Does Freedom of Expression Cause Less Terrorism?

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Abstract: It is often assumed that there is a trade-off between civil rights and national safety although the association is theoretically ambiguous. This paper therefore explores this association by estimating the effect of degrees of freedom of expression on the risk of terrorist attacks. We first note that different theoretical arguments support both a positive and negative association between freedom of expression and terrorism. We explore this association empirically in a large panel of 162 countries observed between 1970 and 2016. Distinguishing between media freedom and discussion freedom, and separating democracies and autocracies, we find that discussion freedom is unambiguously associated with less terrorism in democracies.

Keywords: Freedom of expression, terrorism, political economy

1. Introduction

When a state experiences a terror attack, the reaction from governments and politicians, often is to cut back on civil rights. This sometimes occurs because of the political assumption that there is a tradeoff between civil rights and national safety (Waldron, 2003; Meisels, 2005; Bjørnskov and Voigt, 2020). The existing empirical literature on this question is nevertheless divided into two overall claims. One part of the literature argues that civil rights, including freedom of speech and freedom of the press, can function as a relatively peaceful outlet of concerns and frustration. Freedom therefore prevents terror, because unhappy citizens, can express in legal ways their discontent with the executive branch or other political actors (Schmid, 1992; Eyerman, 1998; Li, 2005; Piazza, 2013; Ravndal, 2018). The other part of the literature describes how freedom of speech might increase the likelihood of terror by making it easier for terrorist organizations to motivate and recruit new members, as well as making it easier to plan a terror attack (Schmid, 1992; Ross, 1993; Eyerman, 1998; Li, 2005).

Yet, despite the importance of the question and the fact that existing literature extensively covers multiple theoretical arguments, virtually all empirical studies share a common empirical problem by distinguishing between broad regime types (Weinberg and Eubank, 1998; Li, 2005; Wade and Reiter, 2007; Whitaker, 2007; Piazza, 2008; Piazza and Walsh, 2009; Chenoweth, 2010; Ravndal, 2018). The implicit assumption, which we abandon in the following, is that freedom of expression differs between regime types but only varies little within types. We note here that this assumption does not bear out in the data.

In this paper, we instead examine how freedom of speech and freedom of the press affects the amount of terror a state experiences. We do so by using new measures from the Varieties of Democracy project, which enable us to test how freedom of expression affects the amount of terror at state experiences, instead of merely exploring difference across regime types. We find that *freedom of discussion* in particular is substantially associated with less terrorism, and argue that freedom lowers the risk of terror due to two types of mechanisms: 1) more freedom of expression makes it easier for the police and intelligence agencies to effectively gather information on potential terrorist and targets; and 2) freedom of expression works as an outlet for displeased citizens through which they can openly express their discontent instead of resorting to terror, therefore preventing terror.

The rest of the paper is structured as follows. Section 2 describes the two theoretical standpoints, and our theoretical argument. In section 3, we define our three key terms: terror, democracy and freedom of expression. In section 4 we describe our methodical approach and explain our variables. Sections 5 and 6 includes our results while section 7 comprises our conclusion and a discussion of our results.

2. Freedom of speech as a peaceful outlet of dissent or a source of conflict

When a state is exposed to an act of terrorism, the reaction is often to increase security against terror by restricting certain civil rights. This restriction takes place either because it is believed that a trade-off between safety and freedom exists, or because opportunistic politicians use terrorist attacks as a pretext to introduce such changes (Waldron, 2003; Meisels, 2005; Bjørnskov and Voigt, in press). One of the civil rights that is often restricted in such contexts is freedom of expression: 22 of the 83 countries sampled in Bjørnskov and Voigt (in press) explicitly allow censorship during states of emergency as of 2014 and only 40 have unconditional constitutional protection of the freedom of speech and expression. As such, much constitutional and judicial thought relies on an assumption that restricting freedom of expression may be necessary and effective such that a trade-off between security and civil liberties exists. Yet, the main claims inherent in much constitutional thought and previous research that investigates democracy and the significance of civil rights – including freedom of expression – in relation to terrorism can be divided into two opposite theoretical arguments.

The first argument is that increased freedom of expression lowers the risk of terrorism, because it acts as an outlet for the frustration of disgruntled citizens who would otherwise have turned to violence (Schmid, 1992; Eyerman, 1998; Li, 2005; Piazza, 2013; Ravndal, 2018). Freedom of expression can used by such citizens as a peaceful opportunity to try to change the political status quo by criticizing the holders of power and have an open discussion of political means and aims. The effect of freedom of expression as an alternative to terror can nevertheless only be present if citizens believe that they can express their points of view without sanctions from other citizens, interest groups, or the state. Ravndal (2018) for example shows that Sweden may be exposed to more right-wing political violence than the rest of Western Europe, because the country does not have an open and free debate about immigration policy.

An additional argument in favour of freedom of expression, which is also relevant for autocracies, is that although restrictions on expression may arguably be a part of the “coup proofing strategy“ of most autocratic regimes, such restrictions are only effective to a limited extent (Bove and Nisticò, 2014). As Egorov et al. (2009) emphasize, freedom of expression and media freedom provide both politicians and security forces with substantially more information of potential threats. In other words, for autocrats restrictions on expression have the unfortunate effect of reducing the costs of keeping terrorist and insurgent activities secret. Egorov et al. (2009) thus argue that many autocrats have clear incentives to allow some level of media freedom in order to reach an optimal balance between reducing latent regime risks and obtaining information on actual risks.

The opposite theoretical argument states that freedom of expression can contribute to increasing the risk of terror. This is arguably the case when such freedom can be used by terrorist organizations to increase the recruitment of potential terrorists. Besides this, freedom of expression can be misused to create fear and instability in society, and can thereby contribute to creating a breeding ground for terror.[[2]](#footnote-2) Several studies also argue that freedom of expression can cause a higher risk of terrorist attacks because terrorist organizations actively choose to commit acts of terror in societies with extensive protection of the freedom of expression (Schmid, 1992; Ross, 1993; Eyerman, 1998; Li, 2005). The main theoretical argument is that the better media coverage of attacks perpetrated in societies with extensive press freedom implies that terrorists obtain higher levels of exposure for their political messages. In other words, when one of the aims of terrorism is publicity, the ‘gains’ to terrorism are increasing in freedom of expression.

