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# Foreign Aid and the Effectiveness of International Counter-Terrorism Conventions

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# Foreign Aid and the Effectiveness of International Counter-Terrorism Conventions

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**by**

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In the contemporary international system, non-state actors pose an acute threat to the interests of states. Transnational terrorism is a particularly notable example of the security threats that non-state actors pose. While the literature on international agreements has focused on state-level compliance, much of international law concerns the behavior of non-state entities such as terrorist groups, transnational crime organizations, corporations, and individuals. This study considers whether the international counter-terrorism regime developed over the past five decades has been effective at reducing transnational terrorism and consider the im-

plications for the study of other instruments of international law which regard non-state actor behavior. Because these agreements establish clear benchmarks, they provide observable outcomes for donors that may want to give foreign aid, but are uncertain about whether aid recipients will use aid for its intended purpose. Agreements allow donors to condition aid allocation on benchmarks set by treaties, rather than observed levels of non-state behavior alone, increasing donor-recipient trust and capacity building aid flows. I find that countries ratifying counter-terrorism agreements see a significant increase in foreign aid receipts. I then assess the effectiveness of eight UN counter-terrorism conventions individually, using terrorism data germane to the type of terrorist activity the specific agreement attempts to curtail. I find support for the hypothesis that counter-terrorism agreements reduce transnational terrorism for five of the agreements in issue areas of terrorist bombing, kidnapping, hostage-taking, and financing. I conclude by discussing how the variation in effectiveness of counter-terrorism agreements found may help shed light on the design of effective international agreements when the locus of compliance is non-state actors and treaty design more generally.

# Contents

# List of Tables

# 1 Introduction

The membership and corpus of international counter-terrorism agreements has expanded greatly since the 1960's when the first UN Convention aimed at reducing terrorist actions was opened for ratification. Yet, there has been little systematic study of whether these agreements are effective. Because of the wide variety in how these conventions operate, empirical exploration in this area may provide fruitful insights into how international agreements may be effectively designed. This study considers whether counter-terrorism agreements are effective at reducing transnational terrorism. In this paper I focus on those conventions regarding terrorist bombing, kidnapping, hostage-taking, financing, and aircraft hijacking.[1]

While there is no universally accepted definition for what constitutes transnational terrorism or indeed terrorism in general, for the purposes of this paper I adopt the definition used by the ITERATE dataset which defines transnational terrorism as "the use, or threat of use, of anxiety-inducing, extra-normal violence for political purposes by any individual

[1]Counter-terrorism agreements regarding nuclear material and maritime safety are not considered because the terrorist events that these agreements regard are rare and there is limited availability of data on nuclear or maritime terror.

or group, whether acting for or in opposition to established governmental authority, when such action is intended to influence the attitudes and 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 institutional or human victims, or the mechanics of its resolution, its ramifications transcend national boundaries." [Mickolus et al., 2011]. Transnational terrorism can thus take may forms, this variety is reflected in conventions designed to curtail it.

States often suffer negative externalities from terrorists based abroad. Indeed, one is hard pressed to find a nationality that has not been the victim of transnational terrorism. Terrorists tend to base themselves in low capacity states [Huepel, 2007]. Major powers are often willing willing to subsidize originator states to prevent terrorism [Azam and Delacroix, 2006]. However, Donor states risk that recipients may not use aid for its intended purpose [Bapat, 2011, Boutton, 2013]. This paper considers whether international counter-terrorism agreements might help mitigate this moral hazard problem by increasing observability.

I first quickly summarize the international counter-terrorism legal regime with an overview of how the regime has developed over the past five

decades. Next, I review the literature in political science and international law that has focused on whether international agreements have a causal impact or are epiphenomenal, focusing on issues of state selection into the treaties and conceptualization and measurement of treaty effectiveness. I then turn to the literature on foreign aid as a counter-terrorism instrument.

After reviewing the literature, I outline the logic behind the two hypotheses of the paper, that states who ratify agreements will receive more foreign aid and will have fewer terrorist events perpetrated by their nationals. I find broad support for the first hypothesis. States which ratify counter-terrorism agreements see an increase in foreign aid receipts. However, there is wide variation in the effectiveness of agreements, some have a large impact on transnational terrorism while others do not. I consider each agreement individually to assess their impact on the behavior which they were designed to prevent using data on skyjackings, terrorist bombings, hostage taking by terrorists and terrorist events in general using a battery of statistical models to account for sample selection, country fixed effects, and rare events bias. Overall I find that conventions aimed at suppressing terrorist bombing, kidnapping, hostage-taking, and financ-

ing are effective for a wide range of model specifications, while there is little evidence that the many conventions regarding the suppression of hijacking and air travel safety have any impact.

