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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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Abstract

Does U.S. military aid make the United States safer? 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 U.S. military aid on anti-American terrorism. We find that higher levels of military aid lead to an increased likelihood of the recipient country producing anti-American terrorism. This finding also holds when subjected to a battery of robustness checks (e.g., alternative instrumental variables, sub-sample analyses, examination of heterogeneous effects, placebo tests). For 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 in turn is approximately 30% of the sample mean. 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 in particular direct their dissatisfaction against the United States as the perceived linchpin of an unfavorable status quo in the recipient country.

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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 interest, among them the notorious 9/11 attacks on Washington, D.C. and New York (Mickolus et al., 2016).¹ In response to this threat from transnational terrorism, the United States has provided military assistance to foreign governments. Between 1968 and 2014, the United States gave approximately 470 billion US\$ (inflation-adjusted) in foreign military aid²; in 2014 alone, the U.S. spent approximately 10.5 billion US\$ (USAID, 2016).

In this paper, we evaluate whether U.S. military assistance is indeed effective in reducing anti-American terrorism. What motivates our analysis is that even single acts of anti-American terrorism can be very costly in both 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\$. As another example, the political 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.

Indeed, military aid may bolster state capacity in recipient countries, consequently making the United States safer by increasing the material costs of carrying out anti-American terrorism (Lai, 2007: 298; Bapat, 2011: 303; The White House, 2013).We call this way of thinking about the military aid-terrorism nexus the *policy-maker argument* as it corresponds to the American policy-makers' thoughts about the efficacy of military aid. Conversely, however, it may also be possible that U.S. military aid creates additional benefits for engaging in anti-American terrorism. For instance, by resorting to anti-American terrorism, terrorist group may hope to reduce U.S. support for a domestic government 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).

¹ Terrorist incidents that affect more than one country are commonly 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.

² 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 instance, it consists of U.S. loans or grants to facilitate the training of military personnel of the recipient country.

Following Neumayer and Plümper (2011), we refer to this pathway from military aid to more terrorism as the *strategic logic channel*.

Obviously, the policy-maker and the strategic logic argument make contradicting predictions about the effect of aid on terrorism. So far, the empirical research on the nexus between U.S. military aid and anti-American terrorism supports the strategic logic argument. In particular, Neumayer and Plümper (2011) use data for 149 countries for the 1978-2005 period, finding that countries that receive more U.S. military aid produce more anti-American terrorism. Furthermore, Gries et al. (2015), Krieger and Meierrieks (2015), Saiya et al. (2017) and Meierrieks and Gries (2019) control for the effect of U.S. military aid in their analyses of non-aid determinants of anti-American terrorism and similarly find that anti-American terrorism is more likely to originate from countries that receive higher levels of U.S. military aid.

In this paper, we contribute to the sparse empirical literature on the nexus between U.S. military aid and anti-American terrorism in a number of ways. First, we propose an additional pathway from aid to anti-American terrorism. Building on arguments from the rent-seeking literature and related theoretical contributions, 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, lowering the opportunity costs of violence and encouraging anti-American terrorism. We call this pathway from more military aid to more anti-American terrorism the *grievances channel*.

Second, we also add to the empirical analysis of the military aid-terrorism nexus. In detail, we use a *large sample* of 173 countries between 1968 and 2014, meaning that our sample is considerably bigger than the one employed by Neumayer and Plümper (2011) and covers the post-9/11 era more exhaustively. Most importantly, given that concerns over endogeneity have been largely neglected in earlier research, to account for endogeneity we exploit quasi-random variation in the global patterns of U.S. military aid to provide instrumental-variable *causal estimates* of the effect of U.S. military aid on the emergence of anti-American terrorism. Our empirical approach also accounts for previously unappreciated data features that may complicate statistical inference such as the presence of *cross-sectional dependence*. Furthermore, we provide a battery of empirical tests (e.g., alternative instrumental variables, sub-sample analyses, examination of heterogeneous effects,

placebo tests) to assess the *robustness* of our empirical investigation. Finally, we provide an analysis of the effects of U.S. military aid on potential transmission channels, thereby shedding further light on the *mechanics of the military aid-terrorism nexus*, especially whether the policy-maker argument, the strategic logic argument and/or our new grievances argument find support in the data.

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 estimates and various robustness checks are reported in Section 4. In Section 4 we also examine a number of transmission channels potentially accounting for the relationship between U.S. military aid and anti-American terrorism. Section 5 concludes.

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

2.1 Rational-Economic Model of Terrorism

To discuss how U.S. military aid may result in anti-American terrorism, we resort to a rationaleconomic model of terrorism. In short, this 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, e.g., 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 (e.g., due to increased state strength), (2) terrorism will increase as the benefits from terrorism increase (in the form of political influence, financial contributions from sympathizers, media attention etc.) and (3) terrorism will increase as the opportunity costs of terrorism, i.e., utility generated by non-violence, decrease (e.g., Schneider et al., 2015).

2.2 From U.S. Military Aid to Less Anti-American Terrorism

Applying the rational-economic model of terrorism, we first develop the *policy-maker argument* that more military aid ought to make the United States safer. This argument stresses that terrorism is more likely to emerge in countries characterized by low levels of state capacity. Low state capacity will lower the material costs of terrorism and thus sway the terrorists' calculus in ways that 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 some 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.

Weak states also have incentives to engage in negotiations with terrorist groups operating within their territory (e.g., Bapat, 2011). Also assuming a rational calculus on the part of both the government, it may be less costly for a weak state to arrive at an agreement with a terrorist group rather than to engage in a conflict that a weak state may not be able to win militarily. For instance, the 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 weak 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 (e.g., Bapat, 2011). An example for this mechanism provided by Bapat (2011) is Yemen. The Yemeni government has always been too weak to challenge the presence of Islamist militants within its territory; in fact, Yemen was the staging ground for anti-American terrorism, most prominently the 2000 attack against the USS Cole. However, 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 Yemeni government and Islamist militants operating within its territory.