However, while the theoretical arguments are covered extensively in the existing literature, virtually all studies share a common empirical problem by distinguishing between broad regime types. When testing whether restrictions on the freedom of the press are associated with terrorist activity, the existing literature rests on the assumption that there is a close and unequivocal association between the degree to which political institutions are democratic and the degree to which those institutions respect the freedom of the press (cf., Weinberg and Eubank, 1998; Li, 2005; Wade and Reiter, 2007; Whitaker, 2007; Piazza, 2008; Piazza and Walsh, 2009; Chenoweth, 2010). The literature thereby ignores the substantial variation in press freedom *within* regime types and is therefore unable to test a number of theoretical mechanisms, and separate effects of freedom of speech from broader effects of political representation.

In the following, we abandon this assumption as it is known that freedom of expression varies even within entrenched democracies – and that some autocracies allow a significant degree of media press (Egorov et al., 2009; Arrese, 2017). Instead, we test directly how the degree of freedom of expression affects the risk of terrorism within and across regime types. We also separate freedom of expression according to regime type, which allows us to get closer to a real test of specific mechanisms, as mechanisms resting on voter reactions mainly pertain to democracies.

3. Defining our key terms

Going forward, we begin by defining our three key terms: terror, democracy and freedom of expression. This is necessary because conceptual clarity of these terms is important for the subsequent analysis, and for an interpretation of our empirical results in the following. Indeed, as we argue above, conceptual clarity at the state of measurement is a weak point of many existing studies.

Throughout the years, many studies have attempted to define terrorism. However, the literature includes over a hundred different definitions of terror and substantial disagreement remains about how to define terror and terrorist activity (Badey, 1998; Hoffman, 2006; Schmid, 2011). In the rest of the paper, we follow Enders and Sandler (2012, p. 4) in defining terror as “the premeditated use or threat to use violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate victims”. We further distinguish between international and national terrorism, because freedom of speech and freedom of the press can have different meaning depending on whether the media operate in an international or domestic context. We follow Enders and Sandler’s (2011, p. 321) definition of domestic terrorism as*” homegrown in which the venue, target, and perpetrators are all from the same country. Thus, domestic terrorism has direct consequences for only the venue country, its institutions, citizens, property, and policies.”* Conversely, international terror must have actors or targets from a different nation or take place in another state than where the terrorist is from.

Second, we follow the definition in Article 19 of the Universal Declaration of Human Rights (United Nations, ) of freedom of expression: “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.” We also take this to imply that anyone has the right to exchange information and opinions with anyone else, such that there can be no privileged recipients of particular information.

Finally, to be able to test how freedom of the press and freedom of speech affect the terrorist threat a country faces, we operate with a minimalistic definition of democracy (Munck and Verkuilen, 2002). Our operational definition follows Joseph Schumpeter's (1942, p. 269) idea that “democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote.” Practically, we thus use Bjørnskov and Rode’s (in press) definition of electoral democracy as “a set of political institutions in which properly contested, repeated and repeatable elections are free […] and create ex ante uncertainty for the incumbent government and de facto ex post irreversibility of election results.”

4. Data and empirical strategy

Our main variable is terrorism, which we primarily capture through the number of separate terrorist incidents in a given year in the country. Enders and Sandler’s (2012) definition of terrorism, which we use here, is in practice identical to the operational definition behind the large dataset from the Global Terrorism Database maintained at the University of Maryland (GTD, 2019), from which we draw our terrorism data. In order to match the terrorist data with other available data, we aggregate the events data in the GTD to annual data and measure the degree of terrorism as the logarithm (plus one) to the number of events. However, we also follow Bjørnskov and Voigt (2020) by disaggregating the terrorism data using three additional features of the GTD. This first allows us to measure the number of terrorist events targeted at either the government or the military or police, respectively. Second, we follow previous studies by creating an additional measure capturing the number of attacks with multiple targets, which Bjørnskov and Voigt (2020, 586) interpret as a proxy “for logistically challenging events, versus nonchallenging with a single target.”[[3]](#footnote-3) The GTD allows us to separate armed attacks from other types of terrorist attacks. Finally, we use information in the GTD to sort out attacks planned and perpetrated by international terrorist groups.

In order to be able to measure the effects of freedom of expression, we employ information from the Varieties of Democracy (V-Dem) dataset (Coppedge et al., 2016).[[4]](#footnote-4) The full index of freedom of Expression and Alternative Sources of Information in V-Dem is aggregated from separate indices of media censorship effort, harassment of journalists, media bias, media self-censorship, whether print/broadcast media are critical, whether print/broadcast media provide different perspectives, freedom of discussion for men, freedom of discussion for women, and freedom of academic and cultural expression. We instead aggregate these variables in two separate variables, following the structure of correlations reported in appendix Table A1 and the subsequent factor analytical solution in appendix Table A2. Both indicate that the two indices of freedom of discussion and the index of academic freedom form statistically separable components. We thus form two indices by taking the simple average of these three indices, which we call “discussion freedom”, and aggregate the remaining indices in a measure of “media freedom”.[[5]](#footnote-5) Both measures therefore retain the scale from the V-Dem project, which allows values between -4 and +4.

For a statistical measurement of democracy, we employ Bjørnskov Rode’s (in press) updated assessment of Cheihub, Gandhi and Vreelands dataset of Democracy and Dictatorship. As noted above, this specific measurement of democracy follows a minimalistic definition of democracy where democracy is coded exclusively based on the structure of the political institutions and the *de facto* adherence to those institutions to the extent that they ensure the existence of free and fair, contested elections. Whereas minimalist definitions have attributable issues – as stressed by several authors, the much-used Polity IV indicator is insensitive to restrictions on electoral participation – and may lack a number of normatively desirable features, indicators based on more normatively oriented maximalist definitions suffer from different problems. The more serious issue in our context is that their more specific indicators and sub-indicators eventually hinder analysis of the core questions we want to answer. By insisting on a minimalist democracy measure, we thus ensure that press freedom or respect for citizens’ rights to expression are not directly reflected in our democracy measure (cf. Bjørnskov and Rode, in press).