Although scholars in the early 1990's found that UN counter-terrorism conventions had no discernible effect on transnational terrorism [Enders et al., 1990], I revisit this finding with two decades of additional data and many more conventions. This paper leverages the wide variety of counter-terrorism agreements to gain leverage on what design elements help increase the effectiveness of counter-terrorism agreements. My findings concord with Enders et al.'s finding that UN Conventions regarding air safety have little discernible impact, but unlike their study, I find strong evidence of the impact of counter-terrorism conventions in a variety of other issue areas.

Through an analysis of the impact of counter-terrorism agreements on levels of transnational terrorism accounting for non-random state selection into treaties, country fixed effects, and rare events bias, I find evidence that suggests that the design of counter-terrorism agreements may help mitigate the moral hazard problem arising in the delegation of aid. While further research is needed to understand why these agreements

are effective, the evidence I present here makes a compelling case that counter-terrorism agreements do have "bite". In the conclusion, I discuss how future research might test competing arguments using causal mediation analysis with endogenous regressors by adapting recently proposed estimators for causal mediation analysis with treatment noncompliance [Yamamoto, 2014] to the context of state selection into treaties. I also consider the implications of the papers results for the study of treaty design and describe fruitful avenues for future research using zero-inflated count models with endogenous regressors [Stephan et al., 2007, Roebuck et al., 2004].

## International Counter-terrorism Agreements

The development of an international counter-terrorism regime has been in progress for decades beginning with the adoption of a convention for the prevention and punishment of terrorism by the League of Nations in 1937 which never came into force. Beginning in 1963, with the introduction of a convention aimed in part to prevent terrorist actions on board aircraft, The United Nations began to expand the international counter-terrorism regime. Before 2001, there were 12 counter terrorism international agree-

ments, however the rate of adherence was low. UN Resolution 1373 called upon states to become parties to these agreements. Due to the international pressure after the events of September 11, 2001 from the United States and others, about two-thirds of UN member states have ratified or acceded to at least 10 of the 16 total agreements to date. These agreements can be organized into general agreements aimed at curbing transnational terrorism, counter-terrorism agreements specific to nuclear material and explosives, agreements pertaining to aviation, and agreements pertaining to maritime terrorism. Below I briefly summarize agreements included in this study with commentary on the outcome they would have if effective in order to give some context to the analysis that follows.

The 1979 International Convention against the Taking of Hostages requires governments of states who are a party to the treaty to take steps to prosecute and prevent hostage taking as an act of international terrorism. Therefore, for this agreement to be considered effective we would expect to see a reduction in the number of terrorist kidnappings when states ratify. The 1997 International Convention for the Suppression of Terrorist Bombings requires that state parties punish terrorist bombings with an international element under their domestic law, to assist other states with

criminal prosecutions, and to extradite those suspected of terrorist bombings. The 1991 Convention on the Marking of Plastic Explosives requires state parties to prohibit and prevent the manufacture and trafficking of unmarked plastic explosives. If either of these two conventions result in a reduction in terrorist bombing then they should be considered effective. The 1999 International Convention for the Suppression of the Financing of Terrorism requires state parties to take measures for the freezing or seizure of funds used to promote terrorism.Reducing terrorists abilities to finance operations should result in a general reduction in terror events.

The 1963 Convention on Offenses and Certain Other Acts Committed on Board Aircraft requires that state parties recognize aircraft commanders and crew to keep good order and discipline on board aircraft. The 1970 Convention for the Suppression of Unlawful Seizure of Aircraft requires that state parties criminalize the hijacking of aircraft (also known as skyjackings) and to extradite or prosecute offenders. The 1971 Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation provides further detail for the jurisdiction, prosecution and extradition of acts of transnational terrorism and other unlawful acts taking place onboard airplanes. The 1988 Protocol on the Suppression of Unlaw-

ful Acts of Violence at Airports Serving International Civil Aviation adds actions endangering safety at international airports to the list of offenses in the 1971 convention for which state parties much criminalize, prosecute and extradite. Each of these many conventions regarding the safety of air travel should result in a reduction of the hijacking of aircraft if they are effective.