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, delegating the fight against terrorism to the local government. Under the assumption that such mechanisms are at play, we would expect to find support for the following hypothesis:

Hypothesis (H1): More U.S. military aid leads to less anti-American terrorism originating from recipient countries.

2.3 From U.S. Military Aid to More Anti-American Terrorism

As stressed in the introduction, 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; Gries et al., 2015; Krieger and Meierrieks, 2015; Saiya et al., 2017), which runs counter to the policy-maker argument. 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 any positive effect of aid on anti-American terrorism: the *grievances channel*.

2.3.1 The Strategic Logic Channel

Following Neumayer and Plümper (2011), the *strategic logic channel* 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 political 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 (due to political pressure from the American public and, ultimately, U.S. Congress) 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. On the one hand, these benefits come in form of an increased likelihood of terrorist success (e.g., in the form of political concessions) 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).

2.3.2 The Grievances Channel

We argue that the additional pathway from higher levels of military aid to more anti-American terrorism we introduce in this paper – the *grievances channel* – affects the terrorists' calculus by lowering the opportunity costs of terrorism. Indeed, a number of theoretical contributions argue that socio-economic and political conditions that constrain socio-economic and political participation and thus create *grievances* (e.g., poverty, discrimination) make violence – as the alternative way to achieve such participation – comparatively more attractive (for a survey, see Schneider et al., 2015).

Bueno de Mesquita and Smith (2009) argue that the provision of military aid yields benefits to the donor country, e.g., in form of military and market access or a voting behavior favorable to the donor at international organizations.³ 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 (in form of the military aid itself) 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 it and exclude other social groups from it (for the case of economic aid, see, e.g., Svensson, 2000; Djankov et al., 2008). On the one hand, rents due to military aid may incentivize corrupt behavior by politicians and 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.

On the other hand, 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 gate-keepers to create "winners" and "losers", with the former disproportionately benefitting by sharing in 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 from which backers are drawn to form a winning coalition that keeps the government in power (e.g., Bueno de

³ Indeed, empirical evidence suggests that the allocation of U.S. economic and military assistance is driven by U.S. military and 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; Wang, 1999; Dreher et al., 2008; Boutton and Carter, 2014).

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.⁴

Consequently, the provision of U.S. military aid is anticipated to create grievances among the "losers" of the aid provision process, i.e., among those that suffer from poorer institutions due to U.S. military aid and have no direct or indirect (via governmental redistribution) access to the rents arising from 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 become more constrained due to rent-seeking behavior (e.g., due to increased corruption or increased political power of the rent beneficiaries). This in turn ought to make the alternative to non-violence more attractive to achieve politico-social change (e.g., a fairer distribution of resources within a society). 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 United States more positively.

2.3.3 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 (strategic logic channel) and/or (2) affect the opportunity costs of anti-American terrorism in ways that make it more attractive. With respect to the latter point, U.S. military aid is expected to adversely affect local institutional quality and create "winners" and "losers" due to the distribution of aid, with the "losers" developing grievances that may result in terrorism directed at

⁴ This refers to the more general issue of *aid fungibility*, i.e., the ability of the recipient country to spend (at least some amount of the) 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 also benefit the selectorate outside of the military sphere.

the United States as the perceived linchpin of the "winners" (grievances channels). If these channels were relevant, we would expect to find support for the following hypothesis:

Hypothesis (H2): More U.S. military aid leads to more anti-American terrorism originating from recipient countries.

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.

-Table 1 here-

3.1 Anti-American Terrorism

The data on terrorism comes from the *International Terrorism: Attributes of Terrorist Events* (*ITERATE*) dataset (Mickolus et al., 2016). *ITERATE* 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).

Anti-American terrorism, the main dependent variable in our analysis, 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.⁵ 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.

⁵ *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).

Therefore, little information is lost when we use a binary terrorism indicator. Rather, by only differentiating between no anti-American terrorism and any terrorism by means of 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 but from a third country, leading us to wrongly assign some cases.⁶ However, in many cases the nationality of the perpetrator or the identity of the attacking group is not known; in fact, Abrahms and Conrad (2017: 279) report that only one in seven terrorist attacks is actually claimed. In addition to this, 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, however, below we also use an alternative definition of anti-American terrorism.

⁶ 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.

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

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, e.g., peacekeeping and the cooperative threat reduction initiative (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*:

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

Military aid is measured in millions of constant 2014 U.S. dollars and 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. 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 in a specific year. 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.



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

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 following model:

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

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 (ε), we also include a vector of additional controls (X) that we introduce 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 be due to, e.g., spillover effects. If not accounted for, cross-sectional dependence in panel data may lead to correlation in the residuals, consequently affecting estimation efficiency and 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, e.g., 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 model models, see Wooldridge, 2002; Angrist and Pischke, 2009).

3.3.2 Two-Stage Instrumental-Variable Model

A major concern when estimating equation (2) is the issue of endogeneity. Apart from being due to omitted variables or measurement error, endogeneity may be due to reverse causality and/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, the production of anti-American terrorism in recipient countries may trigger the provision of (additional) U.S. military aid to foster local state capacity in order 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 as a way of exerting political pressure on the aid-receiving country to force it to intensify the local fight against terrorism.