We further add a set of control variables capturing economic development, population size, and other types of conflicts. We proxy development by adding the logarithm to purchasing-power adjusted GDP per capita from the Penn World Tables, mark 9.1, from which we also derive the logarithm to population size (Feenstra et al., 2015). In addition, we add a categorical measure of civil war and interstate conflicts, which we get from the update of Gleditsch et al. (2002) in Petterson et al. (2019). This measure consists of two dummies, one capturing low-intensity conflicts defined as conflicts with more than 25 “battle deaths” in a given year while high-intensity conflicts are defined as those with more than 1000 deaths (Gleditsch et al., 2002).

Throughout all regressions in the following, we add two-way fixed effects capturing annual and country-specific factors. As such, we effectively control for all approximately time-invariant factors that could affect terrorist activity as well as freedom of expression such as geography, social trust, stable political traditions and constitutional choices and norms. The specific choice of estimator thus hinges on a specific problem relating to the distribution of our dependent variable. As illustrated in Figure 1, the terrorism data are distributed with a large number of zeros – no terrorist attacks occurred in more than half of all country-years in the full sample and 43 % in all democratic country-years – while the rest of the data approximately resemble an exponential distribution.

*Insert Figure 1 about here*

We therefore form two types of variables from the terrorism data in the following, which separate the extensive margin – whether any attacks took place – from the intensive margin that captures how many attacks occurred, given that at least one did. When estimating effects at the extensive margin, we employ a conditional fixed effects logit estimator while we use simple fixed effects OLS for the intensive margin. In both cases, we add a twice-lagged dependent variable, which accounts for country-specific trends and broader region-specific trends not captured in the country fixed effects. The lagged dependent variable also takes care of some of the potential endogeneity bias, because any reverse causality running from terrorist threats to freedom of expression would be reflected in the lagged variable. While we nevertheless cannot rule out endogeneity or simultaneity bias in the following, we additionally note that such bias is likely more severe in autocracies. As short-run changes to freedom of expression due to terrorist attacks are much less likely in democracies with robust veto institutions and constitutional guarantees, any endogeneity bias – which would yield more positive estimates – is arguably relatively small in this subsample. We therefore throughout provide estimates using the full sample as well as for subsamples with only democratic and only autocratic observations, respectively.

The full sample covers 162 countries around the world in a period between 1970 and 2016. 113 of these countries were democratic and 120 countries were autocratic in at least part of our period, such that 2721 observations out of a total of 6242 are from democracies. While the average discussion (media) freedom at 1.82 (1.57) is substantially different in democracies than the average of -.86 (-.24) in electoral autocracies, we also observe rather large overlaps between regime types.[[6]](#footnote-6) In particular, the 20 % observations from electoral autocracies with the highest discussion freedom have higher scores than the 16 % worst observations from democracies. Symmetrically, the 16 % highest scores in electoral autocracies are higher than the 20 % lowest scores in democracies, and the standard deviation within either regime type is close to 1. Evidently, simply separating regime types provides a poorly identified difference in freedom of expression and ignores the considerable variation within regime types.

With respect to terrorism, only four of these countries – Cabo Verde, Mongolia, Oman and Sao Tomé and Principe – experienced no terrorist attacks while five countries – Greece, Israel, Lebanon, the United Kingdom and the US – experienced attacks very year between 1970 and 2016. We next describe these data before using them to explore the association between freedom of expression and terrorism.

5. Main results

We start by illustrating the development of terrorism since 1970 as well as the basic structure of the freedom-terrorism association in three figures. Figure 2 first shows how terrorist events were rare events in the beginning of the 1970s that affected about 40 % of all democracies but very few autocracies. The figure also illustrates the veritable explosion of terrorism in democracies in the 1980s, in which more than four events occurred per million people in some years. The occurrence of terrorism has become rarer again since the early 1990s although with a slight uptick since 2005 and a substantial increase in its frequency in autocracies in the most recent years.

*Insert Figure 2 about here*

Figure 3 next illustrates the simple risk of observing any terrorist attacks in four groups: autocracies with above and below median discussion freedom, and democracies with above and below median discussion freedom. Figure 4 illustrates the same differences for the number of attacks per million inhabitants, given that any attacks occurred. The figures thus follow the separation of the extensive and intensive margins that we continue in the following tables.

*Insert Figure 3 about here*

*Insert Figure 4 about here*

The first figure clearly indicates that autocracies with more freedom of expression tend to be significantly more prone to experience years with terrorist attacks (p<.01) while democracies are weakly less likely to do so (p<.07). However, these differences may hide effects of both economic development, differences between autocratic regime types, and many other factors. In addition, the main difference in the figure is that democracies are substantially more likely to experience years with terrorist attacks. We also note that the main differences between autocracies and democracies are reversed in Figure 4, where the difference between the number of attacks in more versus less free countries is not significant (p<.12) while the difference for democracies is strongly significant (p<.01).

We further explore these differences in Tables 2 and 3 where the former provides results on the extensive margin and the latter provides results on the intensive margin. In both, we find evidence of substantial persistence over time such that the same countries experience a substantially higher terrorism risk at both margins. We also observe that severe conflicts such as civil wars strongly affect the terrorism risk in all countries at both margins while we find no significant effect of low-intensity conflicts at the extensive margin in democracies. In other words, both the risk and subsequent escalation of terrorism are important in autocracies while it appears to be only the escalation risk that clearly affects terror in democracies.[[7]](#footnote-7) At the intensive margin, we likewise find that richer societies are more at risk.

*Insert Table 2 about here*

*Insert Table 3 about here*

Turning the attention to our main variables, in the full sample we observe positive and significant effects of media freedom at the extensive margin, a significant negative association of discussion freedom, and no clear associations at the intensive margin. However, when we split the sample in autocracies and democracies, the positive effect of media freedom at the extensive margin turns out to be driven entirely by autocracies, which we cannot reject is substantially affected by endogeneity bias. Conversely, we find a significant negative effect of discussion freedom at the intensive margin and a weakly significant negative intensive effect in democracies. As such, in the case that these latter estimates are subject to endogeneity bias, they are likely to be lower-bound estimates of the true negative association.

