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## Paying Them to Hate US: The Effect of U.S. Military Aid on Anti-American Terrorism, 1968-2014

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# Paying Them to Hate US: The Effect of U.S. Military Aid on Anti-American Terrorism, 1968-2014

## Abstract

Does U.S. military aid make the United States safer? To answer this question, we collect data on 173 countries between 1968 and 2014. Exploiting quasi-random variation in the global patterns of U.S. military aid, our paper is the first to provide causal estimates of the effect of U.S. military aid on anti-American terrorism. We find that higher levels of military aid led to an increased likelihood of the recipient country to produce anti-American terrorism. For our preferred instrumental-variable specification, doubling U.S. military aid increases the risk of anti-American terrorism by 4.4 percentage points. Examining potential transmission channels, we find that more U.S. military aid leads to more corruption and exclusionary policies in recipient countries. Consistent with a theoretical argument developed in this paper, these results indicate that the inflow of military aid induces rent-seeking behavior, which in turn encourages terrorism by groups that suffer from reduced economic and political participation as a consequence of rent-seeking. These groups direct their dissatisfaction against the United States as the perceived linchpin of an unfavorable status quo in the recipient country.

JEL-Codes: D740, F350.

Keywords: U.S. military aid, anti-American terrorism, transnational terrorism, instrumental variable estimation.

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## 1. Introduction

Between 1968 and 2014, the world saw over 3,500 transnational terrorist attacks against American interests, most notably the 9/11 attacks on New York City and Washington, D.C. (Mickolus et al., 2016).<sup>1</sup> In response to this threat from transnational terrorism, the United States has provided—among other measures—military assistance to foreign governments. Between 1968 and 2014, the United States gave approximately 470 billion US\$ (inflation-adjusted) in foreign military aid; in 2014 alone, the U.S. spent about 10.5 billion US\$ on foreign aid (USAID, 2016).<sup>2</sup>

Does military aid actually make the United States safer? There are competing and contradicting predictions about the effect of aid on terrorism. For one, military aid may bolster state capacity in recipient countries, consequently protecting the United States by making it more difficult to carry out anti-American terrorism (Lai, 2007: 298; Gould and Stecklov, 2009; Bapat, 2011: 303). We call this way of thinking the *policy-maker argument* as it corresponds to the American policy-makers' thoughts about the efficacy of military aid (e.g., The White House, 2013). For another, U.S. military aid can also lead to more anti-American terrorism. By resorting to anti-American terrorism, a terrorist group may hope to reduce U.S. aid for a domestic government that the terrorist group opposes; a reduction in U.S. aid will consequently weaken this government and make terrorist success more likely (Neumayer and Plümper, 2011). We follow Neumayer and Plümper (2011) and refer to this pathway from military aid to terrorism as the *strategic logic channel*.

Understanding whether U.S. military aid leads to more or less anti-American terrorism is highly important from a public policy perspective. Political decisions in favor of aid may have consequences for taxation and spending in other fields. Moreover, even single acts of anti-American terrorism can be extremely costly in social, political and economic terms. For instance, in addition to human casualties, the costs of repairing the *USS Cole* (targeted by anti-American terrorism in Yemen in 2000) were more than 250 million US\$.<sup>3</sup> As another example, the political

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<sup>1</sup> Terrorist incidents that affect more than one country are referred to as *transnational terrorism*. For instance, the 9/11 attacks were transnational because foreign terrorists attacked on U.S. soil, with non-Americans being also victimized.

<sup>2</sup> The *United States Agency for International Development* (USAID, 2016) defines military aid as aid that subsidizes or substantially enhances the military capability of the recipient country (for example U.S. loans or grants to facilitate the training of military personnel of the recipient country).

<sup>3</sup> See [https://www.navy.mil/submit/display.asp?story\\_id=1415](https://www.navy.mil/submit/display.asp?story_id=1415).

fallout from the 2012 terrorist attack on the U.S. consulate in Benghazi, Libya, was influential in both the 2012 and 2016 U.S. presidential elections.

In this paper, we contribute in several ways to the sparse literature on the nexus between U.S. military aid and anti-American terrorism. First, we extend the theoretical framework on the military aid-terrorism nexus by proposing an additional pathway from aid to anti-American terrorism. This will provide novel insights into the channels linking our main variables of interest. Second, we take the problem of endogeneity seriously and use an instrumental-variable approach that allows us to establish *causal linkages* (rather than mere correlations) between U.S. military aid and anti-American terrorism. In addition, we improve statistical inference by considering data features such as cross-sectional dependence and unobserved heterogeneity that have been unappreciated in earlier empirical studies of the aid-terrorism nexus. Third, we study in more detail the mechanisms underlying the aid-terrorism relationship.

More specifically, we extend the existing literature along the theoretical dimension, proposing a further pathway from aid to anti-American terrorism. Building on arguments from the rent-seeking literature, we argue that U.S. military aid undermines institutions in recipient countries and creates anti-American resentment among those parts of the population that do not have direct or indirect (via governmental redistribution) access to the rents arising from aid. For these groups, U.S. military aid constrains the means of economic and political participation and thus encourages anti-American terrorism. We call this third pathway from more military aid to more anti-American terrorism—in addition to the policymaker and strategic logic channels—the *grievances channel*.

To empirically examine the effect of U.S. military aid on anti-American terrorism, we use a *large sample* of 173 countries between 1968 and 2014. This sample is considerably larger than the one employed by Neumayer and Plümper (2011). Their study is closest to ours: it covers 149 countries between 1978 and 2005. Neumayer and Plümper (2011) show that more U.S. military aid correlates with more anti-American terrorism, which is consistent with their strategic logic argument. In contrast to Neumayer and Plümper (2011), our sample covers the post-9/11 era more exhaustively, which allows us—among other things—to explicitly compare the pre- and post-9/11 periods. More importantly, given that concerns over endogeneity have been largely neglected in earlier research, we employ an *instrumental-variable (IV) approach* to provide *causal estimates* of the effect of U.S. military aid on the emergence of anti-American terrorism, instrumenting local U.S. military aid

with trends in U.S. military aid in other parts of the world. Our empirical approach also accounts for data features that may complicate statistical inference such as the presence of cross-sectional dependence. Furthermore, we provide a battery of robustness checks (e.g., alternative instrumental variables, sub-sample analyses) and empirical extensions (e.g., concerning examinations of heterogeneous effects of aid and spill-over effects) to further improve our understanding of the relationship between military aid and anti-American terrorism.

Finally, and unexplored in the existing empirical literature, we study the effects of U.S. military aid on various potential transmission channels, thereby shedding further light on the *mechanics of the military aid-terrorism nexus*. We investigate whether the *policy-maker argument* (henceforth *PMA*), the *strategic logic channel* (*SLC*) and/or our new *grievances channel* (*GC*) arguments are supported by the data.

To preview our main findings, we show—in contrast to the *PMA*—that higher levels of military aid lead to an increased likelihood of the recipient country producing anti-American terrorism. In our preferred specification, at the sample mean, doubling U.S. military aid increases the risk of anti-American terrorism by 4.4 percentage points, which is approximately 30% of the sample mean. Our results indicate that earlier findings on the aid-terrorism relationship—derived from non-IV approaches—are downward biased and underestimate the role of U.S. military aid in anti-American terrorism. Considering potential transmission channels, we find strong support for our newly introduced *GC*: more U.S. military aid leads to more corruption and exclusionary policies in recipient countries. Specifically, the inflow of military aid induces rent-seeking behavior, which in turn encourages terrorism by groups that suffer from reduced economic and political participation because of rent-seeking. These groups in particular direct their dissatisfaction against the United States as the perceived linchpin of an unfavorable status quo in the recipient country.

The remainder of this paper is organized as follows. In Section 2, we provide a more detailed theoretical explanation as to how U.S. military aid may be related to anti-American terrorism. We introduce our dataset and empirical model in Section 3. Our baseline and IV estimates are reported in Section 4, followed by various robustness checks and extensions in Section 5. In Section 6, we examine a number of transmission channels potentially accounting for the relationship between U.S. military aid and anti-American terrorism. Section 7 concludes.

## **2. U.S. Military Aid and Anti-American Terrorism**

To discuss how U.S. military aid may result in anti-American terrorism, we resort to a rational-economic model of terrorism. Seminal contributions to this model include Landes (1978), Sandler et al. (1983) and Enders and Sandler (1993). In short, the rational-economic model assumes that terrorists are rational actors who consider the expected costs and benefits of violent and non-violent behavior and, provided violence is the option that maximizes expected utility, employ terrorism as a means to achieve social or political goals (for surveys of the theoretical literature, see Schneider et al., 2015; Gaibulloev and Sandler, 2019). This rational-choice representation of terrorism yields three predictions, namely that (1) terrorism will decrease as the material costs of terrorism increase, (2) terrorism will increase as the benefits from terrorism increase (in the form of additional political influence, financial contributions from sympathizers, media attention, etc.), and (3) terrorism will increase as the opportunity costs of terrorism—i.e., utility generated from non-violence—decrease.

### **2.1 From U.S. Military Aid to Less Anti-American Terrorism**

Applying the rational-economic model of terrorism, we first develop the *policy-maker argument*. The PMA stresses that terrorism is more likely to emerge in countries characterized by low levels of state capacity. Low state capacity will reduce the material costs of terrorism and thus make violence a more attractive option. For instance, when a state's control of its territory is weak, it becomes less costly for terrorist organizations to operate due to lower expected levels of retaliation by the government (e.g., Lai, 2007). Indeed, there is evidence that weaker states tend to see more terrorism (e.g., Lai, 2007; Hendrix and Young, 2014; George, 2018). By strengthening local state capacity, military aid by the United States is expected to raise the material costs of operating a terrorist organization, ultimately lowering the level of terrorism that can be produced.

Governments of weak states may also have incentives to engage in negotiations with terrorist groups operating within their territory (Bapat, 2011). Assuming a rational calculus on the part of these governments, it may be less costly for them to arrive at an agreement with a terrorist group than to engage in a conflict that they may not be able to win militarily. For instance, a weak state's government may allow a terrorist group to operate from the state's territory in exchange for non-aggression against the local government. As a consequence of such tacit agreement, the terrorist group may use the state's territory to launch terrorist attacks against foreign actors (e.g., the United States) without threatening the survival of the weak state's government. This again ought to lead



to more terrorism by lowering the material costs of terrorism. However, it also creates an additional incentive to provide foreign military assistance: the provision of military aid may lead a weak state's government to forego negotiations when the benefits from aid are larger than the benefits from negotiations with the terrorists (Bapat, 2011).<sup>4</sup>

In sum, the *policy-maker argument* suggests that U.S. military aid bolsters local state capacity and increases local governments' territorial control, which in turn raises the operating costs of terrorism. In addition, it reduces local governments' incentives to negotiate with terrorists. If such mechanisms are relevant, we expect support for the following hypothesis:

*Hypothesis (H1): More U.S. military aid leads to less anti-American terrorism originating from the country receiving the aid.*

## **2.2 From U.S. Military Aid to More Anti-American Terrorism**

Existing empirical evidence on the causes of anti-American terrorism suggests that more U.S. military aid is associated with more anti-American terrorism (Neumayer and Plümper, 2011; see also Gries et al., 2015; Krieger and Meierrieks, 2015; Saiya et al., 2017), which runs counter to the PMA. Instead, the literature emphasizes the *strategic logic argument* to explain the positive link between aid and anti-American terrorism. We discuss this channel below. Additionally, we introduce a novel mechanism to explain positive effects of aid on anti-American terrorism: the *grievances channel*.