To account for endogeneity concerns, we estimate a *two-stage instrumental-variable system* of the following form:

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

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

$$global \ aid_{it} = [pmilfin_{i} * (milfin_{gt} - milfin_{rt})] + [pmiltrain_{i} * (miltrain_{gt} - miltrain_{rt})] + [pmildrug_{i} * (mildrug_{gt} - mildrug_{rt})] + [pmilother_{i} * (milother_{gt} - milother_{rt})]$$
(4)

That is, the IV is the respective global (subscript g) amount of U.S. military aid for foreign military financing, training, counter-narcotics and other programs, from which we subtract the respective regional (subscript r) amount of aid, i.e., aid provided to the country of interest and its neighborhood.⁷ We weigh these four differences by the relative importance the specific dimensions of aid have to the respective country of interest in year t (via *pmilfin*, *pmiltrain*, *pmildrug* and *pmilother*), before summing up, creating an IV that varies over time and is distinct for each country in the sample.

Our idea behind the IV is to exploit quasi-random variation in the global patterns of U.S. military aid to explain local levels of U.S. military aid (3a) and consequently use this information to estimate the 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 policy-makers, the influence of the American military-industrial complex (which may lobby for military aid to bolster foreign sales) and increased illicit drug

⁷ 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; Sothern Africa; Sothern Asia; Southern Europe; Western Africa; Western Asia; and Western Europe.

consumption in the United States (which may affect U.S. counter-narcotics aid). However, while we expect recipient countries to benefit from global increases in U.S. military aid that are relevant to them (or to lose due to corresponding decreases in aid), aid recipient countries have no leverage to influence global 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" on the IV, while weighting the relative importance of global trends in specific types of military aid in local military aid ought to further reduce the impact of spurious correlations and trends.

3.3.3 Controls

In both the non-IV and IV case, we include a vector of controls (X'). Depending on the specification, this vector consists of the following variables:

(1) 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 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 material costs of carrying out anti-American terrorist attacks (e.g., Neumayer and Plümper, 2011).

(2) For the baseline model, we also interact the year-fixed effects with regional dummies⁸ to account for *region-specific trends*. Furthermore, X' also includes a set of variables that may affect anti-American terrorism and the provision of U.S. military aid at the same time, thus potentially leading to spurious regression results. These confounders include (i) a measure indicating the extent of *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*⁹, (ii) *infant mortality* as a measure of economic development as well as (iii) (logged) *population size* to control for scale effects, with

⁸ 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 Middle East, using a list provided by Kane (2012). As reported in the appendix (Supplementary Table 2), dropping the regional trends from the baseline model does not affect our results.

⁹ See the *Political Instability Task Force Dataset*, available at <u>http://www.systemicpeace.org/inscrdata.html</u>.

both variables being drawn from the *World Development Indicators* (World Bank, 2016), and (iv) a dichotomous *democracy* measure drawn from Bjornskov and Rode (forthcoming).

(3) 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 to better isolate the role of military aid in anti-American terrorism, given that regular recipients of U.S. military aid also tend to receive more economic assistance and U.S. troop contingents. The economic aid data is from USAID (2016). Data on U.S. troops is from an update of Kane (2012).

4. Empirical Results

4.1 Baseline OLS and IV-Estimates

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 of aid on terrorism. This main 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; Gries et al., 2015; Krieger and Meierrieks, 2015; Saiya et al., 2017; Meierrieks and Gries, 2019). At the same time, it provides evidence against the policy-maker argument of H1. As for the confounders, we find evidence that countries are also more likely to see anti-American terrorism when they experience state failure, are a democracy and receive U.S. economic aid and troops, while there is no conclusive evidence linking economic underdevelopment and population size to anti-American terrorism.

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

-Table 2 here-

Table 2 also reports the IV-results. Again, we find that military aid exerts a positive effect on anti-American terrorism; this is evidence in favor of *H2* but not *H1*. What is more, this effect is several times *larger* compared to the non-IV estimates reported. Thus, our results suggest that earlier findings – from non-IV settings – are downward biased, underestimating the role of U.S. military aid in anti-American terrorism. Potentially, this may be due to classical measurement error, leading 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 (e.g., a tougher stance on anti-American terrorism) from the recipient country. As an alternative explanation, the United States may reduce aid due to domestic political pressures, 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%, which is an effect six times larger than the baseline non-IV estimate. 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. First, the first-stage regression results are 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. For another, 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.

4.2 Additional Confounders

As a first robustness check, we add further confounders to our baseline model. These include (1) a *lagged dependent variable* (to account for omitted variables), (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*¹⁰, (4) a dummy indicator measuring whether an aid-receiving country is involved in an *international war*, using data from the *Center for Systemic Peace*¹¹ and (5) a *globalization index* drawn from the *KOF Swiss Economic Institute*¹². 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.

4.3 Alternative Dependent Variables

To employ alternative dependent variables, we extract the following variables from *ITERATE*. First, we use the count of anti-American terrorist attacks (location definition) per country-year pair. Second, we weigh this count of anti-American attacks 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

¹⁰ 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.

¹¹ See the *List of Major Episodes of Political Violence*, available at <u>http://www.systemicpeace.org/inscrdata.html</u>.

¹² See <u>https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html</u>.

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.¹³ 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 is 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 produced an anti-American attack with at least one American victim, using both the location and country of origin definition of transnational terrorist incident. *ITERATE* reports the number of American victims only from 1978 onwards, so that we estimate the effect of U.S. military aid for the 1978-2014 period 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 country-year observation, with unity being added to allow for zero observations. Again, we only use the 1978-2014 data when constructing the indices.

-Table 3 here-

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. The findings of Table 3 thus suggest that our results are not sensitive to the choice of the dependent variable.

4.4 Sub-Samples

Next, we study the role of U.S. military aid for specific sub-samples to see 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

¹³ Coming back to our earlier example of the 1988 attack of the Japanese Red Army on a U.S. military recreational club in Naples, Italy, using the country of origin definition this anti-American attack will be assigned to Japan (while it is assigned to Italy using the location definition).

African, Latin American and sub-Saharan African countries. For instance, due to its economic, political and geographic proximity to the United States, Latin America as "America's backyard" has received high amounts of U.S. military assistance in the past, while also generating substantial anti-American terrorism. 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 so doing, we expect to reduce the effect of influential outliers on our regression results.

