Remittances, Terrorism, and Democracy*

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Abstract

What are the effects of migrant remittances on domestic terrorism? Past work and conventional wisdom suggests that remittances increase resources for groups, enhance their organizational capabilities, and thus, lead to more terrorism. However, we argue that the effect of remittances depends on a country's political institutions. In democratic states, remittances can help groups overcome the costs and barriers to legitimate politics, thereby reducing the allure of terrorism. In authoritarian regimes, however, there are fewer opportunities for legitimate politics regardless of available resources, and so remittances increase violent political expression (i.e., more terrorism). Using data from 1971-2013, we find that more remittances are associated with a decrease in domestic terrorism within democracies but an increase in domestic terrorism within autocracies. We then use a series of mechanism and placebo tests to further explore our theory by demonstrating that the effect of remittances on terrorism is better explained by competition rather executive constraints and the remittances tend to help opposition parties within democracies.

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1 Introduction

Do remittances increase domestic terrorism? A growing body of research on remittances, defined as the money that migrants send to their home states, shows that remittances affect many forms of political activity and violence, such as protests, civil conflict, and terrorism. However, competing expectations and results are rife. On the one hand, remittances are unearned income, and as such are expected to stabilize governments, build economies, and reduce incentives to engage in violence (including terrorism) against the state (Ahmed 2012; Regan and Frank 2014). On the other hand, remittances can weaken the ties between households and the state, which can undermine incumbent support. This reduced support can lead to democratization and/or protests in authoritarian regimes (Escribà-Folch, Meseguer and Wright 2015, 2018) and raise the likelihood of intrastate violence (Elu and Price 2012; Mascarenhas and Sandler 2014; Miller and Ritter 2014).

In this paper, we reconcile these opposing expectations by considering the role of political institutions in the relationship between remittances and domestic terrorism. Specifically, we argue that remittances can lead to either more or less terrorism depending on the available outlets for non-violent political expression. Remittances allow groups to build resources and increase their political activities regardless of regime type (Brady, Verba and Schlozman 1995).[1] However, whether this increased activity results in more violence (terrorism) or not (peaceful/legitimate politics), will depend on the availability and accessibility of legitimate political institutions.[2]

Past work frequently observes that groups would prefer to use peaceful, legitimate politics over relatively ineffective terrorism (Crenshaw 1981; Dekmejian 2007; Kydd and Walter 2006). Within democracies, groups will weigh the costs needed to succeed at legitimate politics versus the cheapness of terrorism. When resources are low (i.e., small levels of remittances) inexpensive terrorism is an attractive option for political expression. However, as resources grow (i.e., remittances increase) peaceful politics becomes increasingly attractive and domestic terrorism declines.

Within autocracies, however, we expect the opposite effect. Few, if any, institutional outlets for effective political opposition exist within most autocratic states regardless of a group's resources.

[1] Throughout we think of groups as a politically-motivated organizations or movements that may decide to use legitimate politics, political violence/terrorism, or a combination of these strategies to achieve their goals.

[2] Throughout, we focus on terrorism when discussing political violence has it covers a wide range of interesting political actions and is among the most commonly studied forms of political violence.

This environment makes relatively ineffective, but available, options like terrorism more attractive. As remittances increase to these countries, we still expect an increase in political activity, but in the form of terrorism. This understanding reflects the general scholarly consensus and conventional wisdom about the relationship between remittances and terrorism (e.g., Mascarenhas and Sandler 2014).

This focus on the trade-off between terrorism and peaceful politics builds on the rich tradition of political access theories of terrorism, which argue that enhancing access to peaceful politics reduces domestic terrorism (Aksoy and Carter 2014; Wade and Reiter 2007; Walsh and Piazza 2010). Recently, there has been some push-back to this framework, with Foster, Braithwaite and Sobek (2013) finding that the presence of accessible institutions is insufficient to alleviate domestic terrorism within democracies, as groups frequently lack the resources necessary to enact policy changes through elections. However, by focusing on remittances, which vary both within and across states, we provide a new resource-based mechanism to explain differences in domestic terrorism within democracies and across regime types.

We test these different expectations using an interaction model. Within autocracies, we find that a 100 USD/person increase in remittances is associated with an average of about 2.5 additional domestic terrorist attacks within a given year, while in democracies we see an average decrease of nearly 3 domestic terrorist attacks for the same increase in remittances. The differences between democracies and autocracies are robust to various measurements and modeling strategies.

We follow this main analysis with a series of mechanism and placebo tests. There are, of course, many factors that affect the flows of remittances and how migrants use them, and there are other possible competing explanations for why remittances are associated with more (less) terrorism in autocracies (democracies). We highlight political access and institutions as one pathway that connects remittances to terrorism. Testing for this mechanisms allows us to better understand how remittances affect terrorism.

First, we use executive constraints as a placebo to identify that the competitive aspects of democracy, rather than constraints, better explain the data. Second, we show that the relationship between remittances and reduced terrorism within democracies is most pronounced within proportional representation systems, where the costs of entry into legitimate politics are lower than in majoritarian systems. This test supports our understanding that political competition is a key link

between remittances and terrorism. Third, we demonstrate that remittances raise opposition party vote shares within democracies, which supports our premise that remittances facilitate opposition groups' use of legitimate politics. These three tests highlight the mechanisms that we propose to explain how remittances reduce terrorism in some states but not others.

With these results, we provide policy and scholarly contributions. Notably, we find that concerns about remittances to democratic countries with active terrorist groups may be overstated. As more remittances come into these countries, we find that domestic terrorism decreases, on average, suggesting that democracies may want to encourage remittances as this may channel groups toward electoral politics and away from violence. Additionally, we provide new evidence that open and democratic institutions can alleviate domestic terrorism so long as groups have the resources to protect themselves through these legitimate political institutions.

2 Remittances and politics

While remittances largely flow from individuals to households, there are many ways that they can move to violent and non-violent political groups. This movement can either be through direct donation to a group, or remittances can be spent by recipients in ways that benefit a group, such as indirect donations that pass through charities or by spending at friendly businesses (Freeman 2011, 469-70). Migrants know this and use remittances to shape domestic politics within their home countries (Itzigsohn and Villacrés 2008; O'Mahony 2013). For example, migrants from Mexico and the Dominican Republic frequently send remittances with an eye toward aiding or campaigning for political parties (Levitt and De la Dehesa 2003).

Motivation for political action can also flow with remittances. Emigrants share and discuss the economic and political conditions of their new location with friends or relatives back home. This communication can highlight relative deprivation within the home country, increase grievances against the incumbent, and raise support for opposition parties (Miller and Ritter 2014). Additionally, as O'Mahony (2013, 806) notes, emigrants from democratizing countries are often eager to engage with the political transformation within their home country.

Politics, however, is not limited to these legitimate institutions and channels. Domestic terrorism is a political reality within many countries, and as such, there is no reason to suspect that the political impact of remittances is limited to parties and elections. However, it is *a priori* un-

clear what the relationship between remittances and terrorism will look like. On the one hand, remittances may reduce political violence. For example, remittances can mitigate the effects of a recession on recipients or otherwise raise their standard of living, and as such they can reduce individual incentives for violence (Regan and Frank 2014). Additionally, terrorism is largely unable to affect political change (e.g., Fortna 2015; Jones and Libicki 2008); with more resources, more effective options may emerge.

On the other hand, remittances, are unearned household income that weaken clientelistic ties between citizens and the state (Pfutze 2014). Loosening these ties, particularly in dominant/one-party states can weaken reliance on and loyalty to the state (Escribà-Folch, Meseguer and Wright 2015). Additionally, remittances can enhance a group's organizational capacity, thereby facilitating political violence, including protests, civil conflict, and terrorism (Elu and Price 2012; Escribà-Folch, Meseguer and Wright 2018; Mascarenhas and Sandler 2014; Miller and Ritter 2014). Indeed, scholars who look specifically at terrorist funding frequently describe remittances as a key financial resource for terrorists, as individuals convert this unearned income into violent politics (e.g., Clarke 2015; Freeman 2011; Passas and Maimbo 2008).

Additionally, the relationship between remittances and political violence may actually go in both directions. In particular, political access theories suggest that the relationship between remittances and domestic terrorism should be conditional on political institutions. Groups have political goals, and more resources, say in the form of remittances, will encourage groups to take actions in pursuit of these goals. As noted, remittances can benefit groups by weakening clientelistic ties between citizens and the state. Loosening these ties makes flows to anti-regime groups even more likely as individuals become willing and able to express their values, ideologies, or political goals (Escribà-Folch, Meseguer and Wright 2015; O'Mahony 2013; Piazza 2018). But the venue for these actions may change based on resources. As resources increase, electoral competition may become more attractive to groups in countries where this opportunity exists, but in places where electoral opportunities are either not present or not competitive, terrorism may continue to be an attractive strategy. We describe this conditional relationship in more detail, below.