### **2.2.1 The Strategic Logic Channel**

The SLC stresses that it is the very beneficial effect of U.S. military aid on local state capacity that creates incentives for anti-American terrorism. Neumayer and Plümper (2011) consider a three-way interaction between a local government, a local terrorist opposition that wants to extract concessions from this government and a foreign actor (the United States) that provides military aid to the local government. The provision of military aid shifts the local balance of power in favor of the local government, thus representing an “effective brake” on the terrorists' goal of achieving

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<sup>4</sup> An example for this mechanism provided by Bapat (2011) is Yemen. This country was the staging ground for anti-American terrorism, most prominently the 2000 attack against the *USS Cole*. By providing military assistance, the United States was able to buy Yemen's loyalty in the fight against (anti-American) terrorism and prevent any agreement between the notoriously weak Yemeni government and Islamist militants operating within its territory.

concessions from the local government (Neumayer and Plümper, 2011: 5). Consequently, the local terrorist group may resort to anti-American terrorism, which may lead the U.S. to withdraw its support from the local government (e.g., due to political pressure from the American public) and thus shift the local balance of power in favor of the terrorist group (Neumayer and Plümper, 2011).

Applying the rational-economic model of terrorism, U.S. military aid will therefore make anti-American terrorism more likely because it creates additional benefits, primarily in form of an increased likelihood of terrorist success when anti-American terrorism reduces U.S. military aid. Additional incidental benefits from anti-American terrorism arise from the disproportionate amount of media attention this type of terrorism usually creates and the stronger peer acknowledgement it produces among potential terrorist sympathizers (Neumayer and Plümper, 2011: 6; see also Jetter, 2017).

### **2.2.2 The Grievances Channel**

We introduce an additional pathway from higher levels of military aid to more anti-American terrorism—the *grievances channel*—that affects the terrorists’ calculus by lowering the *opportunity costs of terrorism*. Indeed, a number of theoretical contributions argue that poor socioeconomic and political conditions will constrain socioeconomic and political participation and thus create *grievances* (e.g., poverty, discrimination) that make violence—as the alternative way to achieve such participation—comparatively more attractive (e.g., Blomberg et al., 2004; Kurrild-Klitgaard et al., 2006).

Bueno de Mesquita and Smith (2009) argue that the provision of aid yields benefits to the donor country, e.g., in the form of military and market access or a voting behavior favorable to the donor at international organizations.<sup>5</sup> While aid incurs costs for the recipient country as a consequence of making concessions to the donor (e.g., in form of a loss of political autonomy), the provision of monetary benefits may still make it worthwhile. In particular, aid may enable *rent-seeking behavior*, meaning that politicians in power and other interest groups will try to appropriate aid and exclude other social groups from it (for the case of economic aid, see, e.g., Svensson, 2000; Djankov et al., 2008). Rents due to military aid may incentivize corrupt behavior by politicians and

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<sup>5</sup> Indeed, evidence suggests that the allocation of U.S. foreign assistance is driven by U.S. strategic concerns as well as economic (e.g., trade benefits) and political (e.g. crucial votes at the United Nations) interests (e.g., Poe and Meernik, 1995; Dreher et al., 2008; Boutton and Carter, 2014).

bureaucrats to secure access to them. Furthermore, access to such rents may disincentivize investment into public goods that would curtail rent-seeking (e.g., Svensson, 2000). Consequently, local institutional quality in recipient countries will suffer.

Moreover, the recipient country usually has some leeway with respect to the *distribution* of the gains from aid. This makes it possible for the recipient country's politicians and bureaucrats as gatekeepers to create "winners" and "losers", with the former disproportionately benefitting by sharing the rents from aid. For the government, this is beneficial because the "winners" of the distribution process will be part of the *selectorate*, i.e., the pool of potential supporters necessary to form a winning coalition that keeps the government in power (e.g., Bueno de Mesquita and Smith, 2009). For instance, when the government uses U.S. military aid to expand its military, government armament contracts or additional jobs in the military may predominantly go to the selectorate. As another example, the recipient country may use U.S. military aid to supplement its own military spending, using associated savings to finance other projects that disproportionately benefit its supporters.<sup>6</sup>

Consequently, the provision of U.S. military aid creates grievances among the "losers" of the aid provision process, i.e., among those who (1) suffer from poorer institutions due to U.S. military aid and (2) have no direct or indirect (via governmental redistribution) access to the rents arising from this aid. Applying the rational-economic model of terrorism, for these "losers" the opportunity costs of terrorism are expected to decrease as non-violent economic and political participation becomes more constrained due to rent-seeking behavior (e.g., due to increased corruption). This in turn ought to make alternatives to non-violence more attractive to achieve sociopolitical change. In particular, we expect aggrieved "losers" to turn against the United States, blaming the United States for the political survival of the local government and unfavorable local conditions. Indeed, Tokdemir (2017) shows that political "losers" in the recipient countries of U.S. aid are more likely to express negative attitudes toward the U.S. as the amount of aid increases, while the "winners" view the U.S. more positively.

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<sup>6</sup> This refers to the issue of *aid fungibility*, i.e., the ability of the recipient country to spend categorical or targeted aid on non-targeted programs. Deger and Sen (1991) and Khilji and Zampelli (1994) find that military aid is as fungible as economic aid, so that military assistance by the United States may indeed also benefit the selectorate outside of the military sphere.

### 2.2.3 Hypothesis

In sum, U.S. military aid may (1) tip the balance of power between local governments and terrorist groups in favor of the former, consequently creating additional benefits from anti-American terrorism (SLC) and/or (2) affect the opportunity costs of anti-American terrorism in ways that make it more attractive (GC). If these channels are relevant, we expect support for the hypothesis:

*Hypothesis (H2): More U.S. military aid leads to more anti-American terrorism originating from the country receiving the aid.*

### 3. Data and Empirical Model

To empirically investigate how U.S. military aid affects anti-American terrorism, we use data for 173 countries between 1968 and 2014. The summary statistics are reported in Table 1. A country list is provided in the appendix.

Variable	N*T	Mean	Std. Dev.	Min.	Max.
Anti-American Terrorism (Location)	7,304	0.15	0.36	0	1
No. of Anti-American Terrorist Attacks (Location)	7,304	0.48	2.26	0	88
Anti-American Terrorism (Origin)	7,304	0.10	0.30	0	1
U.S. Casualties in Anti-American Terrorism (Location)	5,978	0.03	0.17	0	1
U.S. Casualties in Anti-American Terrorism (Victim)	5,978	0.02	0.14	0	1
U.S. Military Aid (1,000,000 \$US)	7,304	72.48	535.06	0	14,563.53
State Failure	7,304	0.57	1.59	0	13.5
Infant Mortality	7,090	76.83	74.68	2.3	384.3
Democracy	7,297	0.45	0.5	0	1
Population Size (in 1,000,000)	7,298	31.60	119.08	0.06	1,364.27
U.S. Economic Aid (1,000,000 \$US)	7,304	89.07	321.39	0	9,626.30
U.S. Troops	7,304	2,416.23	16,089.15	0	256,391
Military Capacity (PCA)	6,292	0	1.30	-0.52	22.25
Control of Territory	7,326	91.32	10.35	33.75	100
Equal Access	7,271	0.57	0.25	0.03	0.99
Equal Distribution of Resources	7,271	0.58	0.28	0.02	0.99
Public Sector Corruption	7,271	0.49	0.30	0.01	0.98
Rigorous and Impartial Public Administration	7,271	0.19	1.51	-3.69	4.46

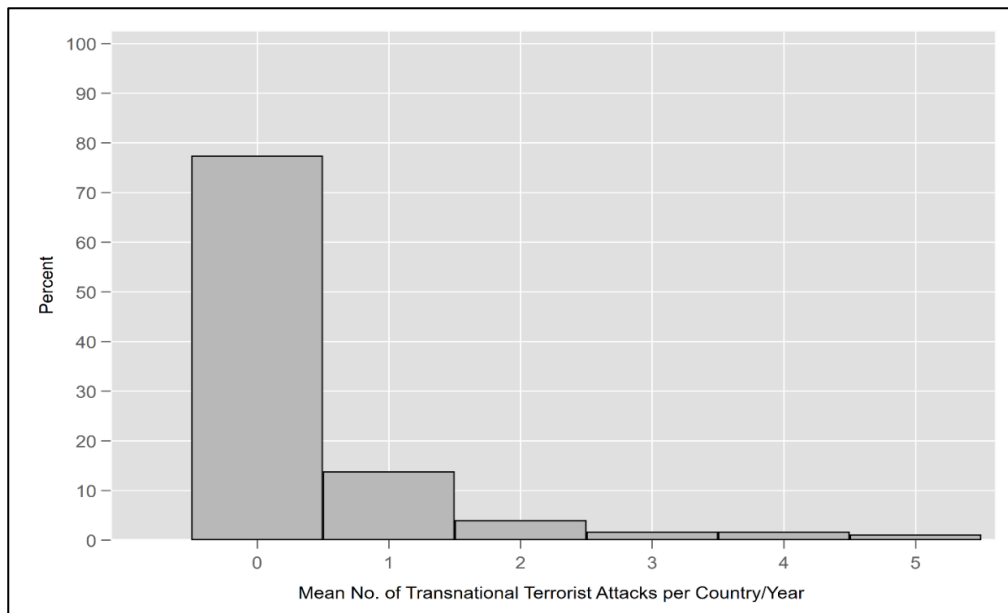
**Table 1: Summary Statistics**

### 3.1 Anti-American Terrorism

Data on terrorism come from the *International Terrorism: Attributes of Terrorist Events (ITERATE)* dataset (Mickolus et al., 2016) that defines transnational terrorism as “the use (or threat of use) of anxiety-inducing, extra-normal violence for political purposes by any individual or group (acting for or in opposition to established governmental authority) when such action is intended to influence the behavior of a target group wider than the immediate victims and when, through the

nationality or foreign ties of its perpetrators, its location, the nature of its victims or the mechanics of its resolution, and its ramifications transcend national boundaries” (Mickolus et al., 2016: 1).

Our dependent variable, *anti-American terrorism*, is measured by a binary variable that is equal to unity when a country-year pair sees at least one transnational terrorist attack against U.S. interests; it is equal to zero if there is no anti-American terrorist activity. Anti-American terrorist attacks may be directed at diplomatic (e.g., embassies), military, commercial or non-official (e.g., American tourists) targets.<sup>7</sup> As shown in Figure 1, anti-American terrorism is a rather rare event; most countries see between zero and one anti-American attack per year. Therefore, little information is lost when we use a dichotomous terrorism indicator. Rather, by using a binary dependent variable, we provide a conservative estimate of the effect of military aid on anti-American terrorism. However, as a robustness check, below we will also use alternative measures of anti-American terrorism such as the count of anti-American terrorist attacks per country-year.



