Remittances, Terrorism, and Democracy*

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January 17, 2023

Abstract

How do remittances affect domestic terrorism? Past work argues that remittances increase groups' resources and lead to increased terrorism. However, we argue that the effect of remittances depends on political institutions. Within democracies, remittances can help groups overcome barriers to legitimate politics and reduce terrorism's allure. Within autocracies, however, fewer legitimate political opportunities exist, and remittances may lead to more terrorism as it remains an alternative and available political outlet. We find that remittances are associated with less (more) domestic terrorism within democracies (autocracies) and use additional mechanism tests to demonstrate that competitive aspects of democracy help explain these trends.

*Thanks to Cassy Dorff, Chelsea Estancona, Michael Findley, Michael Gibilisco, and Brandon Prins for their helpful remarks. This paper also benefited from the participants and audiences at Texas A&M, and the 2022 International Studies Association's annual meeting. All errors are our own.

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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, the direction and reasons for these effects are unclear. 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 individuals and the state, which can undermine incumbent support. This reduced support may 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), depends on the availability and accessibility of legitimate political institutions.[2]

Past work frequently argues that groups would prefer to use peaceful, legitimate politics over relatively ineffective terrorism (Crenshaw 1981; Dekmejian 2007; Kydd and Walter 2006). Within democracies, groups 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. Broadly speaking, few institutional outlets for effective political opposition exist within autocratic states regardless of a group's re-

[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] We focus on terrorism when discussing violent alternatives to politics as it covers a wide range of interesting political actions and is among the most commonly studied forms of political violence.

sources.[3] This environment makes ineffective, but available, options like terrorism more attractive. In other words, as remittances increase to autocracies, 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 theories that focus on how access to political institutions can reduce terrorism (Aksoy and Carter 2014; Wade and Reiter 2007; Walsh and Piazza 2010). However, this line-of-thought has been called into question, with Foster, Braithwaite and Sobek (2013) finding that institutional access 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 and across regime types.

We test these different expectations using an interaction model with two-way fixed effects. 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, placebo, and robustness checks. 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). Likewise, regime type is a relatively coarse measure of the accessibility of institutions. As such this follow-up analysis allows us to dig deeper into which aspects of democracy connect remittances to terrorism.

First, we use measures on executive constraints as a placebo to show that the competitive differences in regime types, rather than constraints, better explain the data and the observed trends. Second, we show that the relationship between remittances and reduced terrorism within

[3] We discuss the institutional variation within autocracies below and in Appendix B.2.

democracies is most pronounced within proportional representation systems, where the costs of entry into legitimate politics are lower than in majoritarian systems. These two tests support 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.

With these results, we contribute to policy and scholarly discussions. For policy, 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. For the literature, 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.[4] We also contribute to a growing body of works examining how regime type and institutions affect the political consequences of remittances such as corruption (Tyburski 2014), public spending (Easton and Montinola 2017), and protests (Escribà-Folch, Meseguer and Wright 2018).

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 be through direct donation to a group, indirect donations that pass through friendly organizations like charities, or by recipients spending in ways that benefit a group (e.g., shopping 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

[4]It is not inherently obvious how this argument extends to non-conventional political acts other than terrorism (e.g., riots, protests, civil conflicts). Indeed, while remittances are likely to increase protests within some autocracies (e.g., Escribà-Folch, Meseguer and Wright 2018), they are not necessarily associated with decreases of all these alternatives to electoral politics within democracies. Various forms of non-conventional politics require substantial mobilization efforts and may have differing likelihoods of success. Thus, by strengthening organizational capacity and facilitating mobilization, remittances might encourage groups to strategically employ certain forms of non-conventional political actions within democracies. A fruitful avenue of future work may be to consider how other "weapons of the weak" tactics may be alleviated or promoted by remittances or other resources.

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 political transformations 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* unclear what the relationship between remittances and terrorism will look like. On the one hand, remittances may reduce this form of 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 ineffective for 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).

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 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.[5] However, the marginal benefit of gaining remittances is likely greater for opposition groups/parties, as incumbents tend to already enjoy a resource advantage (Escribà-Folch, Meseguer and Wright 2015). 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 likely has little impact on pro-incumbent political outcomes. 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.