Before proceeding, we note that of course, not all remittances will go to aid opposition groups and parties; some remittances benefit incumbents. As Ahmed (2012) notes, regimes receive some benefits from remittances and can use this increase in resources to finance patronage or otherwise

buy support. However, the marginal benefit of gaining remittances is likely greater for opposition groups, incumbents likely have a resource advantage over challengers (Bueno de Mesquita et al. 2003; Cox and Katz 1996). In developing countries with weak democratic institutions, incumbency advantage often translates into electoral dominance (Jensen and Wantchekon 2004). Given these advantages, additional income from remittances will have little impact on pro-incumbent political actions. For groups with little access to state resources, however, remittances are valuable additional income that helps them pursue more ambitious goals and adjust their strategies accordingly.

2.1 Remittances and terrorist attacks in democracies

While recent work and conventional wisdom suggest a link between remittances and increased domestic terrorism (e.g., Mascarenhas and Sandler 2014), it is unclear that terrorism is the best political use for these incoming resources. Specifically, while terrorism may be an appealing political outlet to groups within some states, in other states a group's goals may be better served by working within the system. In seminal work, Crenshaw (1981) argues that terrorism is an attractive political tool primarily in situations where actors lack the opportunities to express or address their grievances through peaceful means. This political access argument can be found across a range of work on democracy and terrorism, which has found that democracies with more permissive electoral institutions have fewer terrorist groups, fewer instances of political violence or terrorist attacks, and a lower likelihood of terrorist group formation (Aksoy and Carter 2014; Powell 1982).[3]

These points are supported by Abrahms (2007) and Richardson (2006) who argue that many instances of terrorism are best understood as an alternative to legitimate, peaceful politics. Continuing these arguments, Walsh and Piazza (2010) conclude that a combination of liberal institutions and constraints on harsh counterterrorism policies make democracies less prone to terrorism than other regime types because there are better outlets for political engagement. Additionally, theoretical work by Bueno de Mesquita (2008) demonstrates that institutional openness can lead to a

[3]Based on institutional political access, we define a democracy as a polity with open institutions that allow actors to compete with peaceful politics. An autocracy is a polity with closed institutions that limit access to legitimate politics. We recognize that a number of developing countries have weak democratic institutions and little inclusive political environment for minority groups, which often causes political instability. Our results might be thus driven by the characteristics of these developing countries. To address this concern, we split our sample into developing and developed countries and reestimate our models for robustness checks. The results hold.

decrease in terrorist group recruitment and mobilization efforts. Recent empirical work supports this understanding; Gleditsch and Polo (2016) and Ghatak, Gold and Prins (2019) find strong links between increased domestic terrorism and ethnic/minority political exclusion. In contrast, when individuals or groups find themselves shut out of political institutions, terrorism becomes an attractive means to influence politics.

This exclusion argument also matches several of the best known cases of domestic terrorism within democracies. In the case of Northern Ireland, the Provisional Irish Republican Army (PIRA) became a major actor in the late 1960s in response to decades of economic and political discrimination against the Catholic population. In the face of this exclusion, the PIRA offered a political outlet for Republican expression that was not feasible through legitimate channels at the time due to a combination of demographics and poverty. Likewise, the Tupamaros in Uruguay were a far-left guerrilla group before transitioning into a political party after the collapse of military dictatorship and the start of democracy (Weinberg 1991).[4] Similar stories that relate political exclusions to domestic terrorism can be found for Tamils in Sri Lanka and the rural poor in Peru in the form of the Tamil Tigers and Shining Path, respectively (Dekmejian 2007, 43-4, 50-1).

As the above examples suggest however, just because institutional political access is available, does not mean that it is always feasible. To achieve their political goals in legitimate ways, groups need to organize and obtain representation through elections. These processes require resources, which make it difficult for marginalized groups to effectively engage in party politics (Tavits 2008). In addition, fundraising abilities and campaign spending are positively associated with electoral success, with many scholars noting that poor fundraising makes it increasingly difficult for groups to achieve their desired outcome through elections (e.g., Shin et al. 2005). This lack of resources and capability means that many marginalized groups remain poorly represented in democracies and fail to draw public attention to their grievances. The barriers to enter legitimate politics constrain *de facto* opportunities for them to participate in politics and thus encourage them to express their voices through violence, even when democratic institutions provide them with *de jure* opportunities.

This split between access and ability is highlighted by Foster, Braithwaite and Sobek (2013), who argue against political access theories of domestic terrorism by noting that marginalized groups

[4] This is a similar trajectory to Hezbollah in Lebanon, where the group transitions from only using terrorism to a combined terrorist and electoral strategy when elections became available.

struggle to have a political impact even when institutions are open. Specifically, they argue that more representative governments can actually increase domestic terrorism when the underlying society is very fractionalized.[5] Within highly fractionalized societies, expansive political access can further marginalize the smallest and politically weakest groups by diluting their influence through forcing them to compete against too many other political actors. The excess of access effectively locks them out of the political process despite their presence in it.

Remittances can help such groups overcome these barriers to enter and succeed at legitimate politics. As additional funding sources, remittances allow them to increase their organizational capacity (Burgess 2014; O'Mahony 2013). In particular, the external funding can make a group more competitive in elections, as relatively small increases in campaign spending can be particularly helpful for non-incumbent parties (Moon 2006). In addition to mobilizing supporters for their own parties, remittances help minority groups engage in other institutional political activities. For instance, they may fund other political parties or lobby politicians that are expected to protect them from adverse policies by the incumbent party (Córdova and Hiskey 2015; Pérez-Armendáriz and Crow 2010). As such, the probability that groups can meaningfully participate and affect legitimate politics will increase as more external funding, such as remittances, becomes available.

As institutional politics becomes more feasible, terrorism may become a less attractive political tool. After all, terrorism is an overall ineffective tool for obtaining meaningful policy changes (Fortna 2015; Jones and Libicki 2008), and thus switching to legitimate outlets makes sense so long as groups have the resources to compete effectively. Additionally, opposition groups are better protected from adverse policies when they have access to and participate in the official decision-making processes (Alonso and Ruiz-Rufino 2007; Saideman et al. 2002).

Overall, these relationships between resources and political access lead us to expect that remittances will decrease the incidence of domestic terrorist attacks within democracies. As an external funding source, remittances help groups strengthen their organizational capacity and thus increase the probability that they can address their grievances through the electoral process. This process can occur either by terrorist groups adjusting their tactics and promoting their political wings (if available) or by individuals reallocating their donations to political groups that are seen as more

[5] Likewise, Chenoweth (2010) finds that highly competitive democracies are more prone to terrorism because of the political logjam and impotence generated by having too many groups compete for political influence.

viable as remittances increase. As Weinberg (1991) notes, a primary motivation for terrorism stems from the gap between a group's goals and the perceived prospect of achieving these goals. Remittances reduce this gap by increasing the group's ability to engage in legitimate politics and leads to our first hypothesis.

Hypothesis 1. *Within democracies, an increase in remittances will be associated with a decrease in the average number of domestic terrorist attacks.*

Returning to the PIRA example, some aspects of the case are consistent with this logic. Early in the conflict, the PIRA largely drew resources from the local, economically and politically disadvantaged Catholic population, and Republicans found violence to be the only reasonable outlet for their political message. However, with the growth of organizations like the Irish Northern Aid Committee (NORAID), which funneled money from Irish immigrants in the United States to Northern Ireland, the PIRA's resource base grew dramatically (Wilson 1994).

