanding and addressing minority grievances. *Journal of conflict resolution*, 63(2):439–467, 2019.

Giavazzi, Francesco, Lemoli, Giacomo, Rubera, Gaia, and Iglhaut, Felix. Terrorist attacks, cultural incidents and the vote for radical parties: Analyzing text from twitter. 2020.

Gleditsch, Kristian Skrede and Polo, Sara MT. Ethnic inclusion, democracy, and terrorism. *Public Choice*, 169(3-4):207–229, 2016.

Hanaoka, Chie, Shigeoka, Hitoshi, and Watanabe, Yasutora. Do risk preferences change? evidence from the great east japan earthquake. *American Economic Journal: Applied Economics*, 10(2):298–330, 2018.

Hatemi, Peter K, McDermott, Rose, Eaves, Lindon J, Kendler, Kenneth S, and Neale, Michael C. Fear as a disposition and an emotional state: A genetic and environmental approach to out-group political preferences. *American Journal of Political Science*, 57(2):279–293, 2013.

Hogg, Michael A. Social identity theory. In *Understanding peace and conflict through social identity theory*, pages 3–17. Springer, 2016.

House, Freedom. Freedom in the world 2020 - a leaderless struggle for democracy, 2020.

Johnson, Noel D. Taxes, national identity, and nation building: Evidence from france. 2015.

Kandasamy, Narayanan, Hardy, Ben, Page, Lionel, Schaffner, Markus, Graggaber, Johann, Powlson, Andrew S, Fletcher, Paul C, Gurnell, Mark, and Coates, John. Cortisol shifts financial risk preferences. *Proceedings of the National Academy of Sciences*, 111(9):3608–3613, 2014.

Kibris, Arzu. Funerals and elections: The effects of terrorism on voting behavior in turkey. *Journal of Conflict Resolution*, 55(2):220–247, 2011.

Lazarev, Egor, Sobolev, Anton, Soboleva, Irina V, and Sokolov, Boris. Trial by fire: a natural disaster's impact on support for the authorities in rural russia. *World Politics*, 66(4): 641–668, 2014.

Li, Quan. Does democracy promote or reduce transnational terrorist incidents? *Journal of Conflict resolution*, 49(2):278–297, 2005.

Locke, John. *Two Treatises of Government*. 1690.

Malmendier, Ulrike and Nagel, Stefan. Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?*. *The Quarterly Journal of Economics*, 126(1):373–416, 02 2011. ISSN 0033-5533. doi: 10.1093/qje/qjq004. URL https://doi.org/10.1093/qje/qjq004.

Montalvo, Jose G. Voting after the bombings: A natural experiment on the effect of terrorist attacks on democratic elections. *Review of Economics and Statistics*, 93(4):1146–1154, 2011.

Montalvo, José G and Reynal-Querol, Marta. Ethnic polarization, potential conflict, and civil wars. *American economic review*, 95(3):796–816, 2005.

Przeworski, Adam. *Democracy and the market: Political and economic reforms in Eastern Europe and Latin America*. Cambridge University Press, 1991.

Przeworski, Adam. Democracy as an equilibrium. *Public Choice*, 123(3-4):253–273, 2005.

Rehman, Faiz Ur and Vanin, Paolo. Terrorism risk and democratic preferences in pakistan. *Journal of Development Economics*, 124:95–106, 2017.

Rohner, Dominic, Thoenig, Mathias, and Zilibotti, Fabrizio. Seeds of distrust: Conflict in uganda. *Journal of Economic Growth*, 18(3):217–252, 2013.

Schmid, Alex P. Terrorism and democracy. *Terrorism and Political Violence*, 4(4):14–25, 1992.

Sinclair, Samuel Justin and Antonius, Daniel. *The psychology of terrorism fears*. OUP USA, 2012.

Stovall-McClough, K Chase and Cloitre, Marylene. Traumatic reactions to terrorism: the individual and collective experience. *& S. Vargo (Collaborator), Psychological effects of catastrophic disasters: Group approaches to treatment*, pages 113–153, 2006.

Strebel, Michael A and Steenbergen, Marco R. The impact of the november 2015 terrorist attacks in paris on public opinion: a natural experiment. 2017.

Maryland, STARTUniversity of. The global terrorism database(tm), 2019. URL https://www.start.umd.edu/gtd/.

Van Hauwaert, Steven M and Huber, Robert A. In-group solidarity or out-group hostility in response to terrorism in france? evidence from a regression discontinuity design. *European Journal of Political Research*, 2020.