We report our results in Table 4. In general, these findings are very much in line with our baseline IV-estimates. 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. Dropping countries that receive high levels of military aid even tends to lead to larger estimated effect sizes. Dropping all countries that received over 200 million US\$ on average per year, we find that a one-unit (one million US\$) increase in U.S. military aid increases the likelihood of the remaining aid-receiving countries to produce anti-American terrorism by 0.2%, which is roughly three times larger than the baseline IV-estimate for the whole sample (specification (4) of Table 2). Cautiously interpreted, this latter finding may indicate that the effect of U.S. military aid on anti-American terrorism decreases with the amount of military assistance provided.

-Table 4 here-

4.5 Alternative IV-Approach

4.5.1 Empirical Approach

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

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

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

Our alternative IV-approach is inspired by Nunn and Qian (2014) and Dreher et al. (2019).¹⁴ 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*¹⁵, while data on redistribution is drawn from the *Comparative Political Data Set* of Armingeon et al. (2019).

Both levels of U.S. inequality and redistribution are plausibly exogenous to anti-American terrorism in foreign countries. However, we expect them to reduce the amount of military aid provided to foreign countries. First, 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; this in turn increases the likelihood that domestic redistribution is implemented . Due to budget constraints, emphasizing domestic redistribution ought to lead to a deprioritization of aid-giving (i.e., international redistribution).¹⁶ 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 and with a lower willingness to give aid at the individual-level. Second, as a direct measure of redistribution we use the share of social security transfers to U.S.

¹⁴ 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.

¹⁵ The University of Texas Inequality Project can be accessed at https://utip.lbj.utexas.edu/data.html.

¹⁶ 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).

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 (as indicated by values of *UScon*). The identifying assumption is that the production of 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.

As for the controls (X'), in addition to our baseline controls we also account for incumbency of a *Democratic president*, *U.S. turnout in federal elections* and the *U.S. unemployment rate*; all variables are interacted with P(Aid). Data on these variables comes from Armingeon et al. (2019). Here, the idea is that political and economic developments in the United States correlate with income inequality or redistribution and have differential effects on anti-American terrorism in recipient countries depending on the average level of aid the country received. To further isolate the effect of military aid on anti-American terrorism, 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 are interacted with the year-fixed effects.

4.5.2 Empirical Results

We report our results using the alternative IVs in Table 5. In both the parsimonious and baseline specification and regardless 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 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 5 are trustworthy. In particular, the first-stage regression results imply that increases in income inequality and redistribution in the United States indeed lead to less military aid.

-Table 5 here-

4.6 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 to Islamist terrorist group, a trend that became even 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) (for an overview, see Gaibulloev and Sandler, 2019).

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 question, 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 (2001-2014) 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.¹⁷

We report our empirical findings in Table 6. First, we find that the Cold War era does not influence our main findings. That is, before and after the end of the Cold War more U.S. military aid leads to more anti-American terrorism, 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, we comparing the pre- and post-9/11 era, there is some evidence that U.S. military aid no longer leads to anti-American terrorism after 2001. However, this finding (specification (1), Panel B, Table 6) is likely due to a weak instrument problem, as the instrument associated with the interaction effect is not meaningful. Our results suggest that this instrumentation problem is likely due to the influence of outliers, i.e., countries that receive more than 200 million US\$ in military

¹⁷ Note that the direct effects of the Cold War and post-9/11 dummies are absorbed by the year-fixed effects.

aid per year.¹⁸ Once we drop these countries (specification (2), Panel B, Table 6), more military aid again results in more anti-American terrorism; the associated first-stage F-statistics are now much stronger. What is more, employing U.S. military aid in logged form (which reduces the influence of 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 6).

-Table 6 here-

4.7 Placebo Tests

As our hypotheses relate U.S. military aid specifically to anti-American terrorism, we expect U.S. aid to have little effect on transnational terrorism directed against other countries. To test this proposition as a form of placebo test, 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 Israel and 400 (3%) against Turkish targets. Still, these countries are far less often attacked than the United States; anti-American terrorism alone accounts for approximately 31% of all transnational terrorist incidents recorded during our observation period.

We report our findings employing our usual IV-approach in Table 7. 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. For one, this finding may be due to omitted variables. The United Kingdom

¹⁸ 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.

and France are close allies of the United States; therefore British and French military aid may flow to the same countries as U.S. aid. As we cannot control for the former due to missing data, the U.S. military aid variable may pick up related effects. More worrisome, our finding may also suggest that U.S. military aid 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.

As for Israel and Turkey, our findings suggest that transnational terrorism against these countries shares no relationship with U.S. military aid. This suggests that anti-American terrorism may especially be employed as tool to punish the United States – and its Western allies – for to their military aid policies. Terrorism against Israeli (e.g., by Palestinian and Arab terrorist groups) or Turkey (e.g., by Kurdish and Armenian militants), by contrast, does not appear to be related to these policies.

-Table 7 here-

4.8 Transmission Channels

4.8.1 Model and Variables

Having established that more U.S. military aid leads to more anti-American terrorism and therefore having found no evidence in favor of the policy-maker argument (H1), we now turn to examining whether the strategic logic channel and/or the grievances channel explain this relationship (H2). To do so, we consider the following two-stage equation system:

$$aid_{it} = \alpha * global \ aid_{it} + \delta' * X'_{it} + \varepsilon_{it}$$
(6a)
$$channel_{iit} = \beta * aid_{it} + \gamma' * X'_{it} + \varepsilon_{it}$$
(6b)

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

Strategic Logic Channel Variables. Following the strategic logic channel argument of Neumayer and Plümper (2011), anti-American terrorism is due to 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/bureaucratic 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 and military spending in relation to the size of the military size. 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 draw another variable that measures a *state's control over its territory*. This variable ought to encompass both military and administrative capacity. It measures a government's effective control over its territory, where this control might be challenged by, e.g., criminals, warlords or insurgents.