As resources grew, Republicans experimented with legitimate politics more, and the allocation of resources within the Republican movement shifted to match. Notably, as funds grew throughout the 1980s, Sinn Fein, the PIRA's political wing, withdrew its prohibition on contesting elections, and there was a growing acceptance among Republican leadership that engaging in elections had to be a key component of their strategy.[6] Over this time, the violent campaign waged by the PIRA became increasing controlled and subordinate to Republican electoral ambitions (Neumann 2005, 964). Given that the internal decisions of terrorist groups are largely unknown, it is difficult to say how much we can ascribe the PIRA fundraising success to their transition to the dual strategy of armed struggle and political engagement. For example, the attention brought on by the hunger strikes of the early 1980s appears to have been key to both increased funding and the decision to engage in more legitimate politics. However, this simplified timeline highlights some key mechanisms laid out above. Specifically, when they were unable to effectively compete in elections (by discrimination and lack of resources), Republican strategy overwhelmingly favored violence over legitimate politics. As resources increased, more effort was channeled into electoral politics, which

[6] Some guesses place the PIRA's income in 1978 and 1990 at about 1 and 5 million GBP, respectively (Horgan and Taylor 1999). A five-fold increase over the decade. Likewise, many of the same people handled finances for both Sinn Fein and the PIRA (Horgan and Taylor 2003), and thus the monetary distribution between terrorism and electoral politics was subject to at least some central planning.

was regarded as more effective way at advancing Republican policy goals (conditional on having the resources to compete).

Note that in the PIRA example, it is the overarching Republican leadership making the shift to more electoral engagement and allocating their growing resources accordingly. In this particular case, the overlap between the PIRA and Sinn Fein means that money moves to the same people who make allocation decisions. However, the reasoning still holds if it is instead individual remittance recipients deciding to donate money differently as remittances increase. When remittances are low, violent engagement still provides a cheap (if ineffective) way to engage in politics; as remittances increase, donations to political parties may become more attractive to individual donors.

2.2 Remittances and terrorist attacks in authoritarian regimes

Remittances may help groups enhance their organizational capacity and promote their political activity within non-democracies too. Material support from a diaspora or other community living abroad is generally known to augment resources of opposition groups (Asal, Conrad and White 2014, 952; Piazza 2018). Following resource models of political engagement (e.g. Brady, Verba and Schlozman 1995), we expect that more resources lead to increased political activity. From this point of view, remittances to both democracies and autocracies are designed to be a form of "political investment" by external actors (Escribà-Folch, Meseguer and Wright 2018; O'Mahony 2013).

Building on this political investment argument, past work finds that within autocracies, remittances can diminish citizens' reliance on the state's public spending (Adida and Girod 2011) and loosen the clientelistic ties between citizens and the regime (Escribà-Folch, Meseguer and Wright 2015, 2018). This effect is sometimes referred to as a liberating effect, wherein citizens become less economically dependent on the regime and more willing to invest in their own political preferences and ideological goals. This effect implies that remittances can undermine regime support and facilitate an opposition group's political mobilization.[7] However, within autocracies, these increases

[7]Despite the possibility that remittances promote protests and terrorism, most authoritarian regimes are often reluctant to regulate remittance inflows for at least two reasons. First, remittances are extra household income that can alleviate poverty and promote economic consumption, investment, and growth. Second, remittances may reduce the need for public spending, as they enable households to get services on their own; this shift allows authoritarian leaders to divert resources toward patronage spending (Adida and Girod 2011; Ahmed 2012). Tightly regulating remittances can affect these benefits to the state.

in political ability may not easily translate into increased participation in institutional politics.

Because most authoritarian regimes provide few, if any, institutional channels for political change, the liberating effect of remittances means that regime opponents are more likely to express their views through non-institutional politics. Indeed, political protests become more likely in non-democracies as the inflow of remittances grows, implying that opposition groups with external funding sources enhance their mobilization capacity and express their grievances outside available within-state political institutions (Escribà-Folch, Meseguer and Wright 2018). Violent mobilization is also more likely when the regime blocks opportunities for non-violent mobilization or legitimate participation in the political process (Asal, Conrad and White 2014; Cunningham et al. 2017). As such, more remittances can promote the adoption of violent politics like terrorism in cases where institutional outlets are unavailable.

Additionally, the institutional variation across non-democracies has been found to be a significant predictor of within-autocracy terrorism. For example, Aksoy, Carter and Wright (2012) show that terrorist groups are more likely to emerge in non-democracies without an official political arena (e.g. a competitive legislature). Likewise, Wilson and Piazza (2013) find that party-based autocracies experience less terrorism than other types of autocracies. This difference emerges, they argue, because the party system allows some room for opposition groups to coerce or co-opt the peaceful political institutions. In other words, a small non-violent outlet can induce some groups to substitute institutional politics for terrorism. In contrast, the most closed autocratic systems (military regimes) have higher rates of domestic terrorism.

The above arguments suggest that groups are more willing to exert themselves as their capacity grows. Remittances increase capacity and thus encourage more political action. Authoritarian regimes, however, offer few institutional outlets for groups to pursue peaceful policy changes. Therefore, groups use terrorism as it is one of the few feasible options. As such, we expect that an increase in remittances will enhance both the ability and desire to commit terrorism within autocracies.

Hypothesis 2. *Within autocracies, an increase in remittances will be associated with an increase the average number of domestic terrorist attacks.*

2.3 Alternative approaches

Before moving on, there are several alternatives frameworks and explanations that need to be considered. One alternative school of thought contends that remittances may reduce voter turnout in developing democracies, implying that remittances generally disincentivize the public from participating in institutional politics (e.g., Dionne, Inman and Montinola 2014; Goodman and Hiskey 2008). This argument and finding, however, is not inconsistent with our main argument. The impact of remittances on electoral participation has been shown to be conditional on several factors, such as clientelistic structures (Pfutze 2014) and crime rates (López García and Maydom 2021). In particular, remittances make citizens less dependent on state-led redistribution (Doyle 2015) and clientelistic networks (Dionne, Inman and Montinola 2014; Pfutze 2014). By weakening ties between citizens and the regime, remittances may dissuade turnout more among ruling party supporters than opposition voters. As such, the negative impact of remittances on voter turnout may lead to an overall gain in opposition vote share, which is inline with the participation mechanism proposed above. Indeed, we consider this line-of-thought more below, where we find that remittances are associated with an increase in opposition vote share.

A second alternative theoretical framework starts with the result that terrorism levels tends to be more prevalent in democracies. Human rights and civil rights protection often make it difficult for governments to repress those conducting terrorist activities and thus help discontented people more easily recruit and operate terrorist organizations in liberal societies (Chenoweth 2013; Li 2005). In addition, a free press can serve to amplify an attack, making democracies a more attractive target, as terrorist groups aim to intimidate a larger audience within society and foster social pressures for policy changes (Enders and Sandler 2012; Mascarenhas and Sandler 2014). Again, this approach is not inherently at odds with our main argument. Specifically, we may find that levels of terrorism are higher in democracies, but the effect of remittances on these levels are different. In fact, we find below that when remittances are very low, democracies, on average, experience more terrorism than autocracies, but that the effect of remittances varies by regime type.

A third alternative explanation is that remittances lead to improved living conditions, which may be misattributed by the public to good governance and reduce political grievances and activity. If either of these explanations hold we may expect that terrorism decreases across all regime types

as state capacity deters/squashes active terrorism or citizens grow complacent with additional resources. In this case, we expect that remittances decrease terrorism across regime types (i.e., support for 1 but not 2).

Similarly, remittances may have very different aggregate effects if they benefit the state more than the group through the increase in taxable income. In these cases, the effect of remittances on terrorism/political action may be the result of a different, albeit complementary, path wherein how the state chooses to spend this surplus affects terrorism (e.g., repression versus social services). We return this point below when we consider alternative explanations below.

3 Data and methods

The dependent variable comes from the Global Terrorism Database (GTD), where we count the number of domestic terrorist attacks within a given country-year. We identify a domestic attack as one where the perpetrator's nationality matches the attack location. While this is not the only way to identify domestic terrorism it correlates very highly with other efforts to code only domestic attacks and has enjoyed increased use in recent years (e.g. Davis and Zhang 2019).[8]

Our primary independent variables are remittances and regime type. As O'Mahony (2013) notes, the ideal data would distinguish among politically motivated remittances and be able to pinpoint the exact actors receiving them. Unfortunately, such detailed remittance data do not exist. Following her and others, we rely on remittance data from the World Bank's World Development Indicators (WDI). However, she demonstrates that distinctly political attributes of remittances are captured by these aggregate-level data. For example, even in the aggregate, remittances rise in response to and affect elections (2013, 812-820).