In the lower panels of both tables, we provide estimates of potentially non-linear effects and the top points / maximum effects implied by the estimates. While some of these estimates appear significant, the marginal effects are in most cases surrounded by such large conditional confidence intervals that we see very few effects that are significant within the actual range of the variables (cf., Brambor et al., 2006). The exceptions are the effect of discussion freedom on the intensive margin in democracies, where the estimates rather clearly show that the effect is linear, and the non-linear effect of discussion freedom in autocracies, where we find significance for the freest autocracies.[[8]](#footnote-8)

Overall, the estimates suggest rather sizable effects of discussion freedom at the intensive margin in democracies and a similarly sized, but positive effect of media freedom at the extensive margin in autocracies. We also find a sizeable, but only imprecisely measured effect of discussion freedom at the extensive margin in democracies. In the following, we therefore explore whether these overall effects hide substantial differences across four distinct types of terrorist attacks.

6. Results, different types of terrorist attacks

We next separate all terrorist attacks in five partially overlapping categories: Armed attacks, attacks against the military or the police, attacks against the government or government installations, attacks with either multiple targets or attacks implemented over several consecutive days, and attacks perpetrated by domestic terrorist groups; by definition, the second and third categories cannot overlap. All of these specific results are reported in the appendix.

Starting with the results at the extensive margin, we find that discussion freedom is *not* significantly associated with the risk of observing any terrorist attacks against the government and that our results for domestic terrorism is similar to the overall results. Conversely, we find that it is significantly and substantially associated with both armed attacks, attacks against the military or police, organizationally challenging attacks (multiple attacks), and international attacks in democracies. In addition, we also find that discussion freedom reduces the extensive risk in autocracies (cf. Egorov et al., 2009). However, calculating odds ratios shows that the effects differ across types: the odds ratio for a one-point change in discussion freedom on the risk of observing attacks against military or police targets is approximately .6 while that on armed attacks, challenging attacks and international attacks is about .7 in democracies. In autocracies, a one-point change in discussion freedom yields an odds ratio of .8 for military and police targets while a similar change in media freedom yields an odds ratio of 1.3 for attacks against the government. All of these results are robust to a set of additional test (not shown) including, for example, excluding the 10 % observations with the largest number of terrorist attacks. We are, in other words, certain that the results at the extensive margin are not driven by societies or years with extreme terrorist activity. Additional tests (not shown) also show no clear evidence that the robust associations in the table are non-linear.

As such, the results in appendix Table A3 suggest that substantial discussion freedom mainly affects the extensive risk of getting particularly serious terrorist attacks against the military and police, and not against the government. However, the results at the intensive margin, which we summarize in appendix Table A4, tell a slightly different story. The influence of discussion freedom in democracies remains significantly negative but does not differ significantly across the four types of attacks. In addition, we find that media freedom is significantly associated with more challenging attacks in autocracies while it is significantly associated with fewer domestic attacks in democracies.

A set of additional robustness tests nonetheless reveal that some of these results are, in fact, driven by extreme observations. Excluding the 10 % observations with the most terrorist attacks in a given year as well as the 10 % observations with the smallest number of attacks (in all cases observations with a single attack) yield very small and insignificant estimates for armed attacks and organizationally challenging attacks. In other words, given that at least one attack happens, neither media freedom nor discussion freedom affects the number of armed or multi-target attacks in democracies. We also find that the results at the intensive margin in autocracies are all fragile to excluding observations with particularly high numbers of attacks per year.

Conversely, we find that the results pertaining to attacks against either the government or military and police targets are robust to additional tests with an approximately unchanged estimate. In both cases, a one-point change in discussion freedom in democracies is associated with about 15 % fewer attacks per year. We again find no clear evidence that these associations are non-linear and that there are either optimal levels of discussion freedom or decreasing marginal sensitivity to freedom. Overall, we thus find robust empirical evidence that discussion freedom is substantially and significantly associated with a lower risk of observing terrorist attacks in democracies.

6. Discussion and conclusions

Whether restrictions of the freedom of expression are effective in combatting terrorism or if such restrictions are counterproductive remains an important question. Politicians in different countries have expressed very different points of view and several countries, including Spain and Russia, have in recent years criminalized public comments that can for example be construed as glorifying terrorism and justifying terrorist acts. However, the empirical evidence so far has been surprisingly weak and based on indirect indicators.

In this paper, we have therefore explored the association between two measures of media and discussion freedom and the risk of observing terrorist attacks. Our study has covered 162 countries around the world in a period between 1970 and 2016 of which 113 were democratic for at least part of the period. We combined data on terrorism from the Global Terrorism Database with indicators of freedom of expression from the Varieties of Democracy database, which we separated in two measures of media and discussion freedom, respectively.

The findings imply that while the evidence is mixed for autocracies, extended discussion freedom is strongly and negatively associated with terrorism in democracies. Our estimates imply that a one-point change in discussion freedom in democracies – for example from the current levels in Paraguay to those of Uruguay or from the levels of Malta and Mauritius to those of Denmark and Norway – would reduce the risk of observing any attacks against the military and the police by almost 50 %. In case attacks nonetheless occur, the estimates imply that the same difference yields about 15 % fewer attacks. The effects on other types of attacks are somewhat smaller, but still quite substantial, and we find no significant evidence of non-linear effects. We also note that although we cannot rule out endogeneity bias, such bias in general implies that our estimates are conservative.

The implications of our findings are clear: Although we cannot rule out that very specific limitations may be effective, the general pattern across modern democracies suggests that restrictions on the freedom of expression are counterproductive if their purpose is to avoid terrorist attacks. Yet, several theoretical mechanisms could potentially explain these findings.