Grievances Channel Variables. According to the grievances channel 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 "losers" 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 is anticipated to encourage terrorism (by lowering its opportunity costs) 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 U.S. military aid (for a recent literature review on the economics of corruption, see Dimant and Tosato, 2018). Second, we expect rent-seeking and the eventual distribution of rents to contribute to economic and political exclusion, which limits economic and political participation of the "losers" of the rent-seeking and rent-distribution process. We measure exclusion by (1) an index of the *equal distribution of resources* within a country, indicating, e.g., the fair distribution of public goods such as health and education, and (2) an index of *equal access* that indicates how fair political power is distributed between different economic classes and social groups. Both variables also come the *VDEM Dataset*.

4.8.2 Empirical Results

Our results from equations (6a) and (6b) are reported in Table 8. First, 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 productive bureaucracy. In sum, there is no evidence that U.S. military aid bolsters local state capacity. Consequently, this finding also does not speak to the strategic logic argument.

There is, however, robust evidence that more U.S. military aid contributes to more rent-seeking and increased socio-economic and political exclusion. These findings provide evidence in favor of our grievances channel. That is, military aid undermines local institutional quality and induces rentseeking 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, which may consequently encourage anti-American resentment.

-Table 8 here-

5. 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 a causal estimate of the effect of U.S. military aid on anti-American terrorism. As our main result, we find that higher levels of military aid lead to an increased likelihood of the recipient country producing anti-American terrorism. This finding holds when subjected to a battery of robustness checks.

What are the implications of our study? First, we are able to refute the policy-maker argument. That is, we find no evidence that more U.S. military aid makes the United States less vulnerable to terrorism. Second, while we find that military aid induces anti-American terrorism, we find little evidence that U.S. military aid contributes to increased local state capacity. This suggests that anti-American terrorism is not a consequence of a strategic logic employed by terrorist groups, which would mean that U.S. military aid creates additional benefits from terrorism, e.g., as a reduction in U.S. aid will weaken a local government supported by the United States and make terrorist success more likely. Third, we rather 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. Reduced means of participation ought to lower the opportunity costs of violence. Consequently, aggrieved groups will in particular 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. Our results therefore point to a negative return on investment when military aid is employed as a counter-terrorism tool. This is especially true as (1) U.S. military aid handed out aid 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 further reasons, 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 suggest 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.

- Bapat, N.A. 2011. "Transnational terrorism, US military aid, and the incentive to misrepresent." *Journal of Peace Research* 48: 303-318.
- Bjornskov, C., Rode, M. Forthcoming. Regime types and regime change: A new dataset on democracy, coups, and political institutions. *Review of International Organizations*: https://doi.org/10.1007/s11558-019-09345-1.
- 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.
- Dimant, E., Tosato, G. 2018. "Causes and effects of corruption: What has past decade's empirical research taught us? A survey." *Journal of Economic Surveys* 32: 335-356.
- 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.

- Gaibulloev, 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.
- 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., 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.
- 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.
- 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.
- Wang, T.Y. 1999. "U.S. foreign aid and UN voting: An analysis of important issues." *International Studies Quarterly* 43: 199-210.
- Wooldridge, J.M. 2010. "Econometric Analysis of Cross-Section and Panel Data". MIT Press. World Bank. 2016. "World Development Indicators." The World Bank.

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

U.S. Military Aid t-1 0.0001 0.0006 0.0001 0.0006 0.0003 0.0008 $(0.000)^{***}$ $(0.0002)^{***}$ $(0.000)^{***}$ $(0.0001)^{***}$ $(0.0002)^{***}$ $(0.0002)^{***}$		
(ln) U.S. 0.0387 0.041		
Military Aid $_{t-1}$ (0.0064)*** (0.007	6)***	
Per Capita U.S.	0.0002	0.0096
Military Aid t-1	(0.0002)	(0.0022)***
State Failure $_{t-1}$ 0.01950.02060.01890.02140.01970.019 $(0.0039)^{***}$ $(0.0052)^{***}$ $(0.0038)^{***}$ $(0.0060)^{***}$ $(0.0036)^{***}$ $(0.0060)^{***}$	0.0194 4)*** (0.0038)***	0.0266 (0.0053)***
Infant Mortality $_{t-1}$ -0.00010.0005-0.00020.0008-0.0002-0.000(0.0002)(0.0004)(0.0002)(0.0006)(0.0002)(0.0007)	2 -0.0002 2) (0.0002)	0.0016 (0.0008)*
Democracy t-1 0.0263 0.0586 0.0257 0.0660 0.0288 0.028 0.028 0.028 0.028 0.028	0.0208	0.0507
Population Size $_{t-1}$ (0.0123) (0.0123) (0.0123) (0.0223) (0.0117) (0.0117) (0.0272) (0.0410) (0.0270) (0.0417) (0.0274) (0.0274)	0.0454	-0.0436
(0.0272) (0.0410) (0.0279) (0.0417) (0.0274) (0.0274)	$(0.0270)^{*}$	(0.0641)
Aid (0.0001 -0.0005		
US Troops + 0.0001 = -0.0001		
$(0.000)^{***}$ (0.0001)		
First-Stage Regression Results		
Global Military Aid t-1 0.016 0.016 0.010 0.001		0.001
$(0.004)^{***}$ $(0.004)^{***}$ $(0.004)^{***}$ $(0.004)^{***}$)***	(0.000)***
Effective F-Statistic 14.57 18.48 7.84 69.52		21.71
Anderson-Rubin (AR) [0.0004; [0.0004; [0.0004; [0.002]	2;	[0.0063;
90% Confidence 0.0010] 0.0009] 0.0020] 0.055]	0.0147]
Intervals		
AR Wald Test-Statistic9.488.998.588.99		8.99
$(Pr.>\chi^2) (0.00)^{***} (0.$	***	$(0.00)^{***}$
Country FEYesYesYesYesYesYesYes	Yes	Yes
Year FE Yes 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	6,914	6,914