Voigtländer, Nico and Voth, Hans-Joachim. Persecution perpetuated: the medieval origins of anti-semitic violence in nazi germany. *The Quarterly Journal of Economics*, 127(3): 1339–1392, 2012.

Windsor, Jennifer L. Promoting democratization can combat terrorism. *The Washington Quarterly*, 26(3):43–58, 2003.

Appendix

Tables

Figures

Table 5: Covariate coding

Covariate	Coding
Distance	Natural log of the distance between attack location and interview location + 1 in km
Day of week	Set of dummy variables indicating the day of the week of an interview, 0=Sunday,..., 6=Saturday
Individual demographic and economic covariates	
Age	Age in years
Gender	1 = male, 2= female
Education	0=No formal schooling, 1=Informal schooling only (including Koranic schooling), 2=Some primary schooling, 3=Primary school completed, 4=Intermediate school or Some secondary school / high school, 5=Secondary school / high school completed , 6=Post-secondary qualifications, other than university e.g. a diploma or degree from a polytechnic or college, 7=Some university, 8=University completed, 9=Postgraduate
Employment	0=No (not looking), 1=No (looking), 2=Yes, part time, 3= Yes, full time
Living condition	1=Very bad, 2=Fairly bad, 3=Neither good nor bad, 4=Fairly good, 5=Very good
Own condition vs. others	1=Much worse, 2=Worse, 3=Same, 4=Better, 5=Much better
Religion	1=Christian unspecified, 2=Roman Catholic, 3=Other specific Christian, 4=Muslim, 99=Other
Not enough food last year	0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always
Not enough clean water last year	0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always
No medical treatment last year	0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always
No fuel to cook last year	0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always
W.o. cash income last year	0=Never, 1=Just once or twice, 2=Several times, 3=Many times, 4=Always
Something was stolen last year	0=No, 1=Once, 2=Twice, 3=Three or more times
Own a radio	0=No (Don't own), 1=Yes (Do own)
Own TV	0=No (Don't own), 1=Yes (Do own)
Enumerator characteristics	
Age	Age in years
Gender	1=Male, 2=Female
Urban/rural	1=Rural, 2=Urban
Education	same coding as education of respondent

Coding of employment status slightly changed from round 4 to 5 from a 6 item scale to a 4 item scale. Coding prior to round 5: 0=No (not looking), 1=No (looking), 2=Yes, part time (not looking), 3=Yes, part time (looking),4=Yes, full time (not looking), 5=Yes, full time (looking). Coding in round 5 and later: 0=No (not looking), 1=No (looking), 2=Yes, part time, 3= Yes, full time. Since the top 4 categories on the 6 item scale logically correspond to the top 2 categories of the 4 item scale I aggregate those to ensure comparability.

Table 6: Linear regression on democracy being the preferred form of government.

	(1)	(2)	(3)	(4)
	D	D	D	D
After attack	0.035**	0.037***	0.050***	0.053***
	(0.014)	(0.011)	(0.014)	(0.015)
Controls added				
Attack FE	✓	✓	✓	✓
Distance, day of week		✓	✓	✓
Demogr., econ.			✓	✓
Enum. demogr.				✓
Mean D	2.611	2.611	2.616	2.616
N	14728.000	14728.000	14001.000	14001.000

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

OLS regressions with preference for democracy as dependent variable. The original three item coding of the dependent variable is maintained. All specifications include fixed effects at the attack level. Standard errors are robust and clustered at the attack level. The first column contains no covariates, only treatment and fixed effects. The second column features logarithmic distance between attack and interview and week day dummies. In the third column a set of demographic and economic covariates is added. In the fourth column enumerator demographics are added. Detailed information on the covariate sets and their coding can be found in Table 5.

Table 7: Logistic regression on democracy being the preferred form of government.

| | (1) | (2) | (3) | (4) | (5) |
	D	D	D	D	$\widehat{\Pr}(D=1)$
After attack	0.141***	0.153***	0.203***	0.219***	0.042***
	(0.050)	(0.047)	(0.047)	(0.052)	(0.010)
Controls added					
Attack FE	✓	✓	✓	✓	✓
Distance, day of week		✓	✓	✓	✓
Demogr., econ.			✓	✓	✓
Enum. demogr.				✓	✓
Mean D	0.731	0.731	0.734	0.734	
N	14728.000	14728.000	14001.000	14001.000	14001.000

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Logistic regressions with preference for democracy as dependent variable. The binary indicator $\mathbf{D} = 1$ if democracy is preferred and 0 otherwise. All specifications include fixed effects at the attack level. Standard errors are robust and clustered at the attack level. The first column contains no covariates, only treatment and fixed effects. The second column features logarithmic distance between attack and interview and week day dummies. In the third column a set of demographic and economic covariates is added. In the fourth column enumerator demographics are added. The last column shows the marginal effects computed for the specification with full controls on the individual and enumerator level. Detailed information on the covariate sets and their coding can be found in Table 5.