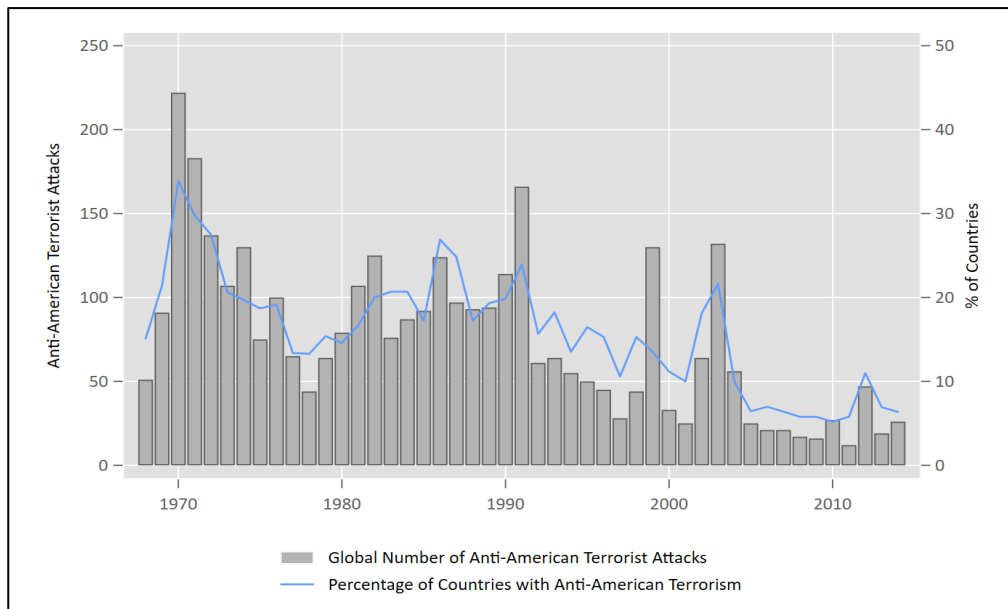
**Figure 1: Histogram of Anti-American Terrorism**

We use the *location definition* of transnational terrorism, where an attack is assigned to the terrorism venue country, i.e., the country in which the anti-American attack occurs. Potentially, the actual perpetrators of an anti-American terrorist attacks do not originate from the venue country

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<sup>7</sup> *ITERATE* excludes terrorist attacks against combatants (e.g., on U.S. troops that act as an occupying force in Iraq); however, it includes attacks against U.S. military forces that act as peacekeepers (e.g., during the 1983-1984 Lebanon intervention).

but from a third country, leading us to wrongly assign some cases.<sup>8</sup> However, in many cases the nationality of the perpetrator is not known; in fact, Abrahms and Conrad (2017: 279) report that only one in seven terrorist attacks is actually claimed. In addition, there may be multiple claims related to a single attack, again making it difficult to correctly assign an attack (Abrahms and Conrad, 2017). Using the location definition, we therefore avoid undercounting anti-American terrorism. As a robustness check, below we also use an alternative definition of anti-American terrorism. Figure 2 illustrates the patterns of anti-American terrorism for the countries in our sample. There are noticeable spikes in anti-American terrorism in the early 1970s, early 1990s and the mid-2000s, and relative lulls in the mid-1970s, mid-1990s and after 2005. Between 10% (after 2005) and over 30% (early 1970s) of all countries produced at least one anti-American terrorist attack per year, pointing to a large geographical and temporal variation in anti-American terrorism.



**Figure 2: Anti-American Terrorism, 1968-2014**

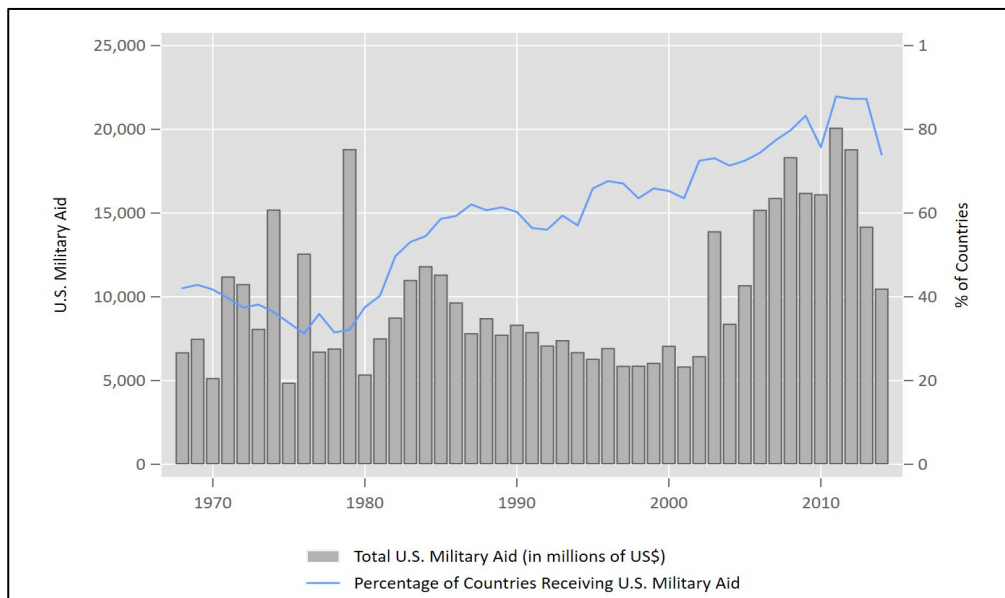
<sup>8</sup> For instance, in 1988 members of the *Japanese Red Army* attacked a U.S. military recreational club in Naples, Italy. Using the location definition of transnational terrorism, this attack will be assigned to Italy.

### 3.2 U.S. Military Aid

USAID (2016) defines military assistance as aid that primarily benefits a recipient government’s armed forces or that subsidizes or substantially enhances local military capability. In detail, the United States provides military aid for foreign military financing (*milfin*), foreign military training (*miltrain*), counter-narcotics initiatives (*mildrug*) and further aid programs (*milother*), the latter including aid for peacekeeping and the cooperative threat reduction initiative, among others (USAID, 2016). Most military aid is spent on foreign military financing (approximately 55% of all aid). Our main explanatory variable, *U.S. military aid*, is the sum of all individual aid programs provided to country *i* at year *t*:

$$aid_{it} = milfin_{it} + miltrain_{it} + mildrug_{it} + milother_{it} \quad (1)$$

Military aid is measured in millions of constant 2014 US\$. The data is drawn from the *United States Agency for International Development* (USAID, 2016). As a robustness check, we also use (i) logged U.S. military aid (with unity added to allow for zero aid per country-year pair) to accommodate outliers and (ii) U.S. military aid divided by population size to account for potential scale effects. Figure 3 illustrates the global patterns of U.S. military aid over our observation period.



**Figure 3: U.S. Military Aid, 1968-2014**

There are some noticeable spikes in military aid during some years in the 1970s and 1980s and after 2005, with a relative lull after the end of the Cold War. There is a clear trend towards more countries receiving at least some U.S. military aid. For instance, in the 1970s 35% to 40% of all

countries received military aid, while after the year 2000 between 70% and 80% of all countries received at least some aid in a given year.

### 3.3 Empirical Model

#### 3.3.1 Baseline Linear Probability Model

To examine the effect of U.S. military aid on anti-American terrorism, we estimate the model:

$$terror_{it} = \beta * aid_{it-1} + \gamma' * X'_{it-1} + \varepsilon_{it} \quad (2)$$

In equation (2), *terror* is an indicator variable that is equal to unity if country *i* experiences at least one incident of anti-American terrorism in year *t*. Our independent variable of interest is *aid*, i.e., U.S. military aid in millions of US\$. In addition to a well-behaved error term ( $\varepsilon$ ), we also include a vector of additional controls (*X'*) discussed below.

Potentially, all variables of interest may be affected by cross-sectional dependence. Cross-sectional dependence refers to the interdependency of variables between countries, which may, for example, be due to spillover effects. If not accounted for, cross-sectional dependence in panel data may lead to correlation in the residuals, consequently affecting the validity of inference (Sarafidis and Wansbeek, 2012). Indeed, using the test for cross-sectional dependence of Pesaran (2004), we find that cross-sectional dependence is present for almost all variables employed in our analysis (results reported in Supplementary Table 1). Therefore, we employ standard errors developed by Driscoll and Kraay (1998) which are not only robust to heteroskedasticity and autocorrelation, but also to general forms of cross-sectional dependence.

We estimate equation (1) as a *linear probability model (LPM)* using the OLS estimator. For our analysis, the LPM has a number of advantages over alternatives that may also be employed when the dependent variable is a binary (such as the Probit model), including the possibility to account for various fixed effects without encountering an incidental parameter problem and the availability of standard errors that are robust to cross-sectional dependence (for a more general discussion of advantages of the LPM over non-linear models, see Wooldridge, 2002; Angrist and Pischke, 2009).

#### 3.3.2 Two-Stage Instrumental-Variable Model

A major concern when estimating equation (2) is *endogeneity*. Apart from omitted variables or measurement error, endogeneity may be due to reverse causality or joint determination. That is,



U.S. military aid may also respond to anti-American terrorism (e.g., Bapat, 2011; Boutton and Carter, 2014). For instance, anti-American terrorism in recipient countries may trigger the provision of additional U.S. military aid to foster local state capacity to curtail the production of anti-American terrorism in future periods. In this case, estimating equation (2) would yield upwards biased estimates of the effect of military aid on anti-American terrorism. Conversely, the results of equation (2) would be downward biased if additional anti-American terrorism from a recipient country leads to a reduction of U.S. military aid. For instance, the United States may reduce aid to pressure the aid-receiving country into intensifying its fight against terrorism.

To address these concerns, we estimate a *two-stage instrumental-variable system* as follows:

$$aid_{it} = \alpha * global\ aid_{it} + \delta' * X'_{it} + \varepsilon_{it} \quad (3a)$$

$$terror_{it} = \beta * aid_{jit-1} + \gamma' * X'_{it-1} + \varepsilon_{it} \quad (3b)$$

Our instrumental variable (IV) is *global aid* which is defined as follows:

$$global\ aid_{it} = [smilfin_i * (milfin_{gt} - milfin_{rt})] + [smiltrain_i * (miltrain_{gt} - miltrain_{rt})] + [smildrug_i * (mildrug_{gt} - mildrug_{rt})] + [smilother_i * (milothers_{gt} - milothers_{rt})] \quad (4)$$

That is, the IV is the respective *global amount* of U.S. military aid (subscript *g*) for foreign military financing, training, counter-narcotics and other programs, from which we subtract the respective *regional amount* of aid (subscript *r*), i.e., aid provided to the country of interest and its neighborhood.<sup>9</sup> We weigh these four differences by the *relative importance* the specific dimensions of aid have to the respective country of interest in year *t*, which is indicated by the share of aid associated with a specific program to the total amount of military aid a country receives (via *smilfin*, *smiltrain*, *smildrug* and *smilother*). Finally, we sum up these weighted differences, creating an IV that varies over time and is distinct for each country in the sample.

Our idea behind this IV is to exploit quasi-random variation in the global patterns of U.S. military aid to explain local levels of U.S. aid (3a) and consequently use this information to estimate the

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<sup>9</sup> Neighboring countries are located in the same region as the country of interest. The regions we consider are the Caribbean; Central Asia; Eastern Africa; Eastern Asia; Eastern Europe; Middle Africa; North and Central America; Northern Africa; Northern Europe; Oceania; South America; South-Eastern Asia; Southern Africa; Southern Asia; Southern Europe; Western Africa; Western Asia; and Western Europe.

causal effect of aid on anti-American terrorism (3b). We argue that the global patterns of the various forms of U.S. military aid are determined by economic, political and geo-strategic considerations *within the United States*. For instance, global levels of U.S. military aid may be affected by budgetary considerations in the United States, the relative political power of hawkish/dovish or isolationist/internationalist policymakers, the influence of the American military-industrial complex (which may lobby for military aid to bolster foreign sales) and increased illicit drug consumption in the United States (which may affect U.S. counter-narcotics aid).

We expect our instrument to be relevant as recipient countries will benefit from a global increase in U.S. military aid (or lose due to corresponding decreases in aid). At the same time, we also expect the instrument to be exogenous because aid recipient countries have no leverage to influence *global* U.S. military aid patterns. Furthermore, by excluding information on U.S. aid to proximate countries when calculating the IV, we prevent the influence of “neighborhood effects”. Our IV-approach is inspired by earlier approaches (e.g., Autor, 2013) that similarly instrument local flows with global to other parts of the world. For instance, Autor et al. (2013) analyze the effect of Chinese imports on U.S. labor markets, instrumenting Chinese imports to the U.S. via Chinese imports to other high-income countries, with the latter being driven by China's lowering of trade barriers and dismantling of central planning and thus exogenous to developments within the U.S.