***p<0.01.

 Table 3: Baseline Fixed-Effects and Instrumental-Variable Fixed-Effects Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable \rightarrow	Baseline	No. of	No. of	Binary	Binary U.S.	Binary U.S.	Terrorism	Terrorism
		Attacks	Attacks Per	Terrorist	Casualties	Casualties	Index	Index
		(Location)	Capita	Attack	(Location)	(Origin)	(Location)	(Origin)
			(Location)	(Origin)				
U.S. Military Aid t-1	0.0006	0.0022	0.3115	0.0004	0.0002	0.0002	0.0006	0.0005
	(0.0001)***	(0.0008)***	(0.1455)**	(0.0001)***	(0.0001)*	(0.0001)*	(0.0002)***	(0.0002)***
State Failure t-1	0.0206	0.1173	27.9985	0.0223	0.0123	0.0104	0.0257	0.0268
	(0.0052)***	(0.0340)***	(7.8751)***	(0.0055)***	(0.0032)***	(0.0037)***	(0.0057)***	(0.0048)***
Infant Mortality t-1	0.0005	0.0023	-0.1753	0.0006	0.0004	0.0002	0.0007	0.0005
	(0.0004)	(0.0016)	(0.2709)	(0.0003)**	(0.0002)**	(0.0002)	(0.0004)*	(0.0003)
Democracy t-1	0.0586	0.0040	22.6920	0.0505	0.0118	0.0106	0.0333	0.0305
	(0.0164)***	(0.1764)	(22.5449)	(0.0124)***	(0.0071)*	(0.0055)*	(0.0107)***	(0.0079)***
Population Size t-1	0.0031	0.3760	-103.8963	0.0390	0.0395	0.0182	-0.0339	-0.0004
	(0.0410)	(0.1355)***	(52.0244)**	(0.0283)	(0.0327)	(0.0248)	(0.0581)	(0.0431)
First-Stage Regression Results	5							
Global Military Aid t-1	0.016	0.016	0.016	0.016	0.014	0.014	0.014	0.014
	(0.004)***	$(0.004)^{***}$	(0.004)***	(0.004)***	(0.005)***	(0.005)***	(0.005)***	(0.005)***
Effective F-Statistic	18.48	18.48	18.56	18.48	7.19	7.19	7.19	7.19
Weak Instrument Robust Test	and Inference							
Anderson-Rubin (AR) 90%	[0.0004;	[0.0007;	[0.0649;	[0.0002;	[0.0001;	[0.0001;	[0.0004;	[0.0002;
Confidence Intervals	0.0009]	0.0038]	0.6353]	0.0008]	0.0005]	0.0005]	0.0011]	0.0009]
AR Wald Test-Statistic	8.99	4.42	3.85	7.96	2.73	2.91	7.01	5.51
$(Pr.>\chi^2)$	(0.00)***	(0.04)**	(0.04)**	(0.00)***	(0.09)*	(0.09)*	(0.00)***	(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

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

	(1)	(2)	(3)	(4)
Instrumental Variable >	Gini	Gini	Social	Social
	Coefficient	Coefficient	Security	Security
			Transfers	Transfers
			(% of GDP)	(% of GDP)
U.S. Military Aid t-1	0.0007	0.0007	0.0007	0.0007
	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***
State Failure t-1		0.0199		0.01999
		(0.0053)***		(0.0052)***
Infant Mortality t-1		0.0006		0.0006
		(0.0003)**		(0.0003)**
Democracy t-1		0.0683		0.0650
		(0.0170)		(0.0170)***
Population Size t-1		-0.0551		-0.0488
		(0.0485)		(0.0465)
First-Stage Regression Results				
Coefficient for Respective IV t-1	-70.58	-79.51	-67.31	-74.76
	(12.90)***	(14.04)***	(7.66)***	(7.28)***
Effective F-Statistic	29.92	32.06	77.26	105.40
Weak Instrument Robust Test and Inference				
Anderson-Rubin (AR) 90% Confidence Intervals	[0.0005,	[0.0003,	[0.0005,	[0.0005,
	0.0010]	0.0008]	0.0010]	0.0014]
AR Wald Test-Statistic	7.36	7.44	6.66	6.54
$(\Pr.>\chi^2)$	(0.00)***	$(0.00)^{***}$	$(0.00)^{***}$	(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 pro	bability that co	ountry receive	s any military	aid per year.

Notes: Constant not reported. P(Aid)=Average probability that country recei Driscoll-Kraay standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01. **Table 5: Alternative Instrumental Variables**