Following Escribà-Folch, Meseguer and Wright (2015), we focus on per capita remittances (in hundreds of 2010 U.S. dollars per person) received by a particular country in a given year. As they point out, this measure is preferred to remittances as a percentage of GDP when we want to separately identify the effect of increased remittances from the effect of GDP growth (2015, 577). For example, sustained GDP growth would decrease the value of remittances as a percentage

[8]Formerly, the most commonly used data project for identifying domestic terrorism in the GTD was Enders, Sandler and Gaibulloev (2011), but their data end in 2007. Our approach correlates with their data at 0.86 for the overlapping years. As a robustness check, we also test our hypotheses with their data in the online appendix. Additionally, we interpolate missing terrorism data for 1993.

of GDP while (perhaps) simultaneously making terrorism against the state less attractive (either because of reduced grievances or increased job opportunities/wages). As they point out, such a setup makes identifying the effect of remittances increasingly tricky and increases the chance of spurious correlations. We consider an alternative approach based on remittances as a share of GDP in the online appendix.[9]

Regime types are measured using polity2 scores, where for ease of interpretation we construct regime-type dummies for democracy (polity2 ≥ 7) and anocracy (polity2 $\in (-6, 6)$). This leaves autocracy (polity2 ≤ -7) as the reference category across all the models. We interact the democracy and anocracy dummies with remittances, which means that the baseline coefficient on remittances reflects the effect that remittances have within autocracies. The dummy variable setup also accommodates recent findings that there tends to be more terrorism in anocratic regimes and that a linear democracy measure may be inappropriate for studying domestic terrorism (Gaibulloev, Piazza and Sandler 2017). Enough institutional variation exists across anocracies that it is thoroughly unclear what effect we would expect remittances to have within these states. Further, our primary interest is on the differences between democracies (open, competitive institutions) and autocracies (closed, uncompetitive institutions), which makes anocracies an essential, but theoretically ambiguous, control variable. Within anocracies it is difficult to form sharp theoretical predictions because the institutional variation covers both near-democracies and near-autocracies. To the extent that political competition is a viable outlet, we may expect some to be more like democracies, but if competition is not viable, then they will be closer to autocracies. The exact direction of this trend will likely depend more on which anocracies have enough observable to make it into the final sample rather than any principled expectations. We also consider alternative measurements based on the V-Dem dataset and a quadratic polity score in the online appendix.

The baseline model includes a host of standard control variables. To proxy for the state's ability to fight terrorism we include logged measures of military personnel and GDP per capita from the Correlates of War's National Materials and Capabilities (NMC) index and WDI, respectively. We also include standard controls for logged population and economic growth from the WDI.

[9] We also check various transformations of the remittances per capita measure, including logged, square root, and quadratic detrending. The untransformed variable has the best model fit in terms of AIC and as such we report that in the main text. The signs and significance of the main results largely hold under the various transformations.

Additionally, terrorism is associated with media coverage and democracy, as such we include a dummy variable for a free press based on Li (2005) with missing values filled-in using Freedom House data.

Additionally, we also consider models that include the number of domestic terrorist attacks in the previous year and for the number of ongoing civil conflicts. Both of these variables are very likely to affect the level of within-country terrorism along with regime type and remittance levels. To measure ongoing conflicts, we count the number of active internal conflict as recorded by the Uppsala Conflict Datsa program. We also consider models with year fixed-effects to account for changes in the international security dynamics. For example, it is often noted that global terrorism levels declined after the Cold War (e.g. Li 2005), the time dummies account for this shift.

Following almost all past work on terrorist attacks, we use negative binomial regression to model the number of domestic terrorist attacks, although we consider alternative models in the Online Appendix. Additionally, we employ country fixed effects in all models to account for any country-level heterogeneity that affects the baseline level of domestic terrorism within each country.[10] The main independent variables and controls are lagged one year to reduce concerns about reverse causation or simultaneity bias. Overall, we have an unbalanced panel that consists of 106 countries from the years 1971-2013.[11] Summary statistics are reported in Table 1.

4 Results

Estimates from main models are reported in Table 2. Across all four models we see that the coefficients on remittances and the coefficients on the interaction between remittances and democracy are statistically significant. The former reflects the effect of remittances within autocracies (when democracy and anocracy both equal 0). Here, the effect is positive and significant at conventional levels across the four specifications. These results offer support for Hypothesis 2; within autocracies an increase in remittances is associated with an increase in the average number of domestic terrorist

[10]Country dummies account for any (observable and unobservable) time-invariant factors that explain why any given country experiences more or less domestic terrorism than another and provide important credibility to regression results based on time-series-cross-sectional data.

[11]Countries that never experience terrorism are not included as the maximum likelihood estimate of their country-specific constant is $-\infty$. We also consider pooled, random effects, and a correlated random effects estimator (as in Crisman-Cox 2021) in the online appendix, which all allow for these all-zero countries to be included.

Table 1: Summary statistics for main variables

Variable	Min	Mean	St. Dev.	Max	Source/Measurement
Domestic attacks	0.00	13.23	45.20	570.00	GTD
Remittances per capita	0.00	0.98	1.69	15.96	World Bank
Democracy	0.00	0.45	0.50	1.00	Polity IV
Anocracy	0.00	0.37	0.48	1.00	Polity IV
Mil. per. pc (logged)	0.00	0.36	0.28	1.89	COW-NMC
Population (logged)	12.79	16.51	1.50	21.02	World Bank
Economic growth	−50.25	3.87	4.74	35.22	World Bank
GDP per capita (logged)	4.90	8.18	1.53	11.24	World Bank
Free press	0.00	0.36	0.48	1.00	Li (2005)/Freedom House
# of ongoing civil conflicts	0.00	0.30	0.70	6.00	UCDP

attacks, holding all the other covariates constant.

The interaction coefficient for democracy and remittances tells us that remittances have different effects in democracy and autocracies. However, what we are really interested in is the combined estimate of $\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{Democracy}}$. Across the four models in Table 2 this combined estimate is negative and statistically significant at conventional levels, which supports Hypothesis 1. Overall, this result means that not only does the effect of remittances change with regime type, but the conditional effect is such that remittances have *opposite* effects in democracies and autocracies.

As mentioned above, we do not focus on anocracies. While they are an important control variable, the theoretical expectations are unclear inherently unclear. However, there are a few interesting things to point out. First, we find that, holding everything else constant, anocracies have a higher baseline rate of domestic terrorism than democracies and autocracies. This finding matches results from Gaibulloev, Piazza and Sandler (2017) and provides some face validity to the models. Second, across models, the combined estimate $\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{Anocracy}}$ is not distinguishable from zero. Likewise, the substantive effects within anocracies tend to have enormous confidence intervals relative to other regime types. This high-variance result is expected given the large heterogeneity among access to and efficacy of legitimate politics within anocracies. We return this point in Appendix B.2 where we measure democracy using a quadratic specification, here we that the estimated effect is negative across anocracies and democracies, but only significant for polity scores greater than 3. This roughly matches our understanding that democratic-like anocracies will have similar trends as democracies, but with much wider confidence intervals, making it difficult to discuss the within-anocracy effect of remittances with any precision

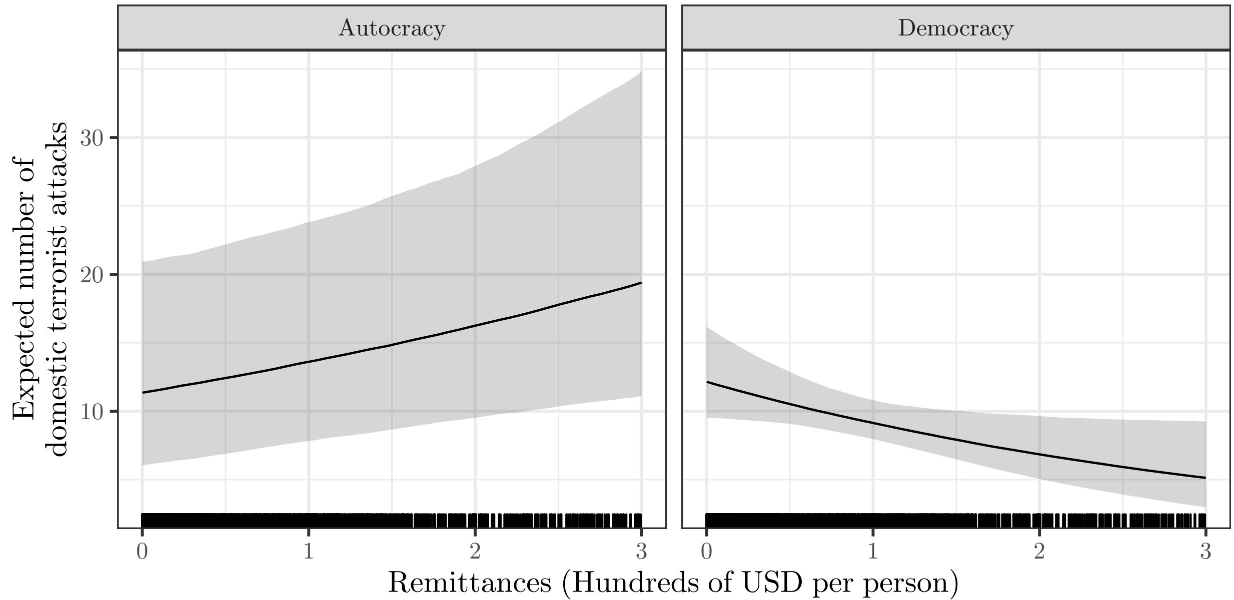
Table 2: Regression results for the conditional effect of remittances on domestic terrorism