We also wish to highlight that our expectations are on how remittances affect terrorism within specific regime types and institutions. As such, we do not take on the debate about whether democracies experience higher *levels* of terrorism relative to autocracies (e.g., Eyerman 1998; Li

[5]It is also important to note that different countries have different policies and mechanisms for capturing or diverting remittances away from citizens and towards the state. North Korea, for example, has very tightly controlled migration which allows them to capture large amounts of migrant worker wages (Choe 2015). Even in this extreme example, however, some 88% of North Korean defectors say that they have or do send remittances to relatives in North Korea (Ji 2021). As the North Korean case illustrates, it is very difficult for any state to stop, capture, or control the flow of informal remittance. In the estimation, country fixed-effects are used to account for unobserved state-level heterogeneity in remittance laws and structure. Likewise, following almost all past work that considers the political and economic consequences of remittances, we focus on informal remittances as measured by the World Bank as they are less susceptible to these kinds of state interventions (e.g., Escribà-Folch, Meseguer and Wright 2015, 576).

2005). It may be the case that democracies experience higher levels of terrorism due to press freedom or civil liberty protections, but we remain agnostic as to what the baseline level of terrorism is within a country. Instead, our focus is on how these levels change in response to remittances and whether the direction of this change is different across regimes and institutional characteristics. Indeed, the results below suggest depending on the remittance levels, democracies may experience more or less terrorism than autocracies (see Appendix C).

2.1 Remittances and terrorist attacks in democracies

While recent work and conventional wisdom suggest that remittances will increase 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 foundational 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).[6]

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 decrease terrorist group recruitment and mobilization efforts. Recent empirical work supports this under-

[6]Based on institutional political access, we conceptualize 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.

standing; 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).[7] 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 access is available, does not mean that it is 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 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 access theories of domestic terrorism by noting that marginalized groups struggle to make an impact even when institutions are open. Specifically, they argue that more rep-

[7] 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.

resentative governments can actually increase domestic terrorism when the underlying society is very fractionalized.[8] 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 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 (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 viable as remittances increase. As Weinberg (1991) notes, a primary motivation for terrorism stems

[8]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.

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).

During this period we see both a growth in resources and a greater willingness by republicans to engage with legitimate politics more. Notably, as funds grew throughout the 1980s, Sinn Féin, 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.[9] Additionally, 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 (if at all) we can ascribe the PIRA's transition to the dual strategy of armed struggle and political engagement to their improved fundraising. 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 and provides some circumstantial evidence. Likewise, a 1988 internal report by Sinn Féin was commissioned and promoted by republican leadership to funnel more NORAID resources and American donors away from violence and toward the political process (Smyth 2020, 38-9). Republican leader Gerry Adams, in particular, strongly believed that political

[9]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 Féin 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.

competition was the more effective use of incoming resources and was a key figure in promoting the use of politics during these period when resources allowed Sinn Féin to be more competitive at the polls (Smyth 2020, 48).

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 Féin 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 opposition group resources (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.[10] However, within autocracies, these increases

[10]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). Attempts to regulate

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.

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

However, autocracies are not a monolith, they exhibit substantial institutional variation that may affect terrorist decisions. 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. As a result, within electoral autocracies we may find trends similar to those within democracies. We consider this institutional variation within autocracies in Appendix B.2 by looking at differences between electoral autocracies, closed autocracies, and democracies. We find that remittances have a pacifying effect similar to democracies in electoral autocracies, further supporting the idea that the presence of electoral institutions can lead to less terrorism as remittances increase.

remittances can affect these benefits to the state.

2.3 Alternative explanations

Before moving on, there are several alternatives frameworks and explanations that need to be considered. One alternative approach 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 inherently 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). 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 in line with the participation mechanism proposed above. Indeed, we consider this argument more below, where we find that remittances are associated with an increase in opposition vote share.

A second alternative framework notes that terrorism levels tend to be higher 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. In fact, we find below that when remittances are low, democracies, on average, experience more terrorism than autocracies, but the *effect* of remittances on terrorism still varies by regime type.