Table 8: Multinomial logistic regression on democracy being the preferred form of government.

	(1) MFX	(2) MFX	(3) MFX	(4) MFX
Pr(Does not matter)	-0.009	-0.009	-0.013	-0.014
	(0.011)	(0.010)	(0.011)	(0.011)
Pr(Sometimes just.)	-0.019	-0.021	-0.026*	-0.028*
	(0.016)	(0.016)	(0.015)	(0.016)
Pr(Dem. preferred)	0.027***	0.030***	0.039***	0.042***
	(0.010)	(0.010)	(0.010)	(0.010)
Controls added				
Attack FE	✓	✓	✓	✓
Distance, day of week		✓	✓	✓
Demogr., econ.			✓	✓
Enum. demogr.				✓
N	14728	14728	14001	14001

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Marginal effects from multinomial logistic regressions with preference for democracy as dependent variable. The original three item coding of the dependent variable is maintained. All specifications include fixed effects at the attack level. Standard errors are robust and clustered at the attack level. The first column contains no covariates, only treatment and fixed effects. The second column features logarithmic distance between attack and interview and week day dummies. In the third column a set of demographic and economic covariates is added. In the fourth column enumerator demographics are added. The last column shows the marginal effects computed for the specification with full controls on the individual and enumerator level. Detailed information on the covariate sets and their coding can be found in Table 5.

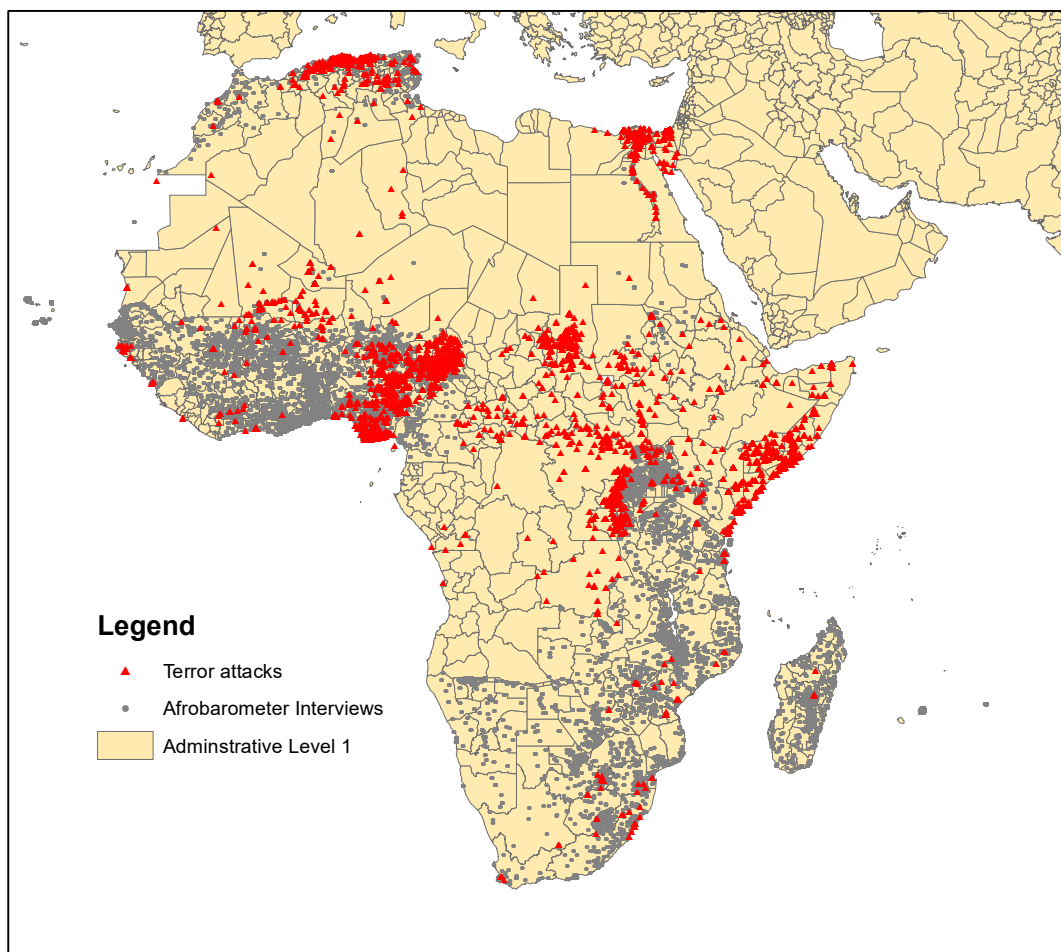Figure 8: Geocoded AfB interviews and terror attacks over the regions of Africa 2005-2015.