	Dependent variable:			
	Domestic terrorist attacks			
	(1)	(2)	(3)	(4)
Remittances	0.21^{**}	0.18^{**}	0.19^{**}	0.18^{**}
	(0.07)	(0.09)	(0.07)	(0.07)
Remittances × Democracy	-0.52^{**}	-0.47^{**}	-0.47^{**}	-0.42^{**}
	(0.15)	(0.13)	(0.12)	(0.11)
Remittances × Anocracy	-0.15	-0.31^{**}	-0.29^{**}	-0.26^{**}
	(0.10)	(0.10)	(0.09)	(0.09)
Democracy	-0.17	0.08	0.36	0.33
	(0.36)	(0.33)	(0.29)	(0.28)
Anocracy	0.97^{**}	1.27^{**}	1.25^{**}	1.16^{**}
	(0.28)	(0.31)	(0.26)	(0.26)
Military personnel	3.12^{**}	1.91^{**}	1.82^{**}	1.38^{**}
	(0.64)	(0.64)	(0.55)	(0.57)
Population	1.38^{**}	4.08^{**}	3.62^{**}	2.80^{**}
	(0.50)	(0.99)	(0.88)	(0.82)
GDP growth	-0.04^{**}	-0.03^{**}	-0.02^{*}	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)
GDP per capita	-0.31	0.99^{**}	0.78^{*}	0.67
	(0.39)	(0.49)	(0.42)	(0.42)
Free Press	0.46^{**}	0.12	0.34^{*}	0.34^{*}
	(0.21)	(0.21)	(0.19)	(0.18)
# of ongoing civil conflicts			1.12^{**}	0.82^{**}
			(0.15)	(0.13)
Lag attacks				0.01^{**}
				(0.001)
$\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{Democracy}}$	-0.31^{**}	-0.29^{**}	-0.28^{**}	-0.24^{**}
	(0.14)	(0.13)	(0.12)	(0.11)
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	No	Yes	Yes	Yes
Observations	3,127	3,127	3,127	3,127
Log Likelihood	-6,046.87	-5,899.73	-5,799.78	-5,737.92
θ	0.39	0.48	0.55	0.61

$^{*}p < 0.1$, $^{**}p < 0.05$. Coefficients from negative binomial models. Standard errors in parentheses clustered on country.

While identifying the direction of these differing trends is interesting, we are also interested in how different the effects of remittances are across regime types. We explore this in two different ways using the two-way fixed effects estimates from Model 2. The first is to graph the expected number of terrorist attacks as a function of remittances for both autocracies and democracies

Figure 1: Expected number domestic terrorist attacks by remittances and regime (Model 2)



Caption: Shaded areas represent 95% confidence intervals from a parametric bootstrap. The changes from moving from 0 to 100 USD/person are statistically significant at the 0.05 level in both regimes and roughly match the effect sizes reported in Table 3.

holding all the other variables fixed at a mean or median value to create an "average case." These results are presented in Figure 1. We focus on changes of 100 USD/person for ease of interpretation. This value is about roughly a doubling of the average level of remittances or about a two standard deviation increase in within-country remittances.

The first thing we note in Figure 1 is that the trend lines are moving in opposite directions. For each 100 USD/person increase in remittances we see that expected number of terrorist attacks within an autocracy is rises by an average about 3 attacks per year. Given the damage and destruction associated with a single attack, increases of this magnitude represent substantial change. In contrast, the same increases in remittances across democracies results in a decrease of about 3 fewer attacks; an effect that is much more precisely estimated. Interestingly, at the lowest levels of remittances, democracies experience more terrorist attacks on average than autocracies, but as remittances increase, we see that democracies experience fewer attacks on average.[12] One

[12]The differences in attack number across regime type are not significant at low levels of remittances, but the gap is significant starting at about 200 USD/person. However, our focus is on the direction of these trends within regimes, not the cross-country comparison. Nevertheless, Appendix C presents the difference in expected number of

Table 3: Average marginal effect of remittances on domestic terrorist attacks (Model 2)

	Autocracy	Democracy
Change in attacks	2.53	−2.85
	(0.32, 5.46)	(−5.57, −0.29)

95% confidence intervals from a parametric bootstrap in parentheses.

explanation for this indistingushability at low levels of remittances are that groups are receiving low levels of outside support here and thus look about the same regardless of regime type. As remittances grow, internal resources grow and groups use them for the best political uses within each state.

The second way to explore the differences across regime types is to consider the average marginal effect (AME). We estimate the marginal effect of a 100 USD/per person increase for each individual observation in the data and then compute the average. The advantage of this observed values approach over the average case approach used in Figure 1 is that it includes the information from all the individual cases in the data rather than relying on a made-up "average case." The estimated AMEs for each regime type are reported in Table 3. For each additional 100 USD/per person in remittances sent to autocracies we see an average increase of 2.5 domestic terrorist attacks, holding the other covariates fixed to their observed values. In contrast, within democracies an additional 100 USD/person in remittances is associated with an average decrease of about 2.9 attacks, holding the other covariates fixed to their observed values. These two marginal trends roughly match the increases shown in Figure 1.

Overall, these differing trends support the hypotheses laid out above. The relationship between democracy and terrorism has a long scholarly history, with many arguments to support both sides of the conjecture that democracies may be more or less likely to experience terrorism than other regime types. Political access theories maintain that democracies should be less susceptible to terrorism because they provide more non-violent outlets for addressing policy goals, but this line of thought has been questioned in recent years, with Foster, Braithwaite and Sobek (2013) arguing that accessible institutions in and of themselves do not reduce the incidence of terrorism within democracies. However, we find new support for political access theories of terrorism by focusing on how a specific resource, remittances, can allow groups to effectively access political institutions.

attacks by regime.

Remittances can help would-be terrorists transition to legitimate politics in places where these institutions exist. Without these resources, groups may find violence to be more effective for expressing their politics.

Additionally, these results align with past work finding a violent effect of remittances, and provide some important face validity. Past work on civil conflict has suggested that financial support from migrant diaspora increases the likelihood that rebel groups mobilize and engage in violent insurgencies (e.g. Miller and Ritter 2014; Salehyan 2007) and terrorism (Mascarenhas and Sandler 2014). Further, this relationship matches qualitative studies that consider the effect of remittances in specific intrastate disputes such as Kosovo and Somalia (Adamson 2006; Horst 2008). However, where we differ from past works is that we *only* find this trend within autocratic regimes.

4.1 Mechanism tests

Having established that remittances have different effects on the incidence of domestic terrorism across regime types, we now explore the mechanism we proposed to explain these trends. Specifically, we argue that the competitive aspects of democracy and the openness of the political system are what lead to remittances having a pacifying effect on domestic terrorism. To better highlight this mechanism we adjust Model 2 to focus on the competitive aspects of democracy. Instead of looking at democracy and anocracy dummies, we first consider the competitiveness of executive recruitment within each state, measured on a 0-3 scale.[13] We use this variable as a proxy for access to and ability to succeed at legitimate politics.

As a placebo test, we then consider a model that includes both this competition measure and the polity variable for executive constraints on a 0-6 scale.[14] Executive constraints work as a placebo because we have no theoretical expectation about the interaction between remittances

[13]We recode the competition variable to better match how it maps into polity scores, specifically we switch levels 0 and 1 such that 0 now reflects a closed system (polity score decreases toward -10) and 1 reflects a poorly regulated system (does not enter a state's polity score in either direction). Levels 2 and 3 still reflect increasing competition (polity score increases toward 10). This rearranging means that the average, minimum, and maximum polity2 scores are increasing across the four levels.