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
Sample → Measurement of U.S. Military Aid →Full AidFull In(Aid)Reduced AidReduced In(Aid)U.S. Military Aid t-10.0007 (0.0003)**0.0322 (0.00085)***0.0023 (0.0008)***0.0335 (0.0114)***U.S. Military Aid t-1 * Cold War (0.0003)-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 (0.001)0.0007 (0.0003)**0.0322 (0.0003)**0.0023 (0.0009)0.0124)Effect of U.S. Military Aid after Cold War (0.0001)***0.0007 (0.0001)***0.0322 (0.0008)***0.0335 (0.0008)***0.0114)*** (0.0114)***First-Stage and Weak-Instrument Diagnostics First-Stage F-Statistic19.49; 14.30 20.5233.46; 21.98 20.528.99; 9.10 21.6030.95; 21.54 21.60
Measurement of U.S. Military Aid \rightarrow Aidln(Aid)Aidln(Aid)U.S. Military Aid $_{t-1}$ 0.00070.03220.00230.0335(0.0003)**(0.0003)**(0.00085)***(0.0008)***(0.0114)***U.S. Military Aid $_{t-1}$ * Cold War-0.00010.01270-0.00040.0096(0.0003)(0.0097)(0.0009)(0.0124)Effect of U.S. Military Aid during Cold War0.00070.03220.00230.0335(0.0003)**(0.0007)0.03220.00230.0335(0.0003)**(0.0007)0.03220.00230.0335(0.0003)**(0.0005)***(0.00085)***(0.0008)***(0.0114)***Effect of U.S. Military Aid after Cold War0.00050.04490.00180.0430(0.0001)***(0.0091)***(0.0005)***(0.0099)***(0.0099)***First-Stage and Weak-Instrument Diagnostics19.49; 14.3033.46; 21.988.99; 9.1030.95; 21.54AR Wald Test-Statistic20.5220.5221.6021.60
U.S. Military Aid $_{t-1}$ 0.00070.03220.00230.0335(0.0003)**(0.0003)**(0.0085)***(0.0008)***(0.0114)***U.S. Military Aid $_{t-1}$ * Cold War-0.00010.01270-0.00040.0096(0.0003)(0.0097)(0.0009)(0.0124)Effect of U.S. Military Aid during Cold War0.00070.03220.00230.0335(0.0003)**(0.0007)(0.0085)***(0.0008)***(0.0114)***Effect of U.S. Military Aid after Cold War0.00070.03220.00230.0335(0.0001)***(0.0005)***(0.0008)***(0.0114)***Effect of U.S. Military Aid after Cold War0.00050.04490.00180.0430(0.0001)***(0.0091)***(0.0005)***(0.0099)***(0.0099)***First-Stage and Weak-Instrument Diagnostics19.49; 14.3033.46; 21.988.99; 9.1030.95; 21.54AR Wald Test-Statistic20.5220.5221.6021.60
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
U.S. Military Aid $_{t-1}$ * Cold War-0.00010.01270-0.00040.0096(0.0003)(0.0097)(0.0009)(0.0124)Effect of U.S. Military Aid during Cold War0.00070.03220.00230.0335(0.0003)**(0.0085)***(0.0008)***(0.0114)***Effect of U.S. Military Aid after Cold War0.00050.04490.00180.0430(0.0001)***(0.0001)***(0.0005)***(0.0005)***(0.0099)***First-Stage and Weak-Instrument Diagnostics19.49; 14.3033.46; 21.988.99; 9.1030.95; 21.54AR Wald Test-Statistic20.5220.5221.6021.60
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
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 $(0.0005)***$ First-Stage and Weak-Instrument Diagnostics $19.49; 14.30$ 20.52 $33.46; 21.98$ 20.52 $8.99; 9.10$ 21.60 $30.95; 21.54$ 21.60
Effect of U.S. Military Aid after Cold War $(0.0003)^{**}$ 0.0005 $(0.0001)^{***}$ $(0.0085)^{***}$ 0.0449 $(0.0001)^{***}$ $(0.0114)^{***}$ 0.0018 $(0.0099)^{***}$ First-Stage and Weak-Instrument Diagnostics19.49; 14.30 20.52 $33.46; 21.98$ 20.52 $8.99; 9.10$ 21.60 $30.95; 21.54$ 21.60
Effect of U.S. Military Aid after Cold War 0.0005 0.0449 0.0018 0.0430 (0.0001)*** (0.0091)*** (0.0005)*** (0.0099)*** First-Stage and Weak-Instrument Diagnostics 19.49; 14.30 33.46; 21.98 8.99; 9.10 30.95; 21.54 AR Wald Test-Statistic 20.52 20.52 21.60 21.60
(0.0001)***(0.0091)***(0.0005)***(0.0099)***First-Stage and Weak-Instrument DiagnosticsFirst-Stage F-StatisticsAR Wald Test-Statistic20.5220.5221.60
First-Stage and Weak-Instrument Diagnostics First-Stage F-Statistics 19.49; 14.30 33.46; 21.98 8.99; 9.10 30.95; 21.54 AR Wald Test-Statistic 20.52 20.52 21.60 21.60
First-Stage F-Statistics19.49; 14.3033.46; 21.988.99; 9.1030.95; 21.54AR Wald Test-Statistic20.5220.5221.6021.60
AR Wald Test-Statistic20.5220.5221.6021.60
$(\Pr > \chi^2) \qquad (0.00)^{***} \qquad (0.00)^{***} \qquad (0.00)^{***} \qquad (0.00)^{***}$
Baseline ControlsYesYesYes
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
Panel B: Pre-9/11 and Post /11 Era (1968-2000 vs. 2001-2014)
(1) (2) (3) (4)
Sample → Full Full Reduced Reduced
Measurement of U.S. Military Aid \rightarrow Aid $\ln(Aid)$ Aid $\ln(Aid)$
U.S. Military Aid t-1 0.0006 0.0442 0.0019 0.0426
(0.0001)*** (0.0085)*** (0.0005)*** (0.0090)***
U.S. Military Aid 1-1 * Post-9/11 0.0001 -0.0127 0.0001 -0.0105
(0.0005) (0.0098) (0.0010) (0.0140)
Effect of U.S. Military Aid before 9/11 Era 0.0006 0.0442 0.0019 0.0426
(0.0001)*** (0.0085)*** (0.0005)*** (0.0090)***
Effect of U.S. Military Aid during 9/11 Era 0.0007 0.0315 0.0020 0.0321
(0.0005) $(0.0102)^{***}$ $(0.0010)^{**}$ $(0.0145)^{**}$
First-Stage and Weak-Instrument Diagnostics
First-Stage F-Statistics 21.59: 0.64 34.49: 13.45 9.27: 7.09 32.09: 15.86
AR Wald Test-Statistic 17.37 17.37 18.06 18.06
$(\Pr > \chi^2)$ $(0.00)^{***}$ $(0.00)^{***}$ $(0.00)^{***}$ $(0.00)^{***}$
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 eraspecific 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 6: Heterogeneity over Time