A third alternative approach contends that remittances may lead to improved living conditions that may be misattributed by the public to good governance and thus reduce political grievances and activity. If this is true, we may expect that terrorism decreases across all regime types as citizens grow complacent with additional resources. In this case, we might expect that remittances decrease terrorism across regime types (i.e., support for Hypothesis 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, by controlling for how this surplus may be spent in different regimes.

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).[11]

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, and we consider an alternative approach based on remittances as a share of GDP in the online appendix.[12]

Regime types are measured using polity2 scores, where for ease of interpretation we construct regime-type dummies for democracy (polity2 ≥ 7) and anocracy (polity2 $\in (-6, 6)$).[13] This leaves

[11] 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.

[12] In the Online Appendix, we consider various transformations of the remittances per capita measure, including logged, square root, and quadratic detrending.

[13] We also consider alternative measurements based on the Varieties of Democracy (V-Dem) dataset and a quadratic polity score in Appendix B.2.

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.

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. 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.

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 Data program.

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

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

online appendix. Additionally, we employ country and year fixed effects.[14] The former account for any country-level heterogeneity that affects the baseline level of domestic terrorism within each country, and the latter account for changes in the international security environment overtime. For example, as it is often noted that global terrorism levels declined after the Cold War (e.g., Li 2005), the time dummies account for this shift. 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.[15] Summary statistics are reported in Table 1.

4 Results

Estimates from main models are reported in Table 2. Across all five 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 five 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 attacks, holding all the other covariates constant.

[14] 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.

[15] 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 Mundlak estimators (as in Crisman-Cox 2021) in the online appendix, which all allow for these all-zero countries to be included.

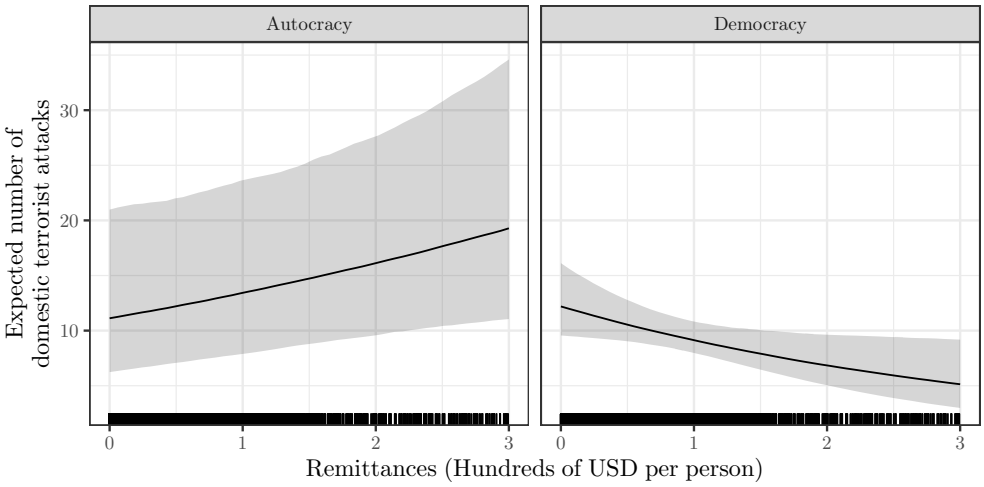
Table 2: Regression results for the conditional effect of remittances on domestic terrorism