[14]We subtract 1 from the original 1-7 constraint coding so that the coefficient on remittances is still reflects the effect in the truest autocracies (i.e., competition and constraints are both zero).

and constraints Including them in a combined model allows us to see which of these two aspects of democracy acts as the conditioning variable. In this sense the constraints variable acts as a type of placebo test where we just want to be sure that the interaction between remittances and competition is still negative and significant even when other aspects of democracy are introduced. The results are presented in Table 4.[15]

Some interesting results appear in this table. First, in the true autocracies (executives are selected without elections; the competition variable is 0) we see that an increase in per capita remittances is still associated with an increase in domestic terrorist attacks. Second, the pacifying effect still emerges in more democratic states. In states that are competitive or in a transition to competitive (levels 2-3), the combined regression coefficients from Model 5 are negative, and in the case of competitive states, the result is statistically significant. Third, when we add in the executive constraints variable, which reflects a notably different aspect of democracy, the relationships from Model 5 remain intact. Once again we find that remittances are associated with more domestic terrorism in noncompetitive states, while in the most competitive states remittances are associated with less domestic terrorism. These results provide support for our proposed mechanism, which is that the competitive aspects of democracy are the main pathway that condition the effect that remittances have on domestic terrorism. Additionally, this mechanism is supported by results from O'Mahony (2013) who finds that remittances within democracies tend to increase as elections draw near.

We can continue to explore the underlying mechanisms by considering some of the relationships that connect remittances, democratic competition, and domestic terrorism. As mentioned, O'Mahony (2013) demonstrates a link between remittances and election timing and finds that remittances flows rise during campaign seasons. This result provides us with a baseline that we build on here. Specifically, we consider two additional regressions that focus only on strong and weak democracies.[16] In the first, we fit a negative binomial model that looks at how remittances affect

[15]Colinearity may be a concern in the encompassing model as the constraints and competition variables correlate at about 0.85. An alternative approach to testing the competition mechanism is to consider a model with only executive constraints and compare it against the competition-only model. The competition model has a better AIC than the constraints model, and a Vuong test provides suggestive evidence that the competition model is preferred.

[16]To retain more observations, we follow Crisman-Cox (2018) and slightly expand our democracy coding when

Table 4: Exploring the political competition mechanism

	Dependent variable:	
	Domestic terrorist attacks	
	(5)	(6)
Remittances	0.19*	0.19
	(0.10)	(0.15)
Remittances × Executive Competition	−0.18**	−0.30**
	(0.05)	(0.11)
Remittances × Executive Constraints		0.07
		(0.06)
Executive Competition	−0.04	−0.08
	(0.12)	(0.18)
Executive Constraints		0.06
		(0.10)
Military personnel	2.24**	2.23**
	(0.74)	(0.74)
Population	4.78**	4.78**
	(1.11)	(1.11)
GDP Growth	−0.02*	−0.02*
	(0.01)	(0.01)
GDP per capita	0.96*	0.98*
	(0.52)	(0.52)
Free Press	0.004	−0.05
	(0.23)	(0.24)
Country Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Observations	3,040	3,040
Log Likelihood	-5,706.00	-5,702.15
θ	0.45	0.46

$^{*}p < 0.1$, $^{**}p < 0.05$. Coefficients from negative binomial models. Standard errors in parentheses, clustered on country. A linear hypothesis test does not reject the null that the two additional parameters in Model 6 are both 0.

domestic terrorism in states with and without proportional representation (PR). PR is typically thought of as a more inclusive form of democracy with lower startup costs and more access to representation (e.g. Powell 1982). As such, we expect that the mitigating effect of remittances on terrorism to be more pronounced in PR systems.

In the second, we fit a linear model that regresses opposition vote share on remittances. The

moving to a democracy-only subset by including all country-years with a polity score of five or above. This includes some democratic-leaning anocracies with legislative elections.

data on opposition vote share comes from the Database of Political Institutions (DPI) and records the total vote share for all opposition parties. Here, we are looking for whether remittances have an effect on opposition politics. Specifically, if marginalized recipients are using remittances as a means of advancing their politics, then we expect that opposition parties will do better in legislative elections. This is a coarse measure, but it still helps us look for a link between remittances and political activity. This model is fit to only the democratic-country-years where a legislative election is held with two-way fixed effects. Controls variables are based on Model 2 where some variables are removed to reflect the fact that this is a very different outcome variable. Results of these two models are reported in Table 5.

There are two results of interest in Table 5. First, we see that within proportional representation systems, remittances lead to fewer terrorist attacks and the combined coefficient remains statistically significant. This result is consistent with our argument that recipients of remittances will use them for legitimate politics when such institutions are more accessible and further supports the main finding of the paper. Second, within democracies we see that remittances tend to increase the proportion of votes that opposition parties receive, which builds on O'Mahony's (2013) finding that remittances increase as elections approach. Indeed, ours results demonstrate the motive for this relationship by showing that remittances can have a positive effect on opposition performance in legislative elections, with each 100 USD/person increase in remittances raising the opposition vote share by about 1.8 percentage points on average (all else equal). Overall, these models provide two distinct tests of the mechanisms we posited for the relationship between remittances and terrorism within democracies. Specifically, these tests establish that in more open regimes, remittances lead to less terrorism and that remittances benefit opposition parties within democracies. These two trends highlight the way in which remittances can lead to a shift away from violent politics and into legitimate politics.

The results from the vote share model also speak to the to debate about remittances and political engagement. As mentioned, Dionne, Inman and Montinola (2014) find that receiving remittances depresses voter participation in some African countries, while Pfutze (2014) finds mixed results on voter participation in Mexico. Here, we find that remittances increase the vote share for opposition parties specifically, which matches the underlying mechanism we posit for where political engagement should increase. As noted above, these results are compatible if the depressed

Table 5: Political competition within democracies

	Dependent variable:	
	Domestic terrorist attacks	Opposition party vote share
	Negative binomial	Linear regression
	(7)	(8)
Remittances	0.21	1.84**
	(0.25)	(0.69)
Remittances × PR	−0.58*	
	(0.31)	
PR	2.08**	1.19
	(0.69)	(6.22)
Military personnel	1.67**	
	(0.83)	
Population	4.50**	31.12**
	(1.36)	(12.32)
GDP Growth	−0.01	−0.28
	(0.02)	(0.28)
GDP per capita	1.69	13.39
	(1.07)	(8.33)
Free Press	−0.21	3.32
	(0.21)	(4.07)
$\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{PR}}$	−0.37**	
	(0.16)	
Country Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Observations	1,615	704
Log Likelihood	-3,450.50	
θ	0.74	
R^2		0.86

$^{*}p < 0.1$, $^{**}p < 0.05$. Regression coefficients. Standard errors in parentheses, clustered on country

turnout is mainly among incumbent supporters. Finally, while these previous works are perhaps not directly comparable to this analysis due to differences in countries and remittance measures, future work may benefit by further breaking down voter turnout by incumbent and opposition.

4.2 Alternative explanation and robustness

Before concluding there is one alternative explanation we want to address. It could be that remittance flows actually lead to more state resources and that what states do with these resources affects terrorism. This top-down approach to the problem could also explain the trends reported

in the main models. Easton and Montinola (2017) show that remittances tend to have different effects on government spending within democracies and autocracies. In the former, governments tend to spend more on social services, which may reduce the motives for terrorism and lead to fewer attacks. In the latter, governments tend to increase military spending, which may increase the motivations for terrorism and lead to more attacks. If the effect of remittances actually goes through government spending habits, then controlling for these spending levels will remove the effect of remittances that flows through spending. Any remaining effect will be attributed to factors outside government spending, which is consistent with our explanation.

Table 6 considers this alternative explanation. Here, we add in logged military expenditures per capita as measured by COW, and we proxy with government social spending using logged infant mortality as measured by the World Bank as a proxy for public health and social spending. Infant mortality was chosen as it tends to have better coverage temporal compared to direct measures of government spending. Even after accounting for how governments spend the enhanced tax dollars associated with remittances, we see that remittances still have opposite effects in democracies and autocracies that go beyond their effect on government spending.