### 3.3.3 Controls

Depending on the specification, the vector of controls ( $X'$ ) consists of the following variables:

In the parsimonious specification,  $X'$  only includes *country-fixed effects* and *year-fixed effects*, which account for unobserved (time-invariant) heterogeneity as well as common shocks and trends (e.g., due to the end of the Cold War). For instance, geographical distance to the United States may be an important time-invariant determinant of anti-American terrorism by impacting the costs of anti-American terrorist attacks (Neumayer and Plümper, 2011).

For the baseline model, we interact the year-fixed effects with regional dummies<sup>10</sup> to account for *region-specific trends*. Furthermore,  $X'$  now also includes a set of confounders, including (i) a

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<sup>10</sup> We include regional dummies for East Asia and the Pacific, Eastern Europe, Western Europe, the former Soviet Union, Sub-Saharan Africa, the Americas as well as Northern Africa and the

measure indicating *state failure* (i.e., incidences of civil wars, coup d'états and genocides/politicides) in an aid-receiving country, drawn from the *Center for Systemic Peace*,<sup>11</sup> (ii) *infant mortality* as a measure of economic development as well as (iii) (logged) *population size* to control for scale effects, with both variables drawn from the *World Development Indicators* (World Bank, 2016) and (iv) a dichotomous *democracy* measure drawn from Bjørnskov and Rode (2020).

In some specifications, we also control for a country's *level of U.S. economic aid* and the *number of U.S. troops stationed in the recipient country*. We do so because regular recipients of U.S. military aid also tend to receive more economic assistance and U.S. troop contingents. However, U.S. military aid does not include payments for U.S. troops in aid-receiving countries. The economic aid data are from USAID (2016). Data on U.S. troops are from an update of Kane (2012).

#### 4. Main Results

We report our main OLS and IV-OLS results in Table 2. First, we consider the OLS estimates. Regardless of how military aid is operationalized and which vector of controls is considered, we almost always find that more U.S. military aid is linked to a greater likelihood of anti-American terrorism. The only exception to this result is when aid is measured in per capita terms, where we find no statistically significant effect, even though the regression coefficient remains positive. This result speaks to *H2* and earlier findings in the literature that also report a positive association between U.S. military aid and anti-American terrorism (Neumayer and Plümper, 2011; see also Gries et al., 2015; Krieger and Meierrieks, 2015; Saiya et al., 2017; Meierrieks and Gries, 2019). At the same time, it provides evidence against *H1*.

The estimated effect sizes, however, are rather small. Using the baseline specification (specification (3) of Table 2), we find that an increase of U.S. military aid by one million US\$ increases the likelihood of the country producing anti-American terrorism by 0.01%. Thus,

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Middle East. As reported in the appendix (Supplementary Table 2), dropping the regional trends from the baseline model does not affect our results.

<sup>11</sup> See the *Political Instability Task Force Dataset*, available at <http://www.systemicpeace.org/inscrdata.html>.

doubling U.S. military aid (approximately 72.5 million US\$ at the sample mean) is expected to increase this likelihood by 0.725%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
U.S. Military Aid $t-1$	0.0001 (0.000)***	0.0006 (0.0002)***	0.0001 (0.000)***	0.0006 (0.0001)***	0.0003 (0.0002)	0.0008 (0.0003)**				
(ln) U.S. Military Aid $t-1$							0.0387 (0.0064)***	0.0414 (0.0076)***		
Per Capita U.S. Military Aid $t-1$									0.0002 (0.0002)	0.0096 (0.0022)***
State Failure $t-1$			0.0195 (0.0039)***	0.0206 (0.0052)***	0.0189 (0.0038)***	0.0214 (0.0060)***	0.0197 (0.0036)***	0.0197 (0.0004)***	0.0194 (0.0038)***	0.0266 (0.0053)***
Infant Mortality $t-1$			-0.0001 (0.0002)	0.0005 (0.0004)	-0.0002 (0.0002)	0.0008 (0.0006)	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0002 (0.0002)	0.0016 (0.0008)*
Democracy $t-1$			0.0263 (0.0125)**	0.0586 (0.0164)***	0.0257 (0.1269)**	0.0660 (0.0228)***	0.0288 (0.0117)**	0.0288 (0.0117)**	0.0208 (0.0120)*	0.0507 (0.0227)**
Population Size $t-1$			0.040 (0.0272)	0.0031 (0.0410)	0.0147 (0.0279)	0.0431 (0.0417)	0.0317 (0.0274)	0.0307 (0.0283)	0.0454 (0.0270)*	-0.0436 (0.0641)
U.S. Economic Aid $t-1$					0.0001 (0.000)***	-0.0003 (0.0002)				
U.S. Troops $t-1$					0.0001 (0.000)***	-0.0001 (0.0001)				
<i>First-Stage Regression Results</i>										
Global Military Aid $t-1$		0.016 (0.004)***		0.016 (0.004)***		0.010 (0.004)***		0.001 (0.000)***		0.001 (0.000)***
Effective F-Statistic		14.57		18.48		7.84		69.52		21.71
Anderson-Rubin (AR) 90% Confidence Intervals		[0.0004; 0.0010]		[0.0004; 0.0009]		[0.0004; 0.0020]		[0.0272; 0.0550]		[0.0063; 0.0147]
AR Wald Test-Statistic (Pr. $>\chi^2$ )		9.48 (0.00)***		8.99 (0.00)***		8.58 (0.00)***		8.99 (0.00)***		8.99 (0.00)***
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	7,134	7,134	6,914	6,914	6,914	6,914	6,914	6,914	6,914	6,914

Notes: Constant not reported. Fixed-effects and instrumental-variable fixed-effects estimates reported. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Table 2: Baseline Fixed-Effects and Instrumental-Variable Fixed-Effects Estimates**

Table 2 also reports the IV-results. Here, we again find that military aid exerts a positive effect on anti-American terrorism, implying evidence in favor of *H2* but not *H1*. Importantly, this effect is several times *larger* compared to the non-IV estimates reported. Thus, our results suggest that earlier findings such as by Neumayer and Plümper (2011)—from non-IV settings—are downward biased and underestimate the role of U.S. military aid in anti-American terrorism. Potentially, this may be due to classical measurement error, which leads to attenuation bias. Alternatively, the bias may result from simultaneity, where the United States reduces military aid to countries that generate anti-American terrorism. For instance, this may be due to bargaining between the United States and a potential aid recipient, with the U.S. withholding aid (which is desired by rent-seekers in the recipient country) in order to extract additional policy concessions (a tougher stance on anti-American terrorism) from the recipient country. As an alternative explanation, the United States may reduce aid due to political pressure within the U.S., e.g., as it may be politically costly to provide aid to countries that host anti-American resentment.

Considering economic significance, using the baseline specification (specification (4) of Table 2), we find that a one-unit increase in U.S. military aid (one million US\$) increases the likelihood of the aid-receiving country to generate at least one incident of anti-American terrorism by 0.06%. At the sample mean, the incidence of anti-American terrorism is 15% (0.15) and U.S. military aid is 72.5 million US\$. Thus, at the sample mean the effect of 0.06% implies that doubling of U.S. military aid (to approximately 145 million US\$) leads to a 4.4 percentage point increase in the incidence of anti-American terrorism, which in turn is approximately 30% of the sample mean.

In order for the IV-estimates to be trustworthy and interpretable in a causal way, they ought to pass a number of diagnostic checks. The first-stage regression results are consistently favorable to this: for one, the instrumental-variable estimates are always highly significant, yielding effective  $F$ -statistics that easily surpass the usual threshold of  $F=10$  that would signal instrument weakness. The estimated effect of the instrumental variable on U.S. military aid also has the expected (positive) sign, indicating that higher levels of global U.S. military aid (corrected for neighborhood effects and the relative importance of certain aid flows) result in higher levels of local military aid. Relying on weak-instrument robust inference also yields satisfactory results (for an introduction to fully robust inference with weak instruments, see Stock et al., 2002). That is, even in case of instrument weakness we find that more U.S. military aid increases the likelihood of the aid-receiving country to generate anti-American terrorism, with the estimated confidence intervals being very similar to the standard IV-estimates and firmly indicating statistical significance at conventional levels.

## 5. Robustness and Extensions

### 5.1 Additional Confounders

As a first robustness check, we add further confounders to our baseline model. These include (1) a *lagged dependent variable*, (2) *total development aid* as a share of gross national income (*WDI* data), (3) a dummy variable indicating whether an aid-receiving country is in a *collective defense agreement with the United States*,<sup>12</sup> (4) a dummy indicator measuring whether an aid-receiving country is involved in an *international war*, using data from the *Center for Systemic Peace*, and (5)

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<sup>12</sup> Alliances with the U.S. include *NATO*, *ANZUS*, *SEATO*, the *Rio Pact* as well as further bilateral U.S. alliances with Japan, South Korea, the Philippines and Pakistan. This variable varies over time, e.g., as countries join *NATO* or *SEATO* was disbanded.

a *globalization index* drawn from the *KOF Swiss Economic Institute*.<sup>13</sup> In further specifications, we replace infant mortality with (logged) *per capita income* (WDI data) as an alternative economic development measure and the dichotomous democracy variable with a continuous *electoral democracy index* from the *VDEM Dataset* (Coppedge et al., 2019).

As reported in the appendix (Supplementary Table 2), these robustness checks do not affect our baseline IV-findings, especially with respect to the role of U.S. military aid in anti-American terrorism. Effect sizes are always comparable to our baseline finding.

## 5.2 Alternative Dependent Variables

We extract several alternative dependent variables from *ITERATE*. First, we use the count of anti-American terrorist attacks (location definition) per country-year pair. Second, we weigh this count by local population size to account for scale effects. Jetter and Stadelmann (2019) show that measuring terrorism in per capita terms may yield different empirical results compared to measuring terrorism in absolute terms. Third, we employ a binary terrorism variable using the *country of origin definition* of transnational terrorism. Here, an anti-American attack is assigned to the country of origin of the terrorist perpetrator or perpetrating group, regardless of the venue country of the anti-American terrorist attack. As noted above, a major problem with this approach is that it cannot properly account for attacks that are not claimed or claimed by multiple terrorist organizations, a feature that tends to be the norm in transnational terrorism (Abrahms and Conrad, 2017). Fourth, as measures of *terrorism ferocity* we use a dichotomous variable that indicates whether a country-year observation saw anti-American terrorism with at least one American victim, using both the location and country of origin definition of transnational terrorism. Here, victims refers to Americans who are wounded or killed in a transnational terrorist incident. *ITERATE* reports the number of American victims only from 1978 onwards, so we estimate the effect of U.S. military aid for the 1978-2014 period only when using these alternative dependent variables. Finally, we construct two *terrorism indices* using the location and country of origin definition of terrorism. Following Eckstein and Tsiddon (2004), these indices are defined as the natural logarithm of the sum of anti-American attacks and American victims from these attacks per

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<sup>13</sup> See <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.

country-year observation, with unity being added to allow for zero observations. Again, we only use the 1978-2014 data when constructing the indices.