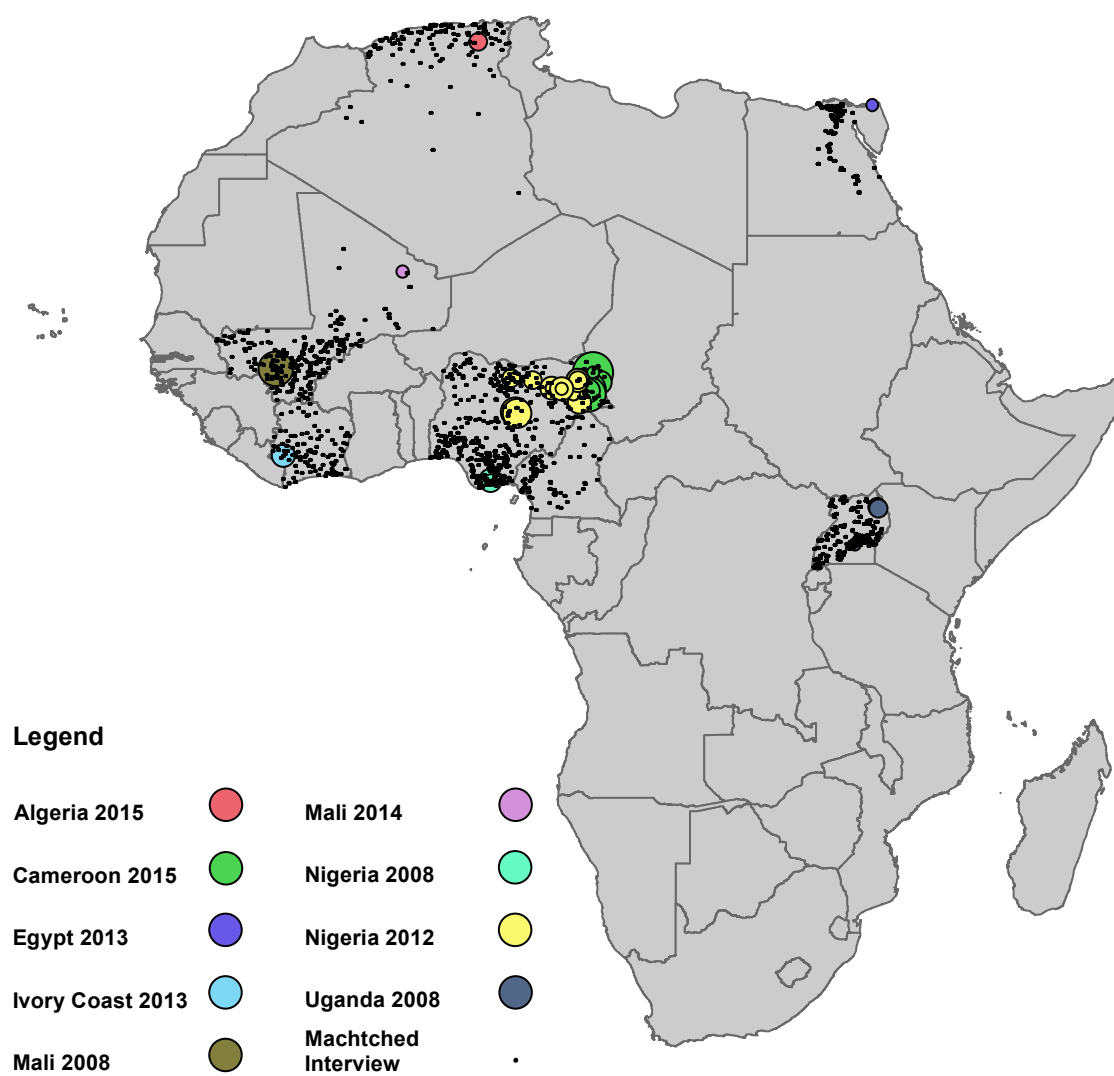Figure 9: Matched interviews and terrorist attacks. Size indicates number of victims.