Additional robustness and specification checks are presented in the online appendix. First, we consider several alternative ways to measure or transform remittances, as we want to be sure that are results to not arise from arbitrary measurement choices. The main model uses remittances per capita, we also consider the log and square root of this measure to control for diminishing returns on large values of remittances. Likewise, we also consider temporal detrending to ensure that time trends in remittance flows do not drive the main result, as well as a measure based on remittances as a share of GDP. We also look at an alternative measure of remittances from the IMF rather than the World Bank data used in the main models. Second, we consider alternative measures of democracy by considering a model that uses polity and polity-squared rather than the binary variables and another that uses the Varieties of Democracy (V-DEM). Third, we replace our variable for domestic terrorism with the one from Enders, Sandler and Gaibulloev (2011). Fourth, we consider whether the effects persist in just the subsample of non-OECD countries, where remittances may have a more prominent effect on daily life. Finally, we consider a set of alternative modeling choices to the negative binomial with country-fixed effects presented in the main text. Specifically, we look at a zero-inflated negative binomial; pooled and random effects negative binomials; and specifications

Table 6: Effect of remittances after controlling for spending

	Dependent variable:		
	Domestic terrorist attacks		
	(9)	(10)	(11)
Remittances per capita	0.28**	0.22**	0.29**
	(0.07)	(0.08)	(0.07)
Remittances per capita) × Dem.	−0.61**	−0.53**	−0.62**
	(0.13)	(0.15)	(0.14)
Remittances per capita × Ano.	−0.13	−0.16	−0.12
	(0.10)	(0.10)	(0.10)
Democracy	0.02	−0.24	0.02
	(0.33)	(0.37)	(0.33)
Anocracy	0.93**	0.92**	0.94**
	(0.27)	(0.28)	(0.27)
Infant mortality	2.10**		2.06**
	(0.49)		(0.53)
Military expenditures		−2.85**	−0.26
		(0.96)	(1.00)
Military personnel	1.98**	2.60**	1.91**
	(0.73)	(0.66)	(0.74)
Population	3.22**	1.41**	3.20**
	(0.69)	(0.51)	(0.71)
GDP Growth	−0.04**	−0.04**	−0.04**
	(0.01)	(0.01)	(0.01)
GDP per capita	1.03**	−0.07	1.03*
	(0.52)	(0.40)	(0.53)
Free Press	0.35	0.47**	0.36*
	(0.21)	(0.20)	(0.21)
$\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{Dem.}}$	−0.33**	−0.31**	−0.33**
	(0.13)	(0.14)	(0.13)
Observations	3,112	3,078	3,067
Log Likelihood	-5,996.36	-5,986.72	-5,945.94
θ	0.42	0.39	0.41

$^{*}p < 0.1$, $^{**}p < 0.05$. Coefficients from negative binomial models. Standard errors in parentheses clustered on country.

based on a Poisson quasi-maximum likelihood estimator.

In all of these checks, we find that the regression coefficients are signed in the ways that we expect and the within-democracy relationship is statistically significant at conventional levels. In nearly all of these checks, the within-autocracy relationship is statistically significant, although this relationship appears to be slightly less robust than the finding within democracies. We speculate

that the difference in robustness stems from heterogeneity within autocratic regimes regarding the ability to influence politics. This heterogeneity is consistent with Wilson and Piazza (2013) who find notable variations in baseline rates of domestic terrorism across autocratic regimes types. Future work should further disentangle the differences among different types of autocratic institutions and explore why the autocratic trend toward more terrorism is less robust than the democratic trend toward less terrorism.

5 Conclusion

In this paper we asked: What effect do remittances have on domestic terrorism, and are these effects different across regimes? While previous work has considered the first question, it has not looked at how regime type influences the effect of remittances. We find that within autocratic state remittances are associated with an increase in the average number of domestic terrorist attacks. This result matches both previous work and the conventional wisdom on the relationship between remittances and terrorism. However, within democracies the effect of remittances is the exact opposite: more remittances are associated with a decrease in the incidence of domestic terrorism. These heterogeneous effects are a novel finding in the study of domestic terrorism and provide new insight into when remittances might encourage or discourage political violence.

What explains these different effects across regime? Remittances to both regimes represent additional resources and income that can go towards political activity. However, what this political activity looks like varies by regime type. Within democracies, legitimate politics is a more available option, but it is often an expensive undertaking. When groups do not have the resources to compete with peaceful politics, terrorism is an attractive option. This dynamic is relatively common among terrorist groups that grow out from politically marginalized groups within democracies (e.g. the PIRA was an outgrowth of the economic and political marginalization Catholics in Northern Ireland). However, as remittances increase, peaceful politics becomes an increasing viable option within democracies and violence can become a less attractive political strategy.

In contrast, within autocracies there are fewer opportunities for peaceful, anti-incumbent political activity. Without these institutional outlets, the trade-off between peaceful and violent politics does not come into play. Thus, as remittances increase, they support alternative political outlets such as terrorism. This matches previous work that looks at the destabilizing effect of remittance to

autocracies (e.g. Escribà-Folch, Meseguer and Wright 2018). While this particular result matches the conventional wisdom regarding the relationship between remittances and terrorism, it is only part of the larger story. By looking at autocracies and democracies within a single interaction model we are able to produce a new result about the heterogeneous effects that remittances can have across regime types.

With these results, we contributed to the study of domestic terrorism by demonstrating that while remittances are sometimes associated with an increase in domestic terrorism (confirming conventional wisdom and results from Mascarenhas and Sandler 2014), this effect only appears within autocratic states. Within democracies, we find robust evidence to suggest that an increase in remittances tends to reduce the incidence of domestic terrorism. This result addresses recent criticism of political access theories of terrorism (e.g. Foster, Braithwaite and Sobek 2013) by highlighting the role that resources play in using accessible institutions.

Additionally, while counterterrorism experts sometimes view remittances suspiciously, our results suggest that this focus may be over broad. Indeed, in countries with open political institution, remittances may decrease domestic terrorism and as such democratic states should carefully consider any policy that looks to restrict remittances in the name of counterterrorism. To the extent that additional resources may improve the ability of marginalized groups to shape political outcomes peacefully, an increase in remittances may improve the security situation. Future work can better consider this mechanism by collecting micro-level data on remittances and migrant networks. Specifically, scholars should look for and identify other institutional barriers within democracies that limit access to legitimate politics. These mitigating variables can help identify and remedy situations where political access theories of terrorism appear to break down.

References

Abrahms, Max. 2007. "Why Democracies make Superior Counterterrorists." *Security Studies* 16(2):223–253.

Adamson, Fiona B. 2006. "Crossing borders: International migration and national security." *International security* 31(1):165–199.

Adida, Claire L. and Desha M. Girod. 2011. "Do Migrants Improve Their Hometowns? Remittances and Access to Public Services in Mexico, 1995-2000." *Comparative Political Studies* 44(1):3–27.

Ahmed, Faisal Z. 2012. "The perils of unearned foreign income: Aid, remittances, and government survival." *American Political Science Review* pp. 146–165.

Aksoy, Deniz and David B. Carter. 2014. "Electoral Institutions and the Emergence of Terrorist Groups." *British Journal of Political Science* 44(1):181–204.

Aksoy, Deniz, David B Carter and Joseph Wright. 2012. "Terrorism in dictatorships." *The Journal of Politics* 74(3):810–826.

Alonso, Sonia and Rubén Ruiz-Rufino. 2007. "Political representation and ethnic conflict in new democracies." *European Journal of Political Research* 46(2):237–267.

Asal, Victor, Justin Conrad and Peter White. 2014. "Going abroad: Transnational solicitation and contention by ethnopolitical organizations." *International organization* 68(4):945–978.

Brady, Henry E., Sidney Verba and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *American Political Science Review* 89(2):271–294.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph M Siverson and James D Morrow. 2003. *The logic of political survival*. Cambridge: MIT press.

Bueno de Mesquita, Ethan. 2008. "Terrorist Factions." *Quarterly Journal of Political Science* 3:399–418.

Burgess, Katrina. 2014. "Unpacking the Diaspora Channel in New Democracies: When Do Migrants Act Politically Back Home?" *Studies in Comparative International Development* 49(1):13–43.

Chenoweth, Erica. 2010. "Democratic Competition and Terrorist Activity." *Journal of Politics* 72(1):16–30.

Chenoweth, Erica. 2013. "Terrorism and democracy." *Annual Review of Political Science* 16:355–378.

Clarke, Colin P. 2015. *Terrorism, Inc. : The Financing of Terrorism, Insurgency, and Irregular Warfare*. Santa Barbara, California: Praeger.

Córdova, Abby and John Hiskey. 2015. "Shaping politics at home: migrant networks and political engagement." *Comparative Political Studies* 48(11):1454–1487.

Cox, Gary W and Jonathan N Katz. 1996. "Why did the incumbency advantage in US House elections grow?" *American journal of political science* pp. 478–497.

Crenshaw, Martha. 1981. "The Causes of Terrorism." *Comparative Politics* 13(4):379–399.

Crisman-Cox, Casey. 2018. "Enemies Within: Interactions Between Terrorists and Democracies." *Journal of Conflict Resolution* 62(8):1661–1685.

Crisman-Cox, Casey. 2021. "Estimating Substantive Effects in Binary Outcome Panel Models: A Comparison." *Journal of Politics* 83(2).