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Baseline	No. of Attacks (Location)	No. of Attacks Per Capita (Location)	Binary Terrorist Attack (Origin)	Binary U.S. Casualties (Location)	Binary U.S. Casualties (Origin)	Terrorism Index (Location)	Terrorism Index (Origin)
U.S. Military Aid $t-1$	0.0006 (0.0001)***	0.0022 (0.0008)***	0.3115 (0.1455)**	0.0004 (0.0001)***	0.0002 (0.0001)*	0.0002 (0.0001)*	0.0006 (0.0002)***	0.0005 (0.0002)***
State Failure $t-1$	0.0206 (0.0052)***	0.1173 (0.0340)***	27.9985 (7.8751)***	0.0223 (0.0055)***	0.0123 (0.0032)***	0.0104 (0.0037)***	0.0257 (0.0057)***	0.0268 (0.0048)***
Infant Mortality $t-1$	0.0005 (0.0004)	0.0023 (0.0016)	-0.1753 (0.2709)	0.0006 (0.0003)**	0.0004 (0.0002)**	0.0002 (0.0002)	0.0007 (0.0004)*	0.0005 (0.0003)
Democracy $t-1$	0.0586 (0.0164)***	0.0040 (0.1764)	22.6920 (22.5449)	0.0505 (0.0124)***	0.0118 (0.0071)*	0.0106 (0.0055)*	0.0333 (0.0107)***	0.0305 (0.0079)***
Population Size $t-1$	0.0031 (0.0410)	0.3760 (0.1355)***	-103.8963 (52.0244)**	0.0390 (0.0283)	0.0395 (0.0327)	0.0182 (0.0248)	-0.0339 (0.0581)	-0.0004 (0.0431)
<i>First-Stage Regression Results</i>								
Global Military Aid $t-1$	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.014 (0.005)***	0.014 (0.005)***	0.014 (0.005)***	0.014 (0.005)***
Effective F-Statistic	18.48	18.48	18.56	18.48	7.19	7.19	7.19	7.19
<i>Weak Instrument Robust Test and Inference</i>								
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0004; 0.0009]	[0.0007; 0.0038]	[0.0649; 0.6353]	[0.0002; 0.0008]	[0.0001; 0.0005]	[0.0001; 0.0005]	[0.0004; 0.0011]	[0.0002; 0.0009]
AR Wald Test-Statistic (Pr. $>\chi^2$ )	8.99 (0.00)***	4.42 (0.04)**	3.85 (0.04)**	7.96 (0.00)***	2.73 (0.09)*	2.91 (0.09)*	7.01 (0.00)***	5.51 (0.02)**
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	6,914	6,914	6,914	6,914	5,858	5,858	5,858	5,858
Notes: Constant not reported. Instrumental-variable (4) to (8) use data for the 1978-2014 period because the respective dependent variables are not available before 1978. Driscoll-Kraay standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01.								

**Table 3: Alternative Dependent Variables**

Our results are reported in Table 3. In short, regardless of which alternative dependent variable we employ, we always find that more U.S. military aid leads to a higher likelihood of the aid-receiving country to produce anti-American terrorism. The associated regression diagnostics always indicate that the IV-results are sound.<sup>14</sup> The findings of Table 3 suggest that our results are not sensitive to the choice of the dependent variable.

### 5.3 Sub-Samples

Next, we study whether specific world regions drive our results. In detail, we first drop all OECD countries from the sample. The ill effects of U.S. military aid may be less pronounced in these countries as they are more developed and democratic. Second, we successively drop from our sample all Middle Eastern and Northern African, Latin American and sub-Saharan African

<sup>14</sup> Using the reduced sample (1978-2014), the instrument does not surpass the threshold of  $F=10$  that would signal instrument weakness. However, the reported weak-instrument inference diagnostics and results are in line with the two-stage regression results that use this potentially weak instrument. This suggests that our inference is indeed valid.

countries. Third, we successively drop from our sample countries that never produce anti-American terrorism (roughly 25% of our sample) as well as countries that received very high amounts of aid (e.g., Israel, Egypt, Greece), or where a large number of U.S. troops were stationed (e.g., Germany, Iraq, Afghanistan). In doing so, we expect to reduce the effect of influential outliers on our regression results.

As reported in the appendix (Supplementary Table 3), there is no evidence that dropping data from specific world regions that saw especially low/high levels of U.S. military aid or high levels of anti-American terrorist activity affects our findings. There is also little evidence that dropping potential outliers (e.g., countries that received very high amounts of military aid) matters.

#### 5.4 Alternative IV-Approach

We also resort to an alternative instrumental variable approach, estimating a series of two-stage instrumental-variable systems of the following form:

$$aid_{it} = \alpha * (UScon_{jt-1} * \overline{P(Aid)_t}) + \delta' * X'_{it} + \varepsilon_{it} \quad (5a)$$

$$terror_{it} = \beta * aid_{it-1} + \gamma' * X'_{it-1} + \varepsilon_{it} \quad (5b)$$

Our alternative IV-approach is inspired by Nunn and Qian (2014) and Dreher et al. (2019).<sup>15</sup> In detail, our IV is the interaction of specific economic conditions in the United States (*UScon*) and a recipient country's average probability of receiving U.S. military aid (*P(Aid)*). Accounting for cross-country variation in the IV, the average probability to receive military aid is defined as the fraction of years that a country receives any U.S. military aid. Accounting for time-series variation in the IV, the economic conditions in the United States we consider are (1) *U.S. income inequality* (measured by the Gini coefficient) and (2) *U.S. redistribution* (measured by the share of social security transfers to total GDP). Data on income inequality comes from the *University of Texas Inequality Project*,<sup>16</sup> while data on redistribution is drawn from the *Comparative Political Data Set* of Armingeon et al. (2019).

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<sup>15</sup> Nunn and Qian (2014) estimate the effect of U.S. food aid on domestic conflict in recipient countries. Dreher et al. (2019) assess the effect of economic aid on the “production” of refugees in aid-receiving countries.

<sup>16</sup> The *University of Texas Inequality Project* can be accessed at <https://utip.lbj.utexas.edu/data.html>.



Both U.S. inequality and redistribution are plausibly exogenous to anti-American terrorism in foreign countries (instrument exogeneity); however, we expect them to reduce the amount of military aid provided to foreign countries (instrument relevance). Higher levels of inequality reduce aid-giving through their effect on the position of the median voter: as inequality increases, the median voter is more likely to be (relatively) poor; in turn, this increases the likelihood that domestic redistribution is implemented. Due to budget constraints, emphasizing domestic redistribution ought to lead to a deprioritization of aid (i.e., international redistribution).<sup>17</sup> Indeed, Chong and Gradstein (2008) show that higher levels of income inequality are associated with lower levels of foreign aid provided at the country level. Similarly, as a direct measure of redistribution we use the share of social security transfers to U.S. GDP. Again, we expect more domestic redistribution to result in fewer resources being available for foreign policy measures, therefore being negatively correlated with U.S. military aid.

As in Nunn and Qian (2014) and Dreher et al. (2019), our alternative two-stage IV-approach is similar to a difference-in-difference estimation strategy, with the first-stage regression (5a) comparing the receipt of U.S. military aid in countries that frequently receive military aid with those that do not (as indicated by  $P(Aid)$ ), in years with low levels of income inequality relative to years with higher levels of inequality or redistribution. The identifying assumption is that anti-American terrorism in countries with differing probabilities of receiving military aid will not be affected differently by changes in U.S. income inequality or redistribution other than via the impact of military aid.<sup>18</sup>

We report our results using the alternative IVs in Table 4. Regardless of which alternative IV we employ, we can corroborate our baseline finding. More U.S. military aid leads to a higher likelihood of aid-receiving countries to produce anti-American terrorism. In fact, in terms of economic

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<sup>17</sup> For our sample, the correlation between the U.S. Gini coefficient and our redistribution measure (social security transfers) is indeed very high and positive ( $r=0.91$ ,  $p=0.00$ ), implying that more inequality is associated with more redistribution. This is also shown graphically in the appendix (Supplementary Figure 1).

<sup>18</sup> For this assumption more likely to hold, we also control for incumbency of a *Democratic president*, *U.S. turnout in federal elections* and the *U.S. unemployment rate* in addition to our baseline controls; all variables are interacted with  $P(Aid)$  (all data from Armingeon et al., 2019). We also control for a country's *average level of U.S. economic aid* and the *average number of U.S. troops stationed in the recipient country* (both variables interacted with the year-fixed effects).

substantiveness, the estimated effects are very close to our IV-estimates reported in Table 2. Reassuringly, the associated IV-regression diagnostics and first-stage results always indicate that the results of Table 4 are trustworthy. In particular, the first-stage regression results imply that increases in income inequality and redistribution in the U.S. indeed lead to less military aid.

	(1)	(2)	(3)	(4)
Instrumental Variable	Gini Coefficient	Gini Coefficient	Social Security Transfers (% of GDP)	Social Security Transfers (% of GDP)
U.S. Military Aid $t-1$	0.0007 (0.0001)***	0.0007 (0.0001)***	0.0007 (0.0001)***	0.0007 (0.0001)***
State Failure $t-1$		0.0199 (0.0053)***		0.01999 (0.0052)***
Infant Mortality $t-1$		0.0006 (0.0003)**		0.0006 (0.0003)**
Democracy $t-1$		0.0683 (0.0170)		0.0650 (0.0170)***
Population Size $t-1$		-0.0551 (0.0485)		-0.0488 (0.0465)
<i>First-Stage Regression Results</i>				
Coefficient for Respective IV $t-1$	-70.58 (12.90)***	-79.51 (14.04)***	-67.31 (7.66)***	-74.76 (7.28)***
Effective F-Statistic	29.92	32.06	77.26	105.40
<i>Weak Instrument Robust Test and Inference</i>				
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0005, 0.0010]	[0.0003, 0.0008]	[0.0005, 0.0010]	[0.0005, 0.0014]
AR Wald Test-Statistic (Pr.> $\chi^2$ )	7.36 (0.00)***	7.44 (0.00)***	6.66 (0.00)***	6.54 (0.01)**
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes
Democratic President*P(Aid)	Yes	Yes	Yes	Yes
U.S. Electoral Turnout*P(Aid)	Yes	Yes	Yes	Yes
U.S. Unemployment Rate*P(Aid)	Yes	Yes	Yes	Yes
U.S. Economic Aid (Average)*Year FE	Yes	Yes	Yes	Yes
U.S. Troops (Average)*Year FE	Yes	Yes	Yes	Yes
No. of Observations	7,131	6,914	7,131	6,914
Notes: Constant not reported. P(Aid)=Average probability that country receives any military aid per year. Driscoll-Kraay standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01.				

**Table 4: Alternative Instrumental Variables**

## 5.5 Heterogeneity over Time

Our observation period includes two events that could be highly relevant to the patterns of U.S. military aid-giving and anti-American terrorism: the *end of the Cold War* and the *9/11 terrorist attacks* on Washington, D.C. and New York. For instance, the end of the Cold War saw a shift from anti-American terrorism being primarily committed by left-wing groups to Islamist terrorist

groups, a trend that became more pronounced after 2001 and was accompanied by a geographical shift in terrorism (from Western Europe and Latin America to the Middle East, Asia and Africa).

Does the relationship between U.S. military aid and anti-American terrorism differ between the Cold War and post-Cold War era and between the pre-9/11 and post-9/11 period, respectively? To answer this, we amend our IV-approach outlined in equations (3a) and (3b) with interaction effects of the military aid variable and a dummy variable that is (1) equal to unity for the Cold War era (1968-1989) and zero otherwise or (2) equal to unity for the post-9/11 era (2002-2014) and zero otherwise. Following Nunn and Qian (2014), we create instruments for these interaction terms by also interacting our instrumental variable (global aid) with the era-specific dummy variables.<sup>19</sup>

We report our results in Table 5. First, we find that the Cold War era does not influence our main findings. That is, more U.S. military aid leads to more anti-American terrorism before and after the end of the Cold War, regardless of how aid is operationalized and whether outliers are dropped from the analysis. The effects before and after the end of the Cold War are also comparable in size.