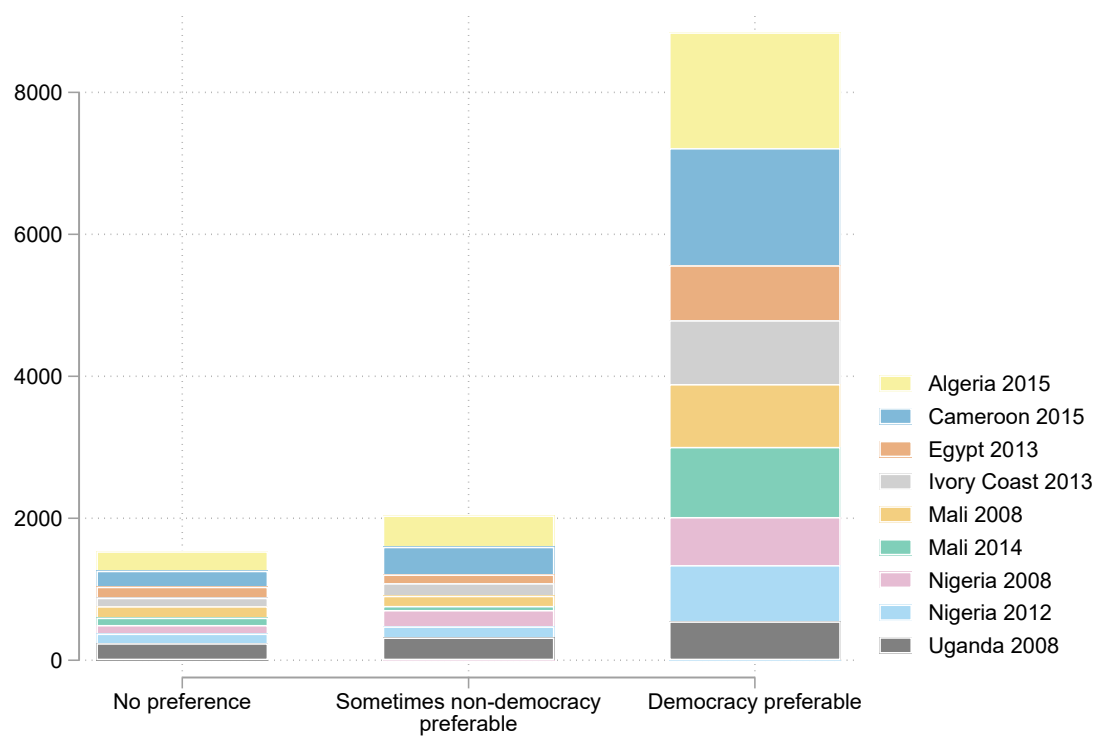Figure 10: Preference for democracy by country-year pair.