The fact that we find substantial effects for discussion freedom but only insignificant effects for media freedom nevertheless suggests that our main mechanism is not that freedom of expression allows the media to function as a ‘safety valve’ of frustration that could otherwise lead to violent action. Instead, we suggest that the main mechanism may be that freedom of expression also allows the police and security and intelligence services to obtain more information about potential threats than if public and private discussion was restricted. We argue that the structure of our specific findings provides indications in the same direction. If the findings were due to a safety valve mechanism, we would have expected to find that discussion freedom mainly affected terrorist attacks against the government and government installations. However, we find that this association is insignificant while the strongest association is between discussion freedom and attacks against the police and military forces.

As such, our findings clearly speak against political action against terrorist threats that restricts the right to free discussion in democracies. We must nonetheless emphasize that much more research is needed in order to unearth more precisely how restrictions on freedom of expression eventually lead to terrorism. Questions such as which types of restrictions are particularly counterproductive, which types of terrorist groups react against such restrictions or take advantage of them, and under which conditions and with which beliefs and incentives democratic politicians nonetheless choose to curb the freedom of their citizens remain left for future research.

References

Arrese, Ángel. 2017. The Role of Economic Journalism in Political Transitions. *Journalism*, 18, 368–383.

Badey, Thomas J. 1998. Defining International Terrorism: A Pragmatic Approach. *Terrorism and Political Violence*, 10, 90-107.

Bjørnskov, Christian and Jacob Mchangama. 2019. Do Social Rights Affect Social Outcomes? *American Journal of Political Science*, 63, 452-466.

Bjørnskov, Christian and Martin Rode. In press. Regime Types and Regime Change: A New Dataset on Democracy, Coups, and Political Institutions. Forthcoming in *Review of International Organizations*.

Bjørnskov, Christian and Stefan Voigt. 2020. When Does Terror Induce a State of Emergency? And What are the Effects? *Journal of Conflict Resolution*, 64, 579-613.

Bjørnskov, Christian and Stefan Voigt. In press. Is Constitutionalized Media Freedom only Window Dressing? Evidence from Terrorist Attacks. Forthcoming in *Public Choice*.

Bove, Vincenzo and Roberto Nisticò. 2014. Military in Politics and Budgetary Allocations. *Journal of Comparative Economics*, 42, 1065-1078.

Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. Understanding Interaction Models: Improving Empirical Analysis. *Political Analysis*, 14, 63–82.

Cheibub, José Antonio, Jennifer Gandhi and James R. Vreeland. 2010. Democracy and Dictatorship Tevisited. *Public Choice*, 143, 67-101.

Chenoweth, Erica. 2010. Democratic Competition and Terrorist Activity. *Journal of Politics*, 72, 16–30.

Coppedge, Michael, Staffan Lindberg, Svend-Erik Skaaning, and Jan Teorell. 2016. Measuring high level democratic principles using the V-Dem data. *International Political Science Review*, 37, 580-593.

Egorov, Georgy, Sergei Guriev, and Konstantin Sonin. 2009. Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review*, 103, 645-668.

Enders, Walter and Todd Sandler. 2012. *The Political Economy of Terrorism*. Cambridge: Cambridge University Press.

Eyerman, Joe. 1998. Terrorism and Democratic States: Soft Targets or Accessible Systems. *International Interactions*, 24, 151– 170.

Feenstra, Robert C., Robert Inklaar, and Marcel P. Timmer. 2015. The Next Generation of the Penn World Table. *American Economic Review*, 105, 3150–3182.

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. Armed Conflict 1946-2001: A New Dataset. *Journal of Peace Research*, 39, 615–637.

GTD. 2019. *Global Terrorism Database Codebook: Inclusion Criteria and Variables*. College Park, MD: University of Maryland. Database available at https://www.start.umd.edu/gtd/ (accessed November 2019).

Hoffman, Bruce. 2006. *Inside Terrorism.* New York: Columbia University Press.

 Meisels, Tamar. 2005. How Terrorism Upsets Liberty. *Political Studies*, 53, 162-181.

Munck, Gerardo L. and Jay Verkuilen, 2002. Conceptualizing and Measuring Democracy: Evaluating Alternative Indices. *Comparative Political Studies*, 35, 5-34.

Pettersson, Therese, Stina Högbladh and Magnus Öberg, 2019. Organized violence, 1989-2018 and peace agreements. *Journal of Peace Research*, 56, 589–603.

Piazza, James A. 2008. Do Democracy and Free Markets Protect Us From Terrorism. *International Politics*, 45, 72–91.

Piazza, James A. 2013. Regime Age and Terrorism: Are New Democracies Prone to Terrorism? *International Interactions*, 39, 246-263.

Piazza, James A. and James I. Walsh. 2009. Transnational Terror and Human Rights. *International Studies Quarterly*, 53, 125-148.

Li, Quan . 2005. Does Democracy Promote or Reduce Transnational Terrorist Incidents? *Journal of Conflict Resolution*, 49, 278-297.

Ravndal, Jacob Aasland. 2018. Explaining Right-Wing Terrorism and Violence in Western Europe: Grievances, Opportunities and Polarisation. *European Journal of Political Research*, 57, 845–866.

Ross, Jeffrey Ian. 1993. Structural Causes of Oppositional Political Terrorism: Towards a Causal Model. *Journal of Peace Research*, 30, 317-329.

Schumpeter, Joseph. 1942. *Capitalism, Socialism and Democracy*, New York: Harper.

Schmid, Alex P. 1992. Terrorism and democracy. *Terrorism and Political Violence*, 4, 14-25.

Schmid, Alex P. 2011. The Problem of Defining Terrorism. In Alex P. Schmid (Ed.), *The Routledge Handbook of Terrorism Research.* London: Routledge, pp. 39-98

Stier, Sebastian. 2015. Democracy, Autocracy and the News: the Impact of Regime Type on Media Freedom. *Democratization*, 22, 1273-1295.

United Nations. 2015. *Universal Declaration of Human Rights*. New York: United Nations.

Wade, Sara Jackson and Dan Reiter. 2007. Does Democracy Matter? Regime Type and Suicide Terrorism. *Journal of Conflict Resolution*, 51, 329-348.

Waldron, Jermy. 2003. Security and Liberty: The Image of Balance. *Journal of Political Philosophy*, 11, 191–210.