	Dependent variable:				
	Domestic terrorist attacks				
	(1)	(2)	(3)	(4)	(5)
Remittances	0.21**	0.21**	0.18**	0.19**	0.18**
	(0.07)	(0.07)	(0.09)	(0.07)	(0.07)
Remittances × Democracy	−0.56**	−0.52**	−0.47**	−0.47**	−0.42**
	(0.15)	(0.15)	(0.13)	(0.12)	(0.11)
Remittances × Anocracy	−0.11	−0.15	−0.31**	−0.29**	−0.26**
	(0.11)	(0.10)	(0.10)	(0.09)	(0.09)
Democracy	0.14	−0.17	0.08	0.36	0.34
	(0.36)	(0.36)	(0.33)	(0.29)	(0.28)
Anocracy	1.13**	0.97**	1.27**	1.25**	1.16**
	(0.29)	(0.28)	(0.31)	(0.26)	(0.26)
Military personnel		3.11**	1.89**	1.82**	1.38**
		(0.64)	(0.64)	(0.55)	(0.57)
Population		1.37**	4.07**	3.61**	2.79**
		(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**	0.13	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)
$\hat{\beta}_{\text{Remittances}} + \hat{\beta}_{\text{Remittances} \times \text{Democracy}}$	0.35**	−0.31**	−0.29**	−0.28**	−0.24**
	(0.15)	(0.14)	(0.13)	(0.12)	(0.11)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	No	No	Yes	Yes	Yes
Observations	3,127	3,127	3,127	3,127	3,127
Log Likelihood	-6,092.57	-6,046.87	-5,899.73	-5,799.78	-5,737.92
θ	0.37	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.

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 five 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.

Figure 1: Expected number domestic terrorist attacks by remittances and regime (Model 3)



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.

As mentioned above, we do not focus on anocracies. While they are an important control variable, the theoretical expectations are 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.

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 3. The first is to graph the expected number of terrorist attacks as a function of remittances for both autocracies and democracies 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 roughly a doubling of the overall average level of remittances or about a two standard deviation increase in within-country remittances. As such, this amount reflects a large, but plausible, 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 increase 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.[16] One 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.[17] These two marginal trends roughly match the increases shown in Figure 1.

Overall, these differing trends support the hypotheses laid out above. A long scholarly debate

[16]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 attacks by regime.

[17]It's worth noting that these effects may be overestimated due to dropping the all-zero groups. To address this we follow advice from Crisman-Cox (2021) and fit a Mundlak-style model in Appendix B.4, the marginal effect is nearly identical for democracies (about -2.8) but smaller for autocracies (about 0.62).

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

	Autocracy	Democracy
Change in attacks	2.52	−2.87
	(0.17, 5.51)	(−5.64, −0.32)

95% confidence intervals from a parametric bootstrap in parentheses.

asks if institutional openness can alleviate terrorism. We find new evidence for the pacifying effect of accessible political institutions by focusing on how a specific resource, remittances, can allow groups to effectively access political institutions. 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, even when electoral institutions are available.

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 demonstrated 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 leads to remittances having a pacifying effect on domestic terrorism. To better highlight this mechanism we adjust Model 3 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 an ordinal 0-3 scale.[18] We use this variable as a proxy

[18]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

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 an ordinal 0-6 scale.[19] Executive constraints work as a placebo because we have no theoretical expectation about the interaction between remittances and constraints. Including them in a combined model allows us to see which of these two aspects of democracy acts as the conditioning variable.[20] In this sense, the constraints variable acts as a placebo 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. We replicate these tests using V-Dem's participatory democracy index for competition and legislative constraints on the executive for constraints. The former measure focuses on how involved with and engaged individual citizens are in the democratic processes within their country. The latter focuses on how much oversight the legislature has over executive action. Both are important parts of the democracy, but our theory suggests that the ability to participate should be the main mechanism connecting remittances to terrorism. Both measures are continuous on the unit interval.[21] The results are presented in Table 4.

Some interesting results appear in this table. First, in low competition states we see that an increase in per capita remittances is still associated with an increase in domestic terrorist attacks in three of the four specifications, holding executive constraints fixed. Second, in states with more political competition (i.e., where groups have more ability to influence politics through legitimate means), remittances are associated with decreased numbers of terrorist attacks. Third, when we add in the executive constraints variable, which reflects a notably different aspect of democracy, we

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are increasing across the four levels.

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

[20] Colinearity may be a concern in the encompassing model as the constraints and competition variables tend to correlate highly. An alternative approach to testing the competition mechanism is to consider a model with only a constraints measure and compare it against the competition-only model. In both the V-Dem and polity cases, the competition models have a better AIC, and Vuong tests provide suggestive evidence that the competition models are preferred.

[21] We also tried the civil society participation index and autonomy of opposition parties as measures of the political competitiveness and found similar results.