Figure 11: Perceived condition of democracy of the own country by country-year pair.
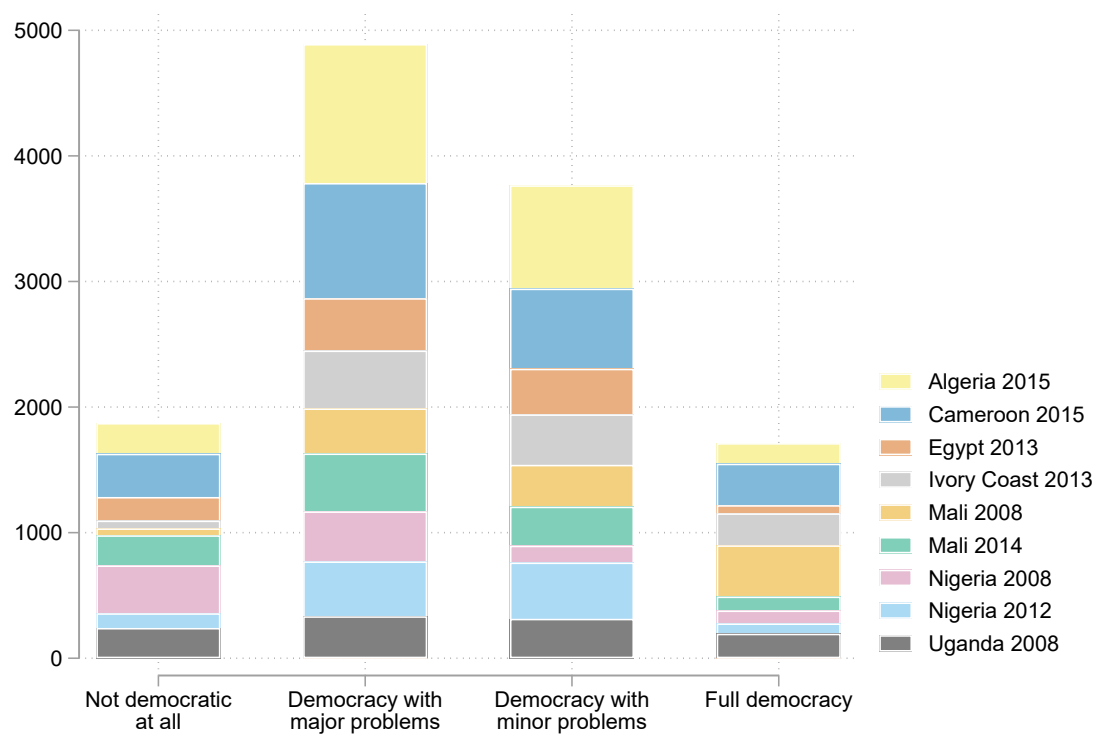
Figure 12: Time trend of preference for democracy in countries of the final sample.
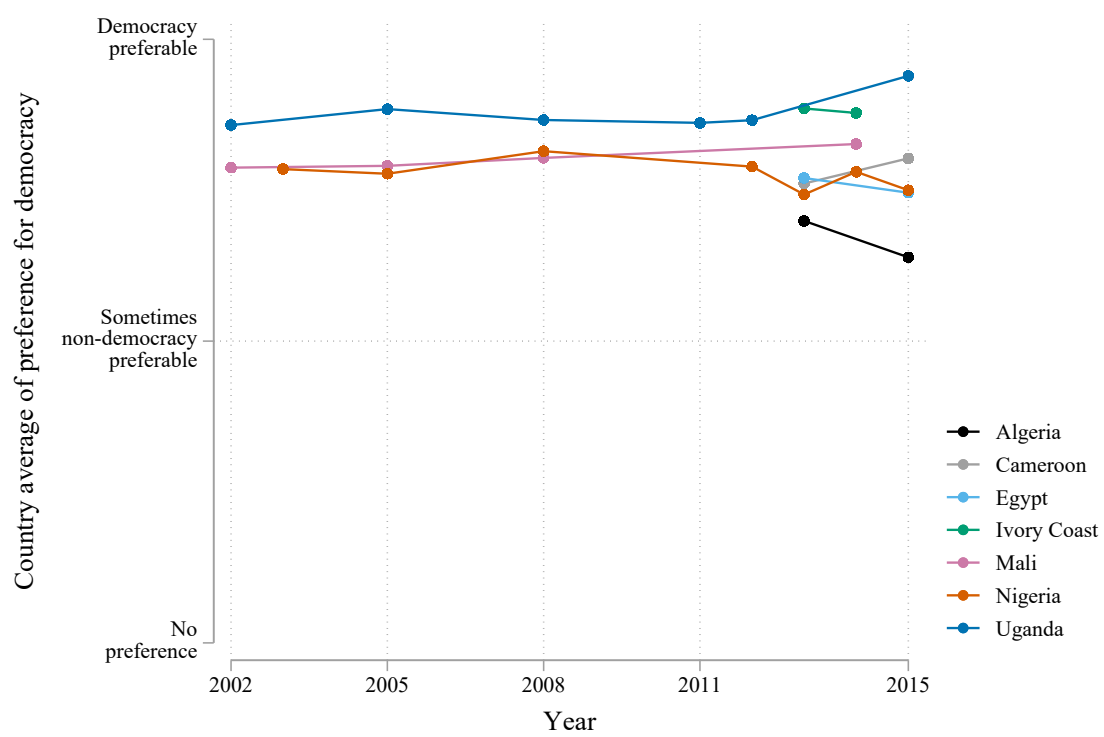
Figure 13: Time trend of the probabilities of reporting democracy being the preferred form of government in selected countries not part of the final sample.