Second, when comparing the pre- and post-9/11 era, we find evidence that U.S. military aid no longer leads to anti-American terrorism after 2001. However, this finding (specification (1), Panel B, Table 5) is likely due to a weak instrument problem, as the instrument associated with the interaction effect is not meaningful. This instrumentation problem is possibly due to the influence of outliers, i.e., countries that receive more than 200 million US\$ in military aid per year.<sup>20</sup> Once we drop these countries (specification (2), Panel B, Table 5), more military aid again results in more anti-American terrorism; the associated first-stage  $F$ -statistics are now much larger. Similarly, employing U.S. military aid in logged form (which outright reduces the influence of

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<sup>19</sup> Note that the direct effects of the Cold War and post-9/11 dummies are absorbed by the year-fixed effects. However, dropping the year-fixed and regional trends instead and re-estimating all models with the Cold War and post-9/11 dummies, respectively, yields results similar to those reported in Table 5.

<sup>20</sup> These countries are Afghanistan, Egypt, Greece, Iraq, Israel, Jordan, South Korea, Russia and Turkey. Potentially, our instrument becomes weak because the flow of military aid to these countries is rather independent from global patterns of U.S. military aid in the post-9/11 era. For instance, since the early 2000s Afghanistan has received military aid through special programs (e.g., the *Afghanistan Security Force Fund*), which may not be swayed by trends in U.S. military aid in other parts of the world, weakening our IV and aggravating identification).

outliers) shows that more U.S. military aid leads to more anti-American terrorism for both the full and reduced sample (specifications (3) and (4), Panel B, Table 5).

<i>Panel A: Cold War Era and Post-Cold War Era (1968-1989 vs. 1990-2014)</i>				
	(1)	(2)	(3)	(4)
Sample	Full	Full	Reduced	Reduced
Measurement of U.S. Military Aid	Aid	ln(Aid)	Aid	ln(Aid)
U.S. Military Aid $\gamma_1$	0.0007 (0.0003)**	0.0322 (0.0085)***	0.0023 (0.0008)***	0.0335 (0.0114)***
U.S. Military Aid $\gamma_1$ * Cold War	-0.0001 (0.0003)	0.01270 (0.0097)	-0.0004 (0.0009)	0.0096 (0.0124)
Effect of U.S. Military Aid during Cold War	0.0007 (0.0003)**	0.0322 (0.0085)***	0.0023 (0.0008)***	0.0335 (0.0114)***
Effect of U.S. Military Aid after Cold War	0.0005 (0.0001)***	0.0449 (0.0091)***	0.0018 (0.0005)***	0.0430 (0.0099)***
<i>First-Stage and Weak-Instrument Diagnostics</i>				
First-Stage F-Statistics	19.49; 14.30	33.46; 21.98	8.99; 9.10	30.95; 21.54
AR Wald Test-Statistic (Pr. $>\chi^2$ )	20.52 (0.00)***	20.52 (0.00)***	21.60 (0.00)***	21.60 (0.00)***
Baseline Controls	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes
No. of Observations	6,914	6,914	6,529	6,529
<i>Panel B: Pre-9/11 and Post /11 Era (1968-2000 vs. 2001-2014)</i>				
	(1)	(2)	(3)	(4)
Sample	Full	Full	Reduced	Reduced
Measurement of U.S. Military Aid	Aid	ln(Aid)	Aid	ln(Aid)
U.S. Military Aid $\gamma_1$	0.0006 (0.0001)***	0.0442 (0.0085)***	0.0019 (0.0005)***	0.0426 (0.0090)***
U.S. Military Aid $\gamma_1$ * Post-9/11	0.0001 (0.0005)	-0.0127 (0.0098)	0.0001 (0.0010)	-0.0105 (0.0140)
Effect of U.S. Military Aid before 9/11 Era	0.0006 (0.0001)***	0.0442 (0.0085)***	0.0019 (0.0005)***	0.0426 (0.0090)***
Effect of U.S. Military Aid during 9/11 Era	0.0007 (0.0005)	0.0315 (0.0102)***	0.0020 (0.0010)**	0.0321 (0.0145)**
<i>First-Stage and Weak-Instrument Diagnostics</i>				
First-Stage F-Statistics	21.59; 0.64	34.49; 13.45	9.27; 7.09	32.09; 15.86
AR Wald Test-Statistic (Pr. $>\chi^2$ )	17.37 (0.00)***	17.37 (0.00)***	18.06 (0.00)***	18.06 (0.00)***
Baseline Controls	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes
No. of Observations	6,914	6,914	6,529	6,529

Notes: Constant not reported. First-stage F-statistics associated with instrumental variable and its interaction with the era-specific dummy variable. Reduced sample does not include the following countries: Afghanistan, Egypt, Greece, Iraq, Israel, Jordan, South Korea, Russia and Turkey. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Table 5: Heterogeneity over Time**

## 5.6 Effects on American Allies

Potentially, U.S. military aid not only affects anti-American terrorism but also affects allies of the U.S. in the form of spillover effects. For instance, resentment against the United States due to aid may also translate into more general anti-Western resentment and thus lead to terrorism against Western U.S. allies. To test this proposition, we draw additional data from *ITERATE*. Using the

location definition of transnational terrorism, our additional dependent variables are equal to unity when a country-pair sees at least one transnational terrorist attack against (1) the United Kingdom, (2) France, (3) Israel and (4) Turkey. Besides the United States, these countries are the most affected by transnational terrorism. Out of the approximately 12,500 transnational terrorist incidents recorded in *ITERATE* between 1968 and 2014, approximately 1,000 (8%) are directed against British, 750 (6%) against French, 650 (5%) against Israeli and 400 (3%) against Turkish targets. Still, these countries are far less often attacked than the United States; anti-American terrorism accounts for approximately 31% of all incidents recorded during our observation period.

We report our findings employing our usual IV-approach in Table 6. We find that more U.S. military aid has a statistically significant effect on anti-British and anti-French transnational terrorism. However, this effect is substantially smaller than the effect of military aid on anti-American terrorism. Thus, our findings suggest that U.S. military aid indeed induces anti-Western rather than only anti-American sentiment, implying adverse (but modest) terrorism spillover effects of U.S. military aid on other Western countries. Terrorism against Israel or Turkey, by contrast, appears to be less related to these policies.

	(1)	(2)	(3)	(4)	(5)
Target Country of Transnational Terrorism	United States (Baseline)	United Kingdom	France	Israel	Turkey
U.S. Military Aid $t-1$	0.0006 (0.0001)***	0.0002 (0.0001)***	0.0002 (0.0001)**	-0.0001 (0.0001)	0.0001 (0.0001)
State Failure $t-1$	0.0206 (0.0052)***	0.0187 (0.0042)***	0.0203 (0.0042)***	0.0033 (0.0019)*	0.0043 (0.0014)***
Infant Mortality $t-1$	0.0005 (0.0004)	0.0002 (0.0002)	-0.0001 (0.0002)	-0.0001 (0.0002)	0.0001 (0.0001)
Democracy $t-1$	0.0586 (0.0164)***	0.0340 (0.0144)**	0.0179 (0.0122)	0.0186 (0.0086)**	0.0090 (0.0050)*
Population Size $t-1$	0.0031 (0.0410)	0.0160 (0.0120)	0.0220 (0.0166)	0.0542 (0.0160)***	0.0367 (0.0188)**
<i>First-Stage Regression Results</i>					
Global Military Aid $t-1$	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***
Effective F-Statistic	18.48	18.58	18.51	18.12	15.69
<i>Weak Instrument Robust Test and Inference</i>					
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0004; 0.0009]	[0.0001; 0.0004]	[0.0001; 0.0005]	[-0.0002; 0.0002]	[-0.0001; 0.0002]
AR Wald Test-Statistic (Pr.> $\chi^2$ )	8.99 (0.00)***	5.14 (0.02)**	6.62 (0.01)**	0.01 (0.94)	1.98 (0.16)
Country FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes	Yes
No. of Observations	6,914	6,868	6,868	6,874	6,868

Notes: Constant not reported. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Table 6: Transnational Terrorism against Non-American Targets**

## 6 Transmission Channels

### 6.1 Model and Variables

Having established that more U.S. military aid leads to more anti-American terrorism (corroborating *H2*) and therefore having found no evidence in favor of the PMA (*H1*), we now turn to examining whether the SLC and/or the GC arguments explain this relationship. To do so, we consider the following two-stage equation system:

$$aid_{it} = \alpha * global\ aid_{it} + \delta' * X'_{it} + \varepsilon_{it} \quad (6a)$$

$$channel_{jit} = \beta * aid_{it-1} + \gamma' * X'_{it-1} + \varepsilon_{it} \quad (6b)$$

As above, *aid* is indicated in millions of constant US\$ and instrumented by *global aid*. The usual baseline controls are included. We use the first-stage regression results to estimate the causal effect of U.S. aid on the various transmission variables (*channel*) introduced below.

**Strategic Logic Channel Variables.** Following the SLC argument of Neumayer and Plümper (2011), anti-American terrorism results from the beneficial effect of U.S. military aid on local state capacity, which makes terrorist success less likely and thus creates a strategic incentive for terrorist groups to attack the U.S. to cut military aid.

Hendrix and Young (2014) differentiate between two dimensions of state capacity: military and administrative capacity. Following Hendrix and Young (2014: 342), via principal component analysis we construct a composite indicator of *local military strength*, accounting for total local military spending, total military personnel as well as military spending in relation to the military personnel. The military data is drawn from the *National Material Capabilities Dataset (NMC)* (updated from Singer, 1987). To indicate *administrative capacity*, we use the *quality of bureaucracy index* from the *VDEM Dataset*. This index measures arbitrariness and biases in the administration of the law by public officials. Finally, from the *VDEM Dataset* we also use another variable that measures a *state's control over its territory*. This variable aims to encompass both

military and administrative capacity. It measures a government's effective control over its territory, where this control might be challenged by criminals, warlords, insurgents or other actors.

***Grievances Channel Variables.*** According to our GC argument, U.S. military aid will induce rent-seeking behavior in the recipient country. For one, this behavior will undermine local institutional quality. For another, it will create “winners” and “losers” in the aid-receiving country. The latter are expected to lose out on direct and indirect access to rents and will consequently see their means of economic and political participation constrained. This will encourage terrorism directed against the United States as sponsor of the local government and rents beneficiaries.

First, we measure the extent of *political corruption*, using a corruption index from the *VDEM Dataset*. This variable reflects both the extent of rent-seeking and potential loss in institutional quality induced by the inflow of the U.S. military. Second, we expect rent-seeking and the eventual distribution of rents to limit economic and political participation of the “losers” of the rent-seeking and rent-distribution process. We measure this exclusion by (1) an index of the *equal distribution of resources* within a country, indicating, for example, the fair distribution of public goods such as health and education, and (2) an index of *equal access* that indicates how fairly political power is distributed between different economic classes and social groups. Both variables also come from the *VDEM Dataset*.

## **6.2 Empirical Results**

Our results from equations (6a) and (6b) are reported in Table 7. We find no evidence that more U.S. military aid increases local military strength or government authority over its territory. There is weak evidence that more military aid results in a less effective bureaucracy. In sum, there is little evidence that U.S. military aid bolsters local state capacity. Consequently, this finding does not speak to the SLC.