Weinberg, Leonard B. and William L. Eubank. 1998. Terrorism and democracy: What recent events disclose. *Terrorism and Political Violence*, 10, 108- 118.

Whitaker, Beth Elise. 2007. Exporting the Patriot Act? Democracy and the ‘War on Terror’ in the Third World. *Third World Quarterly*, 28, 1017-1032.

Table 1. Descriptive statistics

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| --- | --- | --- | --- |
|  | Mean | Standard deviation | Observations |
| Freedom of media | .293 | 1.531 | 8012 |
| Freedom of discussion | .566 | 1.559 | 8012 |
| No elections | .145 | .352 | 7957 |
| Single-party regime | .127 | .333 | 7957 |
| Electoral autocracy | .267 | .442 | 7957 |
| Democracy | .461 | .498 | 7957 |
| Failed coups | .027 | .169 | 8012 |
| Successful coups | .019 | .142 | 8012 |
| No of attacks | 22.436 | 122.579 | 7608 |
| # armed attacks | 18.626 | 108.828 | 7492 |
| # against military / police | 6.352 | 43.620 | 7492 |
| # against government | 3.136 | 14.345 | 7492 |
| # attacks with multiple targets | 16.921 | 116.677 | 7668 |
| # international attacks | .867 | 5.061 | 7497 |
| Any attacks | .475 | .499 | 7608 |
| Any armed attacks | .426 | .495 | 7492 |
| Any attacks, military / police | .240 | .427 | 7492 |
| Any attacks, government | .309 | .462 | 7492 |
| Any attacks, multiple targets | .321 | .467 | 7668 |
| Any attacks, international groups | .138 | .345 | 7497 |
| Civil war, low intensity | .122 | .327 | 8012 |
| Civil war, high intensity | .054 | .227 | 8012 |
| Log GDP per capita | 8.842 | .1239 | 7280 |
| Log population size | 2.026 | 1.732 | 7280 |

Table 2. Main results, extensive margin

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
|  | All | Democracies | Autocracies |
| Twice-lagged dependent | .967\*\*\*(.074) | .980\*\*\*(.074) | .568\*\*\*(.122) | .563\*\*\*(.122) | .843\*\*\*(.102) | .853\*\*\*(.102) |
| Single-party regime | -.636\*\*\*(.169) | -.747\*\*\*(.167) |  |  | -.258(.196) | -.327\*(.193) |
| Electoral autocracy | .038(.148) | .163(.146) |  |  | -.206(.173) | -.094(.171) |
| Democracy | -.049(.192) | .455\*\*(.189) |  |  |  |  |
| Log GDP per capita | .363\*\*(.144) | .313\*\*(.144) | .132(.378) | .141(.380) | .117(.188) | .032(.186) |
| Log population | 1.418\*\*\*(.249) | 1.411\*\*\*(.250) | 1.089\*(.581) | 1.323\*\*(.593) | -.523(.405) | -.562(.406) |
| Civil war, low intensity | .926\*\*\*(.139) | .868\*\*\*(.140) | .589(.370) | .341(.370) | 1.033\*\*\*(.163) | 1.006\*\*\*(.163) |
| Civil war, high intensity | 1.386\*\*\*(.214) | 1.327\*\*\*(.218) | 2.674\*\*\*(.799) | 2.351\*\*(.812) | 1.419\*\*\*(.243) | 1.379\*\*\*(.248) |
| Media freedom | .225\*\*\*(.065) |  | .066(.168) |  | .220\*\*(.093) |  |
| Discussion freedom |  | -.114\*\*(.056) |  | -.269\*(.141) |  | -.132(.083) |
| Annual FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 6242 | 6242 | 2721 | 2721 | 3351 | 3351 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .187 | .186 | .220 | .222 | .199 | .198 |
| LR Chi squared | 1125.24 | 1117.28 | 538.84 | 542.40 | 644.41 | 641.22 |
| Including non-linearity |  |  |  |  |  |
| Freedom | .169\*\*\*(.067) | -.121\*\*(.056) | .164(.243) | -.147(.171) | .128(.104) | -.234\*\*(.092) |
| Freedom squared | -.114\*\*\*(.031) | -.094\*\*\*(.025) | -.056(.101) | -.067(.056) | -.098\*(.051) | -.138\*\*\*(.046) |
| Implied maximum | *.741* | *-.641* | *1.476* | *-1.107* | *.655* | *-.846* |

Note: \*\*\* (\*\*) [\*] denote significance at p<.01 (p<.05) [p<.10]. Numbers in parentheses are standard errors clustered at the country level.

Table 3. Main results, intensive margin

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
|  | All | Democracies | Autocracies |
| Twice-lagged dependent | .482\*\*\*(.033) | .486\*\*\*(.034) | .446\*\*\*(.036) | .437\*\*\*(.036) | .448\*\*\*(.052) | .461\*\*\*(.057) |
| Single-party regime | .058(.106) | .054(.103) |  |  | .143(.109) | .119(.112) |
| Electoral autocracy | -.122(.107) | -.075(.104) |  |  | -.194(.121) | -.151(.119) |
| Democracy | -.209(.155) | -.001(.137) |  |  |  |  |
| Log GDP per capita | .336\*\*\*(.123) | .332\*\*\*(.117) | .864\*\*\*(.247) | .864\*\*\*(.251) | .267\*\*(.135) | .271\*\*(.125) |
| Log population | 1.089\*\*\*(.197) | 1.126\*\*\*(.204) | 1.042\*\*\*(.386) | 1.178\*\*\*(.398) | .500\*(.281) | .578\*(.316) |
| Civil war, low intensity | .406\*\*\*(.089) | .384\*\*\*(.087) | .467\*\*\*(.141) | .417\*\*\*(.134) | .390\*\*\*(.112) | .362\*\*\*(.108) |
| Civil war, high intensity | .583\*\*\*(.119) | .539\*\*\*(.117) | .715\*\*\*(.230) | .655\*\*\*(.214) | .646\*\*\*(.137) | .605\*\*\*(.128) |
| Media freedom | .076(.065) |  | -.068(.093) |  | .167(.102) |  |
| Discussion freedom |  | -.063(.049) |  | -.221\*\*\*(.079) |  | -.045(.077) |
| Annual FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 3382 | 3382 | 1806 | 1806 | 1576 | 1576 |
| Countries | 158 | 158 | 106 | 106 | 115 | 115 |
| Within R squared | .463 | .463 | .464 | .469 | .467 | .463 |
| F statistic | 49.62 | 49.58 | 55.89 | 57.42 | 22.83 | 22.42 |
| Including non-linearity |  |  |  |  |  |
| Freedom | .071(.063) | -.059(.051) | -.113(.126) | -.221\*\*\*(.079) | .109(.102) | -.099(.070) |
| Freedom squared | -.049\*\*(.024) | -.026(.021) | .027(.049) | .018(.029) | -.068\*(.041) | -.069\*(.042) |
| Implied maximum | *.715* | *-1.139* | *2.092* | *-* | *.798* | *-.712* |