Figure 14: Marginal effect of terrorist attack on preference for democracy accounting for spatial confounding by a range of buffer zone radii. Specification controlling only for distance and day of the week. Spikes represent 95% confidence intervals.
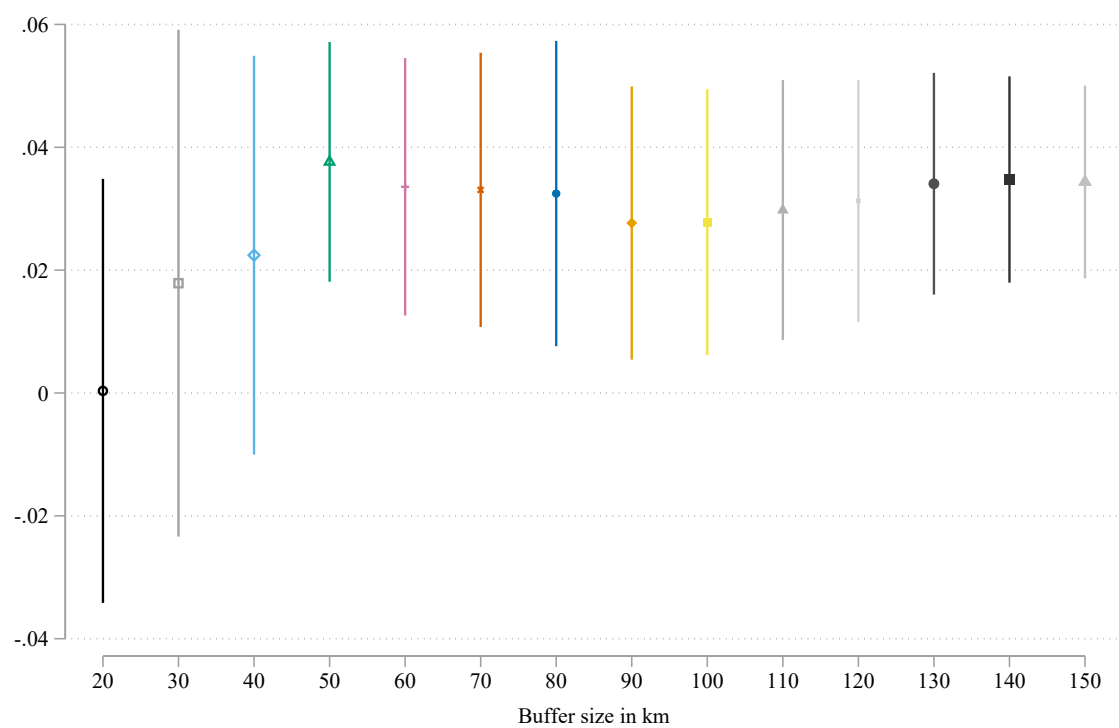
Figure 15: Marginal effect of terrorist attack on preference for democracy accounting for spatial confounding by a range of buffer zone radii. Specification including the full set of individual level control variables added. Spikes represent 95% confidence intervals.