There is, however, robust evidence that more U.S. military aid contributes to more rent-seeking and increased socioeconomic and political exclusion. These findings provide evidence in favor of our GC argument. That is, military aid undermines local institutional quality and induces rent-seeking behavior (as indicated by increases in corruption) and results in exclusionary policies, corresponding to lower opportunity costs of terrorism for the “losers” of these processes that may consequently encourage anti-American resentment.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	Military Capacity	Rigid and Impartial Public Administration	Territorial Control	Public Sector Corruption	Equal Distribution of Resources	Equal Access
U.S. Military Aid $t-1$	-0.0001 (0.0001)	-0.0007 (0.004)*	-0.0038 (0.0036)	0.0001 (0.0000)***	-0.0001 (0.0000)***	-0.0002 (0.0001)***
<i>First-Stage Regression Results</i>						
Global Military Aid $t-1$	0.019 (0.003)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.016 (0.004)***
Effective F-Statistic	33.03	18.47	18.47	18.47	18.47	18.47
<i>Weak Instrument Robust Test and Inference</i>						
Anderson-Rubin (AR) 90% Confidence Intervals	[-0.0002; 0.0001]	[-0.0013; 0.0000]	[-0.0107; 0.0032]	[0.0001; 0.0002]	[-0.0002; -0.0001]	[-0.0003; -0.0001]
AR Wald Test-Statistic (Pr.> $\chi^2$ )	1.29 (0.26)	2.38 (0.12)	0.99 (0.31)	5.44 (0.02)**	4.33 (0.04)**	6.32 (0.01)**
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	5,910	6,882	6,882	6,882	6,882	6,882

Notes: Constant not reported. Baseline controls are state failure; infant mortality; democracy; population size. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Table 7: Transmission Channels**

## 7. Conclusion

Does U.S. military aid make the United States safer from transnational terrorism? To answer this question, we collect data for 173 countries between 1968 and 2014. Exploiting quasi-random variation in the global patterns of U.S. military aid, we provide causal estimates of the effect of U.S. military aid on anti-American terrorism. As our main result, we find that higher levels of military aid cause higher levels of anti-American terrorist activity in recipient countries. In light of this finding, we are able to refute the policy-maker argument: we find (1) no evidence that U.S. military aid contributes to increased local state capacity and (2) no evidence that more U.S. military aid makes the United States less vulnerable to terrorism. The former result also suggests that anti-American terrorism is not a consequence of a strategic logic employed by terrorist groups. Rather, we find that more U.S. military aid leads to more rent-seeking (corruption) and economic-political exclusion. This speaks to the grievances channel we introduce in this paper, which links the inflow of U.S. military aid to rent-seeking and rent-redistribution, which in turn limit economic and political participation for groups that have no direct or indirect access to the rents U.S. military aid entails. Consequently, aggrieved groups will direct their dissatisfaction against the United States as the perceived linchpin of an unfavorable status quo in the recipient country.



The results from our preferred specification suggest that at the sample mean, doubling U.S. military aid increases the risk of anti-American terrorism by 4.4 percentage points, which in turn is approximately 30% of the sample mean. This points to substantial adverse effects of U.S. military aid in terms of anti-American terrorism. This is especially true as (1) U.S. military aid handed out under certain circumstances (e.g., in times of state collapse) may easily amount to hundreds of millions or even billions of US\$, potentially greatly increasing the risk of anti-American terrorism, and (2) even single acts of anti-American terrorism can be very costly in both political and economic terms (e.g., the 2012 Benghazi attack). Clearly, the United States also provides military aid for a number of reasons other than counter-terrorism, e.g., to gain military access, secure strategic positions, earn political favors at international organizations, help obtain market access for the U.S. defense industry or acquire trade benefits from recipient countries. These benefits may very well be substantial. However, our study suggests that these benefits should always be weighed against the security risks the provision of military aid may entail.

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## References

- Abrahms, A., Conrad, J. 2017. "The strategic logic of credit claiming: A new theory for anonymous terrorist attacks." *Security Studies* 26: 279-304.
- Angrist, J.D., Pischke, J.S. 2009. "*Mostly Harmless Econometrics: An Empiricist's Companion.*" Princeton University Press.
- Armingeon, K., Wenger, V., Wiedemeier, F., Isler, C., Knöpfel, L., Weisstanner, D., Engler, S. 2019. "*Comparative Political Data Set 1960-2017.*" Bern: University of Berne.
- Autor, D.H., Dorn, D., Hanson, G.D. 2013. "The China syndrome: Local labor market effects of import competition in the United States." *American Economic Review* 103: 2121-2168.
- Bapat, N.A. 2011. "Transnational terrorism, US military aid, and the incentive to misrepresent." *Journal of Peace Research* 48: 303-318.
- Bjørnskov, C., Rode, M. 2020. Regime types and regime change: A new dataset on democracy, coups, and political institutions. *Review of International Organizations* 15: 531-551.
- Blomberg, S.B., Hess, G.D., Weerapana, A. 2004. "An economic model of terrorism." *Conflict Management and Peace Science* 21: 17-28.
- Boutton, A., Carter, D.B. 2014. "Fair-weather allies? Terrorism and the allocation of US foreign aid." *Journal of Conflict Resolution* 58: 1144-1173.
- Bueno de Mesquita, B., Smith, A. 2009. "A political economy of aid." *International Organization* 63: 309-340.
- Chong, A., Gradstein, M. 2008. "What determines foreign aid? The donors' perspective." *Journal of Development Economics* 87: 1-13.
- Coppedge, M., Gerring, J., Knutsen, C.H., Lindberg, S.I., Skaaning, S.-E., Teorell, J., Altman, D., Bernhard, M., Fish, M.S., Cornell, A., Dahlum, S., Gjerløw, H., Glynn, A., Hicken, A., Krusell, J., Lührmann, A., Marquardt, K.L., McMann, K., Mechkova, V., Medzihorsky, J., Olin, M., Paxton, P., Pemstein, D., Pernes, J., von Römer, J., Seim, B., Sigman, R., Staton, J., Stepanova, N., Sundström, A., Tzelgov, E., Wang, Y., Wig, T., Wilson, S., Ziblatt, D. 2019. "*V-Dem Dataset V9.*" Available at <https://www.v-dem.net/en/data/data-version-9/>.
- Deger, S., Sen, S. 1991. "Military expenditure, aid, and economic development." *World Bank Economic Review* 5: 159-186.
- Djankov, S., Montalvo, J.G., Renal-Querol, M. 2008. "The curse of aid." *Journal of Economic Growth* 13: 169-194.

- Dreher, A., Fuchs, A., Langlotz, S. 2019. "The effects of foreign aid on refugee flows." *European Economic Review* 112: 127-147.
- Dreher, A., Nunnenkamp, P., Thiele, R. 2008. "Does US aid buy UN general assembly votes? A disaggregated analysis." *Public Choice* 136: 139-164.
- Driscoll, J., Kraay, A.C. 1998. "Consistent covariance matrix estimation with spatially dependent data." *Review of Economics and Statistics* 80: 549-560.
- Eckstein, Z. Tsiddon, D. 2004. "Macroeconomic consequences of terror: Theory and the case of Israel" *Journal of Monetary Economics* 51: 971-1002.
- Enders, W., Sandler, T. 1993. "The effectiveness of antiterrorism policies: A vector-autoregression-intervention analysis." *American Political Science Review* 87: 829-844.
- Gaibullov, K., Sandler, T. 2019. "What we have learned about terrorism since 9/11." *Journal of Economic Literature* 57: 275-328.
- George, J. 2018. "State failure and transnational terrorism: An empirical analysis." *Journal of Conflict Resolution* 62: 471-495.
- Gould, E. D., & Stecklov, G. (2009). "Terror and the costs of crime." *Journal of Public Economics* 93: 1175-1188.
- Gries, T., Meierrieks, D., Redlin M. 2015. "Oppressive governments, dependence on the USA, and anti-American terrorism." *Oxford Economic Papers* 67: 83-103.
- Hendrix, C.S., Young, J.K. 2014. "State capacity and terrorism: A two-dimensional approach." *Security Studies* 23: 329-363.
- Jetter, M. (2017). "The effect of media attention on terrorism." *Journal of Public Economics* 153: 32-48.
- Jetter, M., Stadelmann, D. 2019. "Terror per capita." *Southern Economic Journal* 86: 286-304.
- Kane, T. 2012. "Development and US troop deployments." *Foreign Policy Analysis* 8: 255-273.
- Khilji, N.M., Zampelli, E.M. 1994. "The fungibility of U.S. military and nonmilitary assistance and the impacts on expenditures of major aid recipients." *Journal of Development Economics* 43: 345-362.
- Krieger, T., Meierrieks, D. 2015. "The rise of capitalism and the roots of anti-American terrorism." *Journal of Peace Research* 52: 46-61.
- Kurrild-Klitgaard, P., Justesen, M.K., Klemmensen, R. 2006. "The political economy of freedom, democracy and transnational terrorism." *Public Choice* 128: 289-315.

- Landes, W. M. 1978. "An economic study of U.S. aircraft hijacking, 1961-1976." *Journal of Law and Economics* 21: 1-31.
- Lai, B. 2007. "'Draining the swamp': An empirical examination of the production of international terrorism, 1968-1998." *Conflict Management and Peace Science* 24: 297-310.
- Meierrieks, D., Gries, T. 2019. "'Pay for it heavily': Does U.S. support for Israel lead to anti-American terrorism?" *Defence and Peace Economics*, doi: 10.1080/10242694.2018.1560558.
- Mickolus, E.F., Sandler, T., Murdoch, J.M., Flemming, P.A. 2016. "*International Terrorism: Attributes of Terrorist Events, 1968-2016*". Vinyard Software.
- Neumayer, E., Plümper T. 2011. "Foreign terror on Americans." *Journal of Peace Research* 48: 3-17.
- Nunn, N, Qian, N. 2014. "U.S. food aid and civil conflict." *American Economic Review* 104: 1630-1666.
- Pesaran, M.H. 2004. "General diagnostic tests for cross section dependence in panels." *IZA Discussion Paper* No. 1240.
- Poe, S.C., Meernik, J. 1995. "U.S. military aid in the 1980s: A global analysis." *Journal of Peace Research* 32: 399-411.
- Sandler, T, Tschirhart, J.T., Cauley, J. 1983. "A theoretical analysis of transnational terrorism." *American Political Science Review* 77: 36-54.
- Sarafidis, V., Wansbeek, T. 2012. "Cross-sectional dependence in panel data analysis." *Econometric Reviews* 31: 483-531.
- Saiya, N., Zaihra, T., Fidler, J. 2017. "Testing the Hillary doctrine: Women's rights and anti-American terrorism." *Political Science Quarterly* 70: 421-432.
- Schneider, F., Brück, T., Meierrieks, D. 2015. "The economics of counterterrorism: A survey." *Journal of Economic Surveys* 29: 131-157.
- Singer, J. David. 1987. "Reconstructing the correlates of war dataset on material capabilities of states, 1816-1985" *International Interactions* 14: 115-132.
- Stock, J.H., Wright, J.H., Yogo, M. 2002. "A survey of weak instruments and weak identification in generalized method of moments." *Journal of Business & Economic Statistics* 20: 518-529.
- Svensson, J. 2000. "Foreign aid and rent-seeking" *Journal of International Economics* 51: 437-461.

- The White House. 2013. "Fact sheet: U.S. security sector assistance policy." Available at <https://fas.org/irp/offdocs/ppd/ssa.pdf>.
- Tokdemir, E. 2017. "Winning hearts & minds (!): The dilemma of foreign aid in anti-Americanism." *Journal of Peace Research* 54: 819-832.
- U.S. Agency for International Development [USAID]. 2016. "*U.S. Overseas Loans and Grants: Obligations and Loan Authorizations, July 1, 1945-September 30, 2016*." Available at <https://explorer.usaid.gov/reports.html>.
- Wooldridge, J.M. 2010. "*Econometric Analysis of Cross-Section and Panel Data*". MIT Press.
- World Bank. 2016. "*World Development Indicators*." The World Bank.