Note: \*\*\* (\*\*) [\*] denote significance at p<.01 (p<.05) [p<.10]. Numbers in parentheses are standard errors clustered at the country level.

Table A1. Associations across indices

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | v2mecenefm | v2meharjrn | v2meslfcen | v2mebias | v2mecrit | v2merange | v2cldiscm | v2cldiscw | v2clacfree |
| v2mecenefm | 1.00 | 0.91(.72) | 0.84(.65) | 0.77(.68) | 0.82(.70) | 0.79(.62) | 0.81(.55) | 0.86(.53) | 0.84(.59) |
| v2meharjrn | 1.00 | 0.75(.42) | 0.69(.46) | 0.73(.45) | 0.72(.47) | 0.70(.43) | 0.75(.39) | 0.70(.42) |
| v2meslfcen |  | 1.00 | 0.77(.56) | 0.84(.68) | 0.81(.56) | 0.78(50) | 0.82(.49) | 0.80(.050) |
| v2mebias |  |  |  | 1.00 | 0.91(.58) | 0.91(.59) | 0.82(.41) | 0.86(.41) | 0.81(.40) |
| v2mecrit |  |  |  |  | 1.00 | 0.88(.57) | 0.80(.39) | 0.84(.38) | 0.80(.40) |
| v2merange |  |  |  |  | 1.00 | 0.79(.42) | 0.84(.43) | 0.80(.42) |
| v2cldiscm |  |  |  |  |  |  | 1.00 | 1.03(.89) | 0.94(.69) |
| v2cldiscw |  |  |  |  |  |  |  | 1.00 | 0.84(.65) |
| v2clacfree |  |  |  |  |  |  |  | 1.00 |

Note: the table reports bivariate regression coefficients when controlling for country fixed effects. As such, the numbers illustrate the within-country associations between different indices. Numbers in parentheses are results using only observations from democracies.

Table A2. Factor analysis of V-Dem measures

|  |  |  |
| --- | --- | --- |
|  | Raw data | Residual data |
|  | 1 | 2 | 3 | 4 |
| Media censorship | .481 | .355 | .467 | .327 |
| Harrassment of journalists | .454 | .408 | .470 | .334 |
| Media bias | .744 | .249 | .747 | .234 |
| Media self-censorship | .604 | .225 | .578 | .188 |
| Critical media | .797 | .164 | .821 | .109 |
| Media provide perspectives | .821 | .182 | .845 | .143 |
| Freedom of discussion, men | .198 | .793 | .154 | .834 |
| Freedom of discussion, women | .159 | .835 | .116 | .868 |
| Academic freedom | .278 | .835 | .241 | .614 |
| LR test, probability | .000 |  | .000 |  |

Note: all factors are rotated with oblique promax.

Table A3. Additional results, extensive margin using specific measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| Armed attacks | All | Democracies | Autocracies |
| Media freedom | .205\*\*\*(.067) |  | .085(.165) |  | .181\*(.099) |  |
| Discussion freedom |  | -.129\*\*(.058) |  | -.371\*\*\*(.139) |  | -.117(.089) |
| Observations | 6122 | 6122 | 2673 | 2673 | 3263 | 3263 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .183 | .182 | .202 | .205 | .207 | .206 |
| LR Chi squared | 1034.95 | 1030.40 | 471.82 | 478.81 | 622.98 | 621.38 |
| Attacks, mil / pol. | All | Democracies | Autocracies |
| Media freedom | .253\*\*\*(.075) |  | .029(.174) |  | .193(.119) |  |
| Discussion freedom |  | -.158\*\*(.066) |  | -.506\*\*\*(.149) |  | -.247\*\*(.109) |
| Observations | 5611 | 5611 | 2582 | 2582 | 2770 | 2770 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .218 | .217 | .239 | .245 | .250 | .251 |
| LR Chi squared | 953.51 | 947.89 | 445.64 | 457.61 | 553.18 | 555.62 |
| Attacks, government | All | Democracies | Autocracies |
| Media freedom | .278\*\*\*(.067) |  | -.041(.161) |  | .281\*\*\*(.105) |  |
| Discussion freedom |  | -.047(.057) |  | -.159(.127) |  | -.093(.091) |
| Observations | 6122 | 6122 | 2726 | 2726 | 3167 | 3167 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .171 | .168 | .206 | .206 | .185 | .183 |
| LR Chi squared | 880.80 | 864.29 | 477.47 | 479.00 | 466.81 | 460.63 |
| Multiple attacks | All | Democracies | Autocracies |
| Media freedom | .212\*\*\*(.071) |  | .059(.163) |  | .151(.113) |  |
| Discussion freedom |  | -.179\*\*\*(.061) |  | -.327\*\*(.137) |  | -.283\*\*\*(.099) |
| Observations | 6257 | 6257 | 2862 | 2862 | 3099 | 3099 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .260 | .260 | .273 | .276 | .287 | .289 |
| LR Chi squared | 1369.29 | 1368.97 | 631.50 | 637.23 | 749.92 | 756.48 |
| International groups | All | Democracies | Autocracies |
| Media freedom | .252\*\*\*(.085) |  | -.121(.190) |  | .184(.136) |  |
| Discussion freedom |  | -.007(.079) |  | -.308\*\*(.154) |  | -.106(.128) |
| Observations | 4838 | 4838 | 2190 | 2190 | 2326 | 236 |
| Countries | 162 | 162 | 113 | 113 | 120 | 120 |
| Pseudo R squared | .133 | .141 | .205 | .208 | .131 | .131 |
| LR Chi squared | -1394.8186 | -1399.3099 | -637.49856 | -635.6878 | -629.29881 | -629.87304 |

Note: \*\*\* (\*\*) [\*] denote significance at p<.01 (p<.05) [p<.10]. Numbers in parentheses are standard errors clustered at the country level. All regressions include the full specification reported in Table 2.