Table 4: Exploring the political competition mechanism

	Dependent variable:			
	Domestic terrorist attacks			
	Polity		*V-Dem*	
	(6)	(7)	(8)	(9)
Remittances	0.19*	0.19	−0.09	−0.37
	(0.10)	(0.15)	(0.23)	(0.50)
Remittances × Competition	−0.18**	−0.30**	−0.20	−1.39**
	(0.05)	(0.11)	(0.44)	(0.50)
Remittances × Constraints		0.07		1.07
		(0.06)		(0.82)
Executive Competition	−0.04	−0.08	−3.00**	−5.74**
	(0.12)	(0.18)	(1.05)	(1.32)
Executive Constraints		0.06		1.87**
		(0.10)		(0.84)
Military personnel	2.23**	2.22**	1.80**	1.38**
	(0.74)	(0.74)	(0.63)	(0.61)
Population	4.76**	4.76**	4.40**	4.32**
	(1.11)	(1.11)	(1.02)	(0.96)
GDP Growth	−0.02*	−0.02*	−0.03*	−0.03*
	(0.01)	(0.01)	(0.01)	(0.01)
GDP per capita	0.96*	0.98*	0.96*	1.08**
	(0.51)	(0.52)	(0.50)	(0.48)
Free Press	0.004	−0.05	0.22	0.08
	(0.23)	(0.24)	(0.19)	(0.18)
Combined coefficient on remittances (low competition)	0.19*	0.47**	−0.10	0.21
	(0.10)	(0.18)	(0.20)	(0.14)
Combined coefficient on remittances (high competition)	−0.35**	−0.43**	−0.22*	−0.56**
	(0.13)	(0.18)	(0.12)	(0.21)
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,040	3,040	3,075	3,075
Log Likelihood	-5,707.49	-5,703.58	-5,812.24	-5,787.94
θ	0.46	0.46	0.46	0.47

*$p < 0.1$, **$p < 0.05$. Coefficients from negative binomial models. Standard errors in parentheses, clustered on country. For the combined coefficients, the high (low) values are the 90th (10th) percentile of the competition measure. For models with constraints, the constraints variable is fixed to its median value when combined.

see that the pacifying effect of remittances still goes through the competition measures. Indeed, in Models 7 and 9 we see that countries with higher levels of constraints may experience more terrorism as remittances increase. This result suggests that there may be multiple pathways through which remittances affect terrorism, but the pacifying effect that dominates within democracies is more

associated with the competitive components, supporting our proposed mechanism.

We 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.[22] In the first, we fit a negative binomial model that looks at how remittances affect domestic terrorism in states with and without proportional representation (PR). PR is typically seen as a more inclusive form of democracy with lower startup costs and easier access to representation. 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 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 3 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 supports our argument that recipients of remittances will use them for legitimate politics when such institutions are more accessible. 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,

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

Table 5: Political competition within democracies

	Dependent variable:	
	Domestic terrorist attacks	Opposition party vote share
	Negative binomial	Linear regression
	(10)	(11)
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

this result demonstrates the motive for this relationship by showing that remittances are associated with improved 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 build the case 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 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 our expectations for how political engagement should increase. As noted above, these results are compatible with past work if the depressed turnout they find is mainly among incumbent supporters. 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 could 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 can 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. We chose infant mortality because it has better temporal coverage than most direct measures of government social 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

Table 6: Effect of remittances after controlling for spending

	Dependent variable:		
	Domestic terrorist attacks		
	(12)	(13)	(14)
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	−0.23	0.03
	(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		−2.86**	−0.27
		(0.96)	(1.00)
Military personnel	1.96**	2.59**	1.89**
	(0.73)	(0.65)	(0.74)
Population	3.21**	1.40**	3.19**
	(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	1.02*
	(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)	(0.14)
Observations	3,112	3,078	3,067
Log Likelihood	-5,997.84	-5,988.18	-5,947.40
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.

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 V-Dem's four-category measure of regime type. 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 sub-sample 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 Mundlak-specified Poisson regression.

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 every check. Likewise in most checks, the within-autocracy relationship is statistically significant, although this relationship is 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 states 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. 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 remittances within 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 contribute 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.

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 access theories of terrorism appear to break down.

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