## Appendix.

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Afghanistan	Congo (Rep.)	Iceland	Moldova	Slovak Republic
Albania	Costa Rica	India	Mongolia	Slovenia
Algeria	Cote d'Ivoire	Indonesia	Montenegro	Solomon Islands
Angola	Croatia	Iran	Morocco	Somalia
Argentina	Cuba	Iraq	Mozambique	South Africa
Armenia	Cyprus	Ireland	Myanmar	Spain
Australia	Czech Republic	Israel	Namibia	Sri Lanka
Austria	Denmark	Italy	Nepal	Sudan
Azerbaijan	Djibouti	Jamaica	Netherlands	Suriname
Bahrain	Dominican Republic	Japan	New Zealand	Sweden
Bangladesh	Ecuador	Jordan	Nicaragua	Switzerland
Barbados	Egypt	Kazakhstan	Niger	Syria
Belarus	El Salvador	Kenya	Nigeria	Tajikistan
Belgium	Equatorial Guinea	Korea (North)	North Macedonia	Tanzania
Belize	Eritrea	Korea (South)	Norway	Thailand
Benin	Estonia	Kosovo	Oman	Timor-Leste
Bhutan	Eswatini	Kuwait	Pakistan	Togo
				Trinidad and
Bolivia	Ethiopia	Kyrgyz Republic	Panama	Tobago
Bosnia and Herzegovina	Fiji	Lao PDR	Papua New Guinea	Tunisia
Botswana	Finland	Latvia	Paraguay	Turkey
Brazil	France	Lebanon	Peru	Turkmenistan
Bulgaria	Gabon	Lesotho	Philippines	Uganda
Burkina Faso	Gambia, The	Liberia	Poland	Ukraine
				United Arab
Burundi	Georgia	Libya	Portugal	Emirates
Cabo Verde	Germany	Lithuania	Qatar	United Kingdom
Cambodia	Ghana	Luxembourg	Romania	Uruguay
Cameroon	Greece	Madagascar	Russian Federation	Uzbekistan
Canada	Guatemala	Malawi	Rwanda	Vanuatu
			Sao Tome and	
Central African Republic	Guinea	Malaysia	Principe	Venezuela
Chad	Guinea-Bissau	Maldives	Saudi Arabia	Vietnam
Chile	Guyana	Mali	Senegal	Yemen
China	Haiti	Malta	Serbia	Zambia
Colombia	Honduras	Mauritania	Seychelles	Zimbabwe
Comoros	Hong Kong	Mauritius	Sierra Leone	
Congo (Dem. Rep.)	Hungary	Mexico	Singapore	

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## List of Countries

Variable	CD-Test Statistic (p-value)	Mean	Absolute Correlation
Anti-American Terrorism (Location)	14.85***	0.07	
No. of Anti-American Terrorist Attacks (Location)	16.21***	0.07	
Anti-American Terrorism (Origin)	4.68***	0.05	
U.S. Casualties in Anti-American Terrorism (Location)	-0.29	0.01	
U.S. Casualties in Anti-American Terrorism (Victim)	-0.27	0.01	
U.S. Military Aid (1,000,000 \$US)	42.19***	0.21	
State Failure	3.92		
Infant Mortality	653.17***	0.88	
Democracy	39.24***	0.06	
Population Size (in 1,000,000)	516.57***	0.92	
U.S. Economic Aid (1,000,000 \$US)	42.77***	0.24	
U.S. Troops	8.10	0.24	
Military Capacity	217.12***	0.46	
Control of Territory	5.10***	0.28	
Equal Access	136.61***	0.44	
Equal Distribution of Resources	72.02***	0.44	
Public Sector Corruption	5.28***	0.42	
Rigorous and Impartial Public Administration	41.92***	0.40	

Note: \*\*p<0.05, \*\*\*p<0.01 (rejection of  $H_0$  of cross-sectional independence).

**Supplementary Table 1: Tests for Cross-Sectional Dependence**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
U.S. Military Aid $t_{-1}$	0.0005 (0.0002)***	0.0006 (0.0002)***	0.0006 (0.0001)***	0.0006 (0.0001)***	0.0005 (0.0001)***	0.0007 (0.0001)***	0.0005 (0.0001)***	0.0006 (0.0001)***
Lagged Dependent Variable	0.0895 (0.0359)**							
Development Aid $t_{-1}$		-0.0048 (0.0028)*						
U.S. Ally $t_{-1}$			0.0079 (0.0380)					
International Conflict $t_{-1}$				0.0374 (0.0370)				
Globalization Index $t_{-1}$					-0.0029 (0.0023)			
GDP p.c. $t_{-1}$ (replaces Infant Mortality)							0.0177 (0.0291)	
Electoral Democracy $t_{-1}$ (replaces Democracy)								-0.0262 (0.0520)
<i>First-Stage Regression Results</i>								
Global Military Aid $t_{-1:t-1}$	0.015 (0.004)***	0.015 (0.004)***	0.016 (0.004)***	0.016 (0.004)***	0.015 (0.004)***	0.015 (0.004)***	0.014 (0.004)***	0.016 (0.004)***
Effective F-Statistic	16.52	14.94	18.54	18.70	18.13	15.90	12.90	18.87
<i>Weak Instrument Robust Test and Inference</i>								
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0003; 0.0009]	[0.0004; 0.0011]	[0.0004; 0.0009]	[0.0004; 0.0009]	[0.0002; 0.0009]	[0.0005; 0.0012]	[0.0002; 0.0011]	[0.0003; 0.0009]
AR Wald Test-Statistic (Pr.> $\chi^2$ )	8.09 (0.00)***	9.08 (0.00)***	9.05 (0.00)***	8.98 (0.00)***	7.28 (0.00)***	10.11 (0.00)***	7.46 (0.00)***	8.85 (0.00)***
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
No. of Observations	6,914	6,914	6,914	6,914	6,914	6,914	6,370	6,914

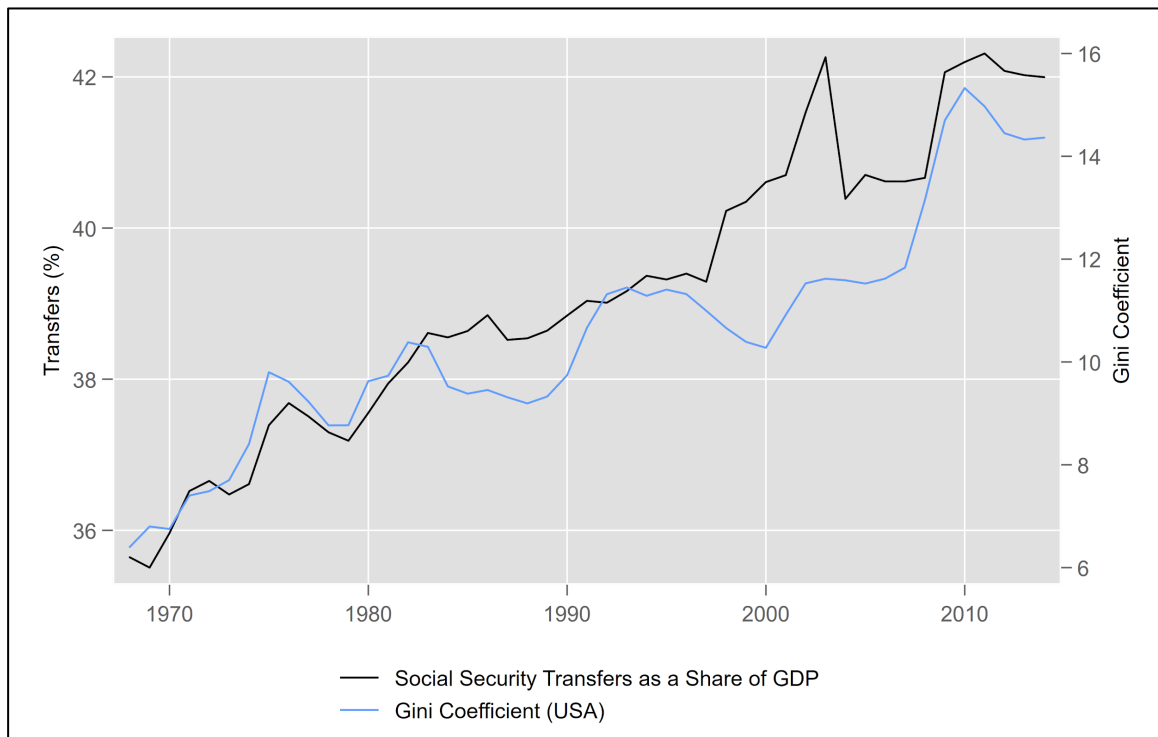
Notes: Constant not reported. Baseline controls are state failure; infant mortality; democracy; population size. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Supplementary Table 2: Additional Instrumental-Variable Fixed-Effects Estimates**

Sub-Sample	(1) No OECD Countries	(2) No MENA Countries	(3) No Latin American and Caribbean Countries	(4) No Sub- Saharan African Countries	(5) Countries with no Anti- American Terrorism dropped	(6) No Country- Year Pairs with Aid over 500 million US\$	(7) No Countries with Average Aid over 200 million US\$	(8) No Country- Year Pairs with More than 15,000 U.S. Troops
U.S. Military Aid $t-1$	0.0006 (0.0002)***	0.0008 (0.0004)**	0.0005 (0.0001)***	0.0005 (0.0001)***	0.0006 (0.0002)***	0.0022 (0.0005)***	0.0019 (0.0005)***	0.0009 (0.0002)***
State Failure $t-1$	0.0206 (0.0054)***	0.0158 (0.0035)***	0.0188 (0.0049)***	0.0245 (0.0085)***	0.0209 (0.0055)***	0.0160 (0.0036)***	0.0128 (0.0047)***	0.0189 (0.0040)***
Infant Mortality $t-1$	0.0008 (0.0005)	-0.0001 (0.0002)	0.0002 (0.0005)	0.0006 (0.0006)	0.0007 (0.0006)	-0.0001 (0.0002)	-0.0002 (0.0002)	0.0004 (0.0002)*
Democracy $t-1$	0.0586 (0.0204)***	0.0485 (0.0141)***	0.0489 (0.0160)***	0.0702 (0.0248)***	0.0735 (0.0201)***	0.0402 (0.0144)***	0.0402 (0.0128)***	0.0361 (0.0110)***
Population Size $t-1$	-0.0550 (0.398)	-0.0396 (0.0417)	0.0532 (0.0439)	0.0061 (0.0518)	0.0208 (0.0503)	-0.0001 (0.0384)	0.0049 (0.0421)	-0.0256 (0.0423)
<i>First-Stage Regression Results</i>								
Global Military Aid $t-1$	0.015 (0.004)***	0.008 (0.002)***	0.020 (0.006)***	0.021 (0.005)***	0.019 (0.004)***	0.004 (0.001)***	0.004 (0.001)***	0.010 (0.002)***
Effective F-Statistic	14.52	27.70	12.81	18.35	18.60	23.56	15.84	39.81
<i>Weak Instrument Robust Test and Inference</i>								
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0004; 0.0011]	[0.0002; 0.0017]	[0.0003; 0.0008]	[0.0003; 0.0008]	[0.0003; 0.0009]	[0.0013; 0.0031]	[0.0011; 0.0031]	[0.0006; 0.0013]
AR Wald Test-Statistic (Pr.> $\chi^2$ )	8.49 (0.00)***	4.60 (0.03)**	9.11 (0.00)***	8.36 (0.00)***	8.76 (0.00)***	8.50 (0.00)***	7.97 (0.00)***	8.76 (0.00)***
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional*Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Observations	5,862	5,678	5,656	4,924	5,250	6,749	6,529	6,689

Notes: Constant not reported. Driscoll-Kraay standard errors in parentheses. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

**Supplementary Table 3: Different Sub-Samples**



**Supplementary Figure 1: Trends in U.S. Inequality and Redistribution, 1968-2014**