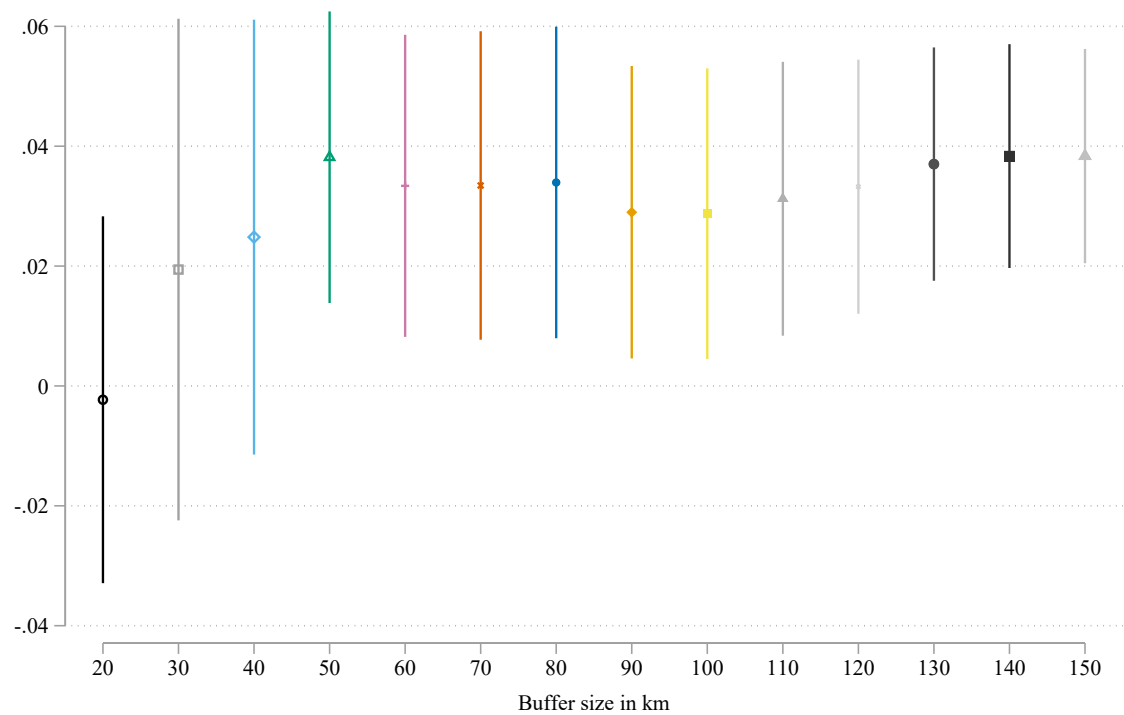
Figure 16: Marginal effect of terrorist attack on preference for democracy accounting for spatial confounding by a range of buffer zone radii. Specification including the full set of individual and enumerator control variables added. Spikes represent 95% confidence intervals.
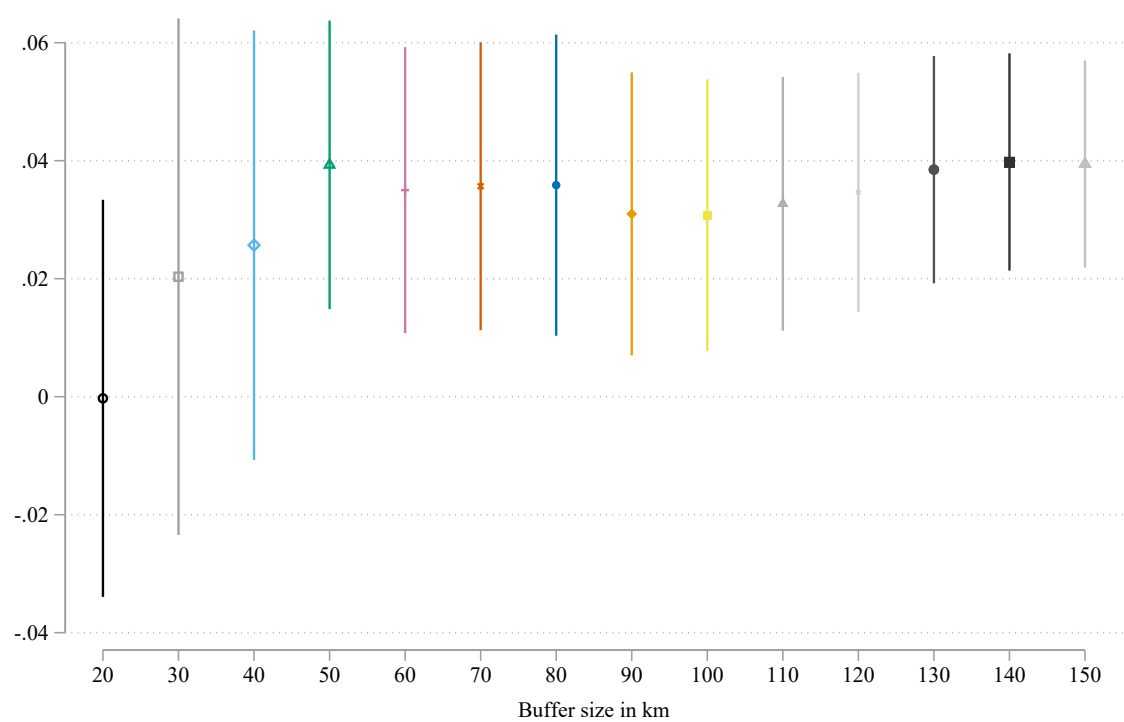
Figure 17: Marginal effect of terrorist attack on preference for democracy across time frames of increasing length. Specifications including the full set of controls. Spikes represent 95% confidence intervals.