Cunningham, David E, Kristian Skrede Gleditsch, Belén González, Dragana Vidović and Peter B White. 2017. "Words and deeds: From incompatibilities to outcomes in anti-government disputes." *Journal of Peace Research* 54(4):468–483.

Davis, Andrew P. and Yongjun Zhang. 2019. "Civil Society and Exposure to Domestic Terrorist Attacks: Evidence from a Cross-national Quantitative Analysis, 1970–2010." *International Journal of Comparative Sociology* .

Dekmejian, R. Hrair. 2007. *Spectrum of Terror.* Washington DC: CQ Press.

Dionne, Kim Yi, Kris L. Inman and Gabriella R. Montinola. 2014. "Another Resource Curse? The Impact of Remittances on Political Participation." Afrobarometer Working Paper No. 145.

Doyle, David. 2015. "Remittances and social spending." *American Political Science Review* 109(4):785–802.

Easton, Malcolm R and Gabriella R Montinola. 2017. "Remittances, regime type, and government spending priorities." *Studies in Comparative International Development* 52(3):349–371.

Elu, Juliet U. and Gregory N. Price. 2012. "Remittances and the Financing of Terrorism In Sub-Saharan Africa: 1974 - 2006." *Peace Economics, Peace Science and Public Policy* 18(1):1–40.

Enders, Walter and Todd Sandler. 2012. *The Political Economy of Terrorism.* 2 ed. Cambridge: Cambridge University Press.

Enders, Walter, Todd Sandler and Khusrav Gaibulloev. 2011. "Domestic versus transnational terrorism: Data, decomposition, and dynamics." *Journal of Peace Research* 48(3):319–337.

Escribà-Folch, Abel, Covadonga Meseguer and Joseph Wright. 2015. "Remittances and Democratization." *International Studies Quarterly* 59(3):571–586.

Escribà-Folch, Abel, Covadonga Meseguer and Joseph Wright. 2018. "Remittances and Protest in Dictatorships." *American Journal of Political Science* 62(4):889–904.

Fortna, Virginia Page. 2015. "Do Terrorists Win? Rebels' Use of Terrorism and Civil War Outcomes." *International Organization* 69(3):519556.

Foster, Dennis M., Alex Braithwaite and David Sobek. 2013. "There can be no Compromise: Institutional Fractionalization and Domestic Terrorism." *British Journal of Political Science* 43(3):541–557.

Freeman, Michael. 2011. "The Sources of Terrorist Financing: Theory and Typology." *Studies in Conflict & Terrorism* 34(6):461–475.

Gaibulloev, Khusrav, James A. Piazza and Todd Sandler. 2017. "Regime Types and Terrorism." *International Organization* 71(3):491–522.

Ghatak, Sambuddha, Aaron Gold and Brandon C. Prins. 2019. "Domestic Terrorism in Democratic States: Understanding and Addressing Minority Grievances." *Journal of Conflict Resolution* 63(2):439–467.

Gleditsch, Kristian Skrede and Sarah M.T. Polo. 2016. "Ethnic Inclusion, Democracy, and Terrorism." *Public Choice* 168:207–229.

Goodman, Gary L and Jonathan T Hiskey. 2008. "Exit without leaving: political disengagement in high migration municipalities in Mexico." *Comparative Politics* 40(2):169–188.

Horgan, John and Max Taylor. 1999. "Playing the 'Green Card' – Financing the Provision IRA: Part 1." *Terrorism and Political Violence* 11(2):1–38.

Horgan, John and Max Taylor. 2003. "Playing the 'Green Card' – Financing the Provision IRA: Part 2." *Terrorism and Political Violence* 15(2):1–60.

Horst, Cindy. 2008. "The transnational political engagements of refugees: Remittance sending practices amongst Somalis in Norway: Analysis." *Conflict, Security & Development* 8(3):317–339.

Itzigsohn, José and Daniela Villacrés. 2008. "Migrant political transnationalism and the practice of democracy: Dominican external voting rights and Salvadoran home town associations." *Ethnic and Racial Studies* 31(4):664–686.

Jensen, Nathan and Leonard Wantchekon. 2004. "Resource wealth and political regimes in Africa." *Comparative political studies* 37(7):816–841.

Jones, Seth G. and Martin C. Libicki. 2008. *How Terrorist Groups End: Lessons for Countering Al Qa'ida*. Santa Monica, CA: Rand.

Kydd, Andrew H. and Barbara F. Walter. 2006. "The Strategies of Terrorism." *International Security* 31(1):49–80.

Levitt, Peggy and Rafael De la Dehesa. 2003. "Transnational migration and the redefinition of the state: Variations and explanations." *Ethnic and racial studies* 26(4):587–611.

Li, Quan. 2005. "Does Democracy Promote or Reduce Transnational Terrorist Incidents?" *Journal of Conflict Resolution* 49(2):278–297.

López García, Ana Isabel and Barry Maydom. 2021. "Remittances, criminal violence and voter turnout." *Journal of Ethnic and Migration Studies* 47(6):1349–1374.

Mascarenhas, Raechelle and Todd Sandler. 2014. "Remittances and terrorism: A global analysis." *Defence and Peace Economics* 25(4):331–347.

Miller, Gina Lei and Emily Hencken Ritter. 2014. "Emigrants and the Onset of Civil War." *Journal of Peace Research* 51(1):51–64.

Moon, Woojin. 2006. "The paradox of less effective incumbent spending: Theory and tests." *British Journal of Political Science* 36(4):705–721.

Neumann, Peter R. 2005. "The Bullet and the Ballot Box: The Case of the IRA." *Journal of Strategic Studies* 28(6):941–975.

O'Mahony, Angela. 2013. "Political Investment: Remittances and Elections." *British Journal of Political Science* 43(4):799–820.

Passas, Nikos and Samuel Munzele Maimbo. 2008. The design, development, and implementation of regulatory and supervisory frameworks for informal funds transfer systems. In *Countering the Financing of Terrorism*, ed. Thomas J. Biersteker and Sue E. Eckert. New York: Routledge pp. 174–192.

Pérez-Armendáriz, Clarisa and David Crow. 2010. "Do migrants remit democracy? International migration, political beliefs, and behavior in Mexico." *Comparative political studies* 43(1):119–148.

Pfutze, Tobias. 2014. "Clientelism vs. Social Learning: The Electoral Effects of International Migration." *International Studies Quarterly* 58(2):295–307.

Piazza, James A. 2018. "Transnational Ethnic Diasporas and the Survival of Terrorist Organizations." *Security Studies* 27(4):607–632.

Powell, G. Bingham. 1982. *Contemporary Democracies: Participation, Stability, and Violence.* Cambridge, MA: Harvard University Press.

Regan, Patrick M and Richard W Frank. 2014. "Migrant remittances and the onset of civil war." *Conflict Management and Peace Science* 31(5):502–520.

Richardson, Louise. 2006. *What Terrorists Want.* New York: Random House.

Saideman, Stephen M, David J Lanoue, Michael Campenni and Samuel Stanton. 2002. "Democratization, political institutions, and ethnic conflict: A pooled time-series analysis, 1985-1998." *Comparative Political Studies* 35(1):103–129.

Salehyan, Idean. 2007. "Transnational Rebels: Neighboring States as Sanctuary for Rebel Groups." *World Politics* 59(2):217–242.

Shin, Myungsoon, Youngjae Jin, Donald A Gross and Kihong Eom. 2005. "Money matters in party-centered politics: campaign spending in Korean congressional elections." *Electoral Studies* 24(1):85–101.

Tavits, Margit. 2008. "Party systems in the making: The emergence and success of new parties in new democracies." *British journal of political science* 38(1):113–133.

Wade, Sara Jackson and Dan Reiter. 2007. "Does Democracy Matter?" *Journal of Conflict Resolution* 51(2):329–348.

Walsh, James I. and James A. Piazza. 2010. "Why Respecting Physical Integrity Rights Reduces Terrorism." *Comparative Political Studies* 43(5):551–577.

Weinberg, Leonard. 1991. "Turning to terror: The conditions under which political parties turn to terrorist activities." *Comparative Politics* 23(4):423–438.

Wilson, Andrew J. 1994. "The Conflict between Noraid and the Friends of Irish Freedom." *The Irish Review (Cork)* 15:40–50.

Wilson, Matthew C. and James A. Piazza. 2013. "Autocracies and Terrorism: Conditioning Effects of Authoritarian Regime Type on Terrorist Attacks." *American Journal of Political Science* 57(4):941–955.