Table A4. Additional results, intensive margin using specific measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| Armed attacks | All | Democracies | Autocracies |
| Media freedom | .109\*(.066) |  | -.077(.084) |  | .198\*(.107) |  |
| Discussion freedom |  | -.032(.051) |  | -.165\*\*\*(.055) |  | .035(.085) |
| Observations | 2915 | 2915 | 1560 | 1560 | 1355 | 1355 |
| Countries | 158 | 158 | 106 | 106 | 114 | 114 |
| Within R squared | .474 | .471 | .479 | .483 | .469 | .463 |
| Attacks, mil / pol. | All | Democracies | Autocracies |
| Media freedom | .092(.059) |  | -.115(.104) |  | .178\*(.092) |  |
| Discussion freedom |  | -.009(.051) |  | -.182\*\*\*(.057) |  | .008(.098) |
| Observations | 1655 | 1655 | 907 | 907 | 748 | 748 |
| Countries | 140 | 140 | 91 | 91 | 93 | 93 |
| Within R squared | .487 | .484 | .484 | .488 | .506 | .499 |
| Attacks, government | All | Democracies | Autocracies |
| Media freedom | .112\*\*(.057) |  | -.031(.086) |  | .211\*\*(.096) |  |
| Discussion freedom |  | .021(.042) |  | -.129\*\*(.053) |  | .054(.071) |
| Observations | 2099 | 2099 | 1176 | 1176 | 923 | 923 |
| Countries | 153 | 153 | 101 | 101 | 108 | 108 |
| Within R squared | .371 | .366 | .358 | .362 | .419 | .405 |
| Multiple attacks | All | Democracies | Autocracies |
| Media freedom | .121(.084) |  | -.178\*(.104) |  | .266\*\*(.124) |  |
| Discussion freedom |  | -.008(.066) |  | -.220\*\*\*(.079) |  | .052(.109) |
| Observations | 2333 | 2333 | 1295 | 1295 | 1038 | 1038 |
| Countries | 149 | 149 | 99 | 99 | 103 | 103 |
| Within R squared | .459 | .456 | .451 | .456 | .481 | .470 |
| Domestic groups | All | Democracies | Autocracies |
| Media freedom | -.004(.036) |  | -.159\*\*(.074) |  | .034(.075) |  |
| Discussion freedom |  | -.001(.031) |  | -.094(.051) |  | .006(.057) |
| Observations | 2248 | 2248 | 1246 | 1246 | 1002 | 1002 |
| Countries | 149 | 149 | 99 | 99 | 102 | 102 |
| Within R squared | .259 | .259 | .341 | .340 | .159 | .159 |

Note: \*\*\* (\*\*) [\*] denote significance at p<.01 (p<.05) [p<.10]. Numbers in parentheses are standard errors clustered at the country level. All regressions include the full specification reported in Table 3.

Figure 1. Distribution of attacks per million inhabitants



Figure 2. Terrorism 1970-2016



Note: full lines depicted the extensive margin, dotted lines the intensive margin. Black lines are averages for democracies while grey lines are averages for autocracies.

Figure 3. Annual risk of any attacks (extensive margin), four groups



Figure 4. Number of attacks per million (intensive margin), four groups



1. \* We thank Niclas Berggren for helpful comments on an earlier version. Bjørnskov also gratefully acknowledges support from the Jan Wallander and Tom Hedelius Foundation. [↑](#footnote-ref-1)
2. The late Weimer Republic is an example of a situation in which a concerted effort by the Nazi party created an illusion of danger. The party arguably used the extensive freedom of the press to publish fake news in, for example, the Nazi newspapers *Der Stürmer* and *Der Völkische Beobachter*. [↑](#footnote-ref-2)
3. It must be noted that the identification of the measure of multiple attacks is not perfect. It remains a possibility that attacks on consecutive days are perpetrated by entirely different groups and are not coordinated. For countries with very high numbers of terrorist attacks, this may be an actual worry. [↑](#footnote-ref-3)
4. The main advantage of the V-Dem data is that the indicators cover over a very long time period, whereas the alternative indicators from Freedom House measure are only available since 1993. However, we must emphasize that our choice comes with the potential problem that the V-Dem indicators are coded backwards in time by a group of experts. We thus risk that the freedom of expression measures are biased by theoretical hindsight shared by the expert coders. [↑](#footnote-ref-4)
5. As is visible in Table A1, and which further tests (not shown) confirm, the separation of these indices is even clearer if we restrict the sample to only democracies. [↑](#footnote-ref-5)
6. As an aside, we note that media freedom at -1.48 is substantially lower in single-party regimes than electoral autocracies, there is no significant difference in discussion freedom (-.84 versus -.86) between the two types of autocracy. [↑](#footnote-ref-6)
7. We must nevertheless stress that the conflict risk is always lower in democracies, and we observe only 2.7 % of all country-years in which society experienced a high-intensity conflict while it was still democratic. High-intensity conflicts appear about three times as likely in autocracies. [↑](#footnote-ref-7)
8. We must nevertheless warn against interpreting the latter result. The effect of discussion freedom turns significantly negative at an index value above 2.4, yet we see only very few and quite particular observations in that range. Only the observations from Hong Kong in the 1990s and the most recent year in Gabon have assessments of discussion freedom above the threshold. Hong Kong is known to be similar to Western democracies in almost all aspects except their national political institutions (local institutions are fully democratic) while Gabon held free and fair elections in January 2018. The most recent years in our sample have thus been *de facto* democratic. [↑](#footnote-ref-8)