	(1)	(2)	(3)	(4)	(5)			
Target Country of Transnational	United	United	France	Israel	Turkey			
Terrorism →	States	Kingdom						
	(Baseline)							
U.S. Military Aid t-1	0.0006	0.0002	0.0002	-0.0001	0.0001			
	(0.0001)***	(0.0001)***	(0.0001)**	(0.0001)	(0.0001)			
State Failure t-1	0.0206	0.0187	0.0203	0.0033	0.0043			
	(0.0052)***	(0.0042)***	(0.0042)***	(0.0019)*	(0.0014)***			
Infant Mortality t-1	0.0005	0.0002	-0.0001	-0.0001	0.0001			
	(0.0004)	(0.0002)	(0.0002)	(0.0002)	(0.0001)			
Democracy t-1	0.0586	0.0340	0.0179	0.0186	0.0090			
	(0.0164)***	(0.0144)**	(0.0122)	(0.0086)**	(0.0050)*			
Population Size t-1	0.0031	0.0160	0.0220	0.0542	0.0367			
	(0.0410)	(0.0120)	(0.0166)	(0.0160)***	(0.0188)**			
First-Stage Regression Results								
Global Military Aid t-1	0.016	0.016	0.016	0.016	0.016			
	$(0.004)^{***}$	$(0.004)^{***}$	(0.004)***	(0.004)***	(0.004)***			
Effective F-Statistic	18.48	18.58	18.51	18.12	15.69			
Weak Instrument Robust Test and Inf	erence							
Anderson-Rubin (AR) 90%	[0.0004;	[0.0001;	[0.0001;	[-0.0002;	[-0.0001;			
Confidence Intervals	0.0009]	0.0004]	0.0005]	0.0002]	0.0002]			
AR Wald Test-Statistic	8.99	5.14	6.62	0.01	1.98			
$(Pr.>\chi^2)$	$(0.00)^{***}$	(0.02)**	(0.01)**	(0.94)	(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.								

Notes: Constant not reported. Driscoll-Kraay standard errors in parentheses. *p<0.1, **p<0.05, * **Table 7: Transnational Terrorism against Non-American Targets**

	(1)	(2)	(3)	(4)	(5)	(6)	
Dependent Variable \rightarrow	Military	Rigid and	Territorial	Public	Equal	Equal	
	Capacity	Impartial	Control	Sector	Distribution	Access	
		Public		Corruption	of		
		Administration			Resources		
U.S. Military Aid t-1	-0.0001	-0.0007	-0.0038	0.0001	-0.0001	-0.0002	
	(0.0001)	(0.004)*	(0.0036)	(0.0000)***	(0.0000)***	(0.0001)***	
First-Stage Regre	ession Results						
Global Military Aid t-1	0.019	0.016	0.016	0.016	0.016	0.016	
	(0.003)***	(0.004)***	$(0.004)^{***}$	(0.004)***	(0.004)***	(0.004)***	
Effective F-Statistic	33.03	18.47	18.47	18.47	18.47	18.47	
Weak Instrument	Robust Test a	nd Inference					
Anderson-Rubin (AR) 90%	[-0.0002;	[-0.0013;	[-0.0107;	[0.0001;	[-0.0002;	[-0.0003;	
Confidence Intervals	0.0001]	0.0000]	0.0032]	0.0002]	-0.0001]	-0.0001]	
AR Wald Test-Statistic	1.29	2.38	0.99	5.44	4.33	6.32	
$(Pr.>\chi^2)$	(0.26)	(0.12)	(0.31)	(0.02)**	(0.04)**	(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 8: Transmission Channels**

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				
List of Countries							

Variable	CD-Test Statistic	Mean Absolute					
	(p-value)	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	0.0006	0.0006	0.0006	0.0005	0.0007	0.0005	0.0006
	(0.0002)***	(0.0002)***	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***	(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							0.0177	
(replaces Infant Mortality)							(0.0291)	
Electoral Democracy t-1								-0.0262
(replaces Democracy)								(0.0520)
First-Stage Regression Results								
Global Military Aid t-1t-1	0.015	0.015	0.016	0.016	0.015	0.015	0.014	0.016
	(0.004)***	(0.004)***	(0.004)***	(0.004)***	$(0.004)^{***}$	(0.004)***	(0.004)***	$(0.004)^{***}$
Effective F-Statistic	16.52	14.94	18.54	18.70	18.13	15.90	12.90	18.87
Weak Instrument Robust Test a	nd Inference							
Anderson-Rubin (AR) 90%	[0.0003;	[0.0004;	[0.0004;	[0.0004;	[0.0002;	[0.0005;	[0.0002;	[0.0003;
Confidence Intervals	0.0009]	0.0011]	0.0009]	0.0009]	0.0009]	0.0012]	0.0011]	0.0009]
AR Wald Test-Statistic	8.09	9.08	9.05	8.98	7.28	10.11	7.46	8.85
$(Pr.>\chi^2)$	$(0.00)^{***}$	$(0.00)^{***}$	$(0.00)^{***}$	(0.00)***	(0.00)***	(0.00)***	$(0.00)^{***}$	(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. Ba	aseline controls	s are state fail	ure; infant mo	rtality; democ	racy; populatic	on size. Drisco	ll-Kraay stand	ard errors in

parentheses. *p<0.1, **p<0.05, ***p<0.01. **Supplementary Table 2: Additional Instrumental-Variable Fixed-Effects Estimates**



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