The effectiveness of each of these Conventions remains understudied. Besides Enders et al. [1990] discussed above, other studies of the international counter-terrorism regime focus only on ratification rather than the effects of ratification [Stiles and Thayne, 2006, Whitaker, 2010]. Following the call from Martin and others, I focus on the effectiveness of counter-terrorism treaties rather than state compliance with UN resolutions requiring they ratify them. Next, I provide an overview of the literature from international organizations and international law which has attempted to assess whether international agreements have a causal impact on behavior and the literature on foreign aid as an means of counter-terrorism.

# 2 Literature Review

Much of the debate in the field of International Organizations can be summarized as about the causal impact of international organizations. Debate initially surrounded whether international organizations had any impact[2]. However, later scholarship has moved toward trying to understand why international organizations work rather than simply if they work [Martin and Simmons, 1998]. In this paper I suggest that counterterrorism operates through the increased provision and efficacy of capacity building aid. While my analysis here is not a direct test of this proposition, I discuss how recent advances in the field of causal mediation analysis [Yamamoto, 2014] might be usefully adapted to the study of international organizations to test between competing arguments for the mechanisms by which international organizations influence behavior in the conclusion.

International agreements often regard behavior of actors who are not states [Paust, 2011]. A recent body of literature has argued that domestic political actors are a possible mechanism for the enforcement of international institutions and agreements [for example see Dai, 2005, Mansfield

[2]see Downs et al. [1996] and Chayes and Chayes [1993] for an example

et al., 2002, Leeds, 1999]. Most of these studies have focused on how domestic political actor's ability to influence a leader's domestic political survival creates indirect enforcement mechanisms for IOs. However, little has been written about the much more direct influence non-state actors can have on the effectiveness of, and state compliance with, international agreements by violating the terms of an international agreement unilaterally. Such agreements criminalize a non-state actor behavior, and call upon states to adopt domestic policies to curb non-state actor behavior. Counter-terrorism agreements are an example of such an agreement.

Counter-terrorism agreements are primarily concerned with curbing a non-state actor behavior, and call upon states to adopt policies which make terrorism harder to pursue. Often terrorists are drawn to states which lack the resources or will to prosecute terrorism emanating from their territory. Foreign powers may rather easily observe the level of resources a state has, but may be much more uncertain about their willingness to spend resources to abate terrorism. I argue that counter terrorism agreements act as a screening mechanism whereby foreign powers learn about the political will of host countries to curb terrorism, allowing them to better target capacity building counter-terrorism aid. Counter-

terrorism agreements are a recent step in the long historical process of making states accountable for violence emanating from within their territory [Thomson, 1994, Kahler, 1995].

Given the power asymmetries that are often present in the relationships between originator and target states, one might wonder why the target of terrorist attacks does not simply attack the originator state. While this is certainly an option that has been used in a small number of notable cases, such action would be unlikely to curb transnational terrorism. Azam and Thelen look at the trade-off between aid and military intervention in the war on terror. They find that while foreign aid is effective at reducing number of attacks, military intervention actually increases the supply of attacks (2010).

# 3 Hypotheses

Abbot and Snidal argue that "IOs are vehicles for pooling activities" [1998, p. 13]. International agreements create cooperative efforts to punish violators because it clearly outlines what is and is not acceptable behavior by non-state actors in a certain issue area. Signing an agreement introduces the risk of extraterritorial enforcement, punishment by or at the behest of a foreign government. This deters terrorists from basing their activities in states which have joined counter-terrorism agreements.

In early 2004, the Philippines ratified the Convention for the Suppression of Terrorist Financing. This ratification was associated with a twelve million dollar increase in average security and counter-terrorism related aid per year form the United States. Similarly, when Pakistan acceded to the Convention for the Suppression of Terrorist Bombings in 2009, they also saw an increase of almost 5.5 million average security and counter-terrorism aid dollars per year from the United States. To consider whether this trend is more general than these two cases I test Hypothesis 1:

Hypothesis 1: *States that ratify international counter-terrorism agreements receive more aid than states that do not.*

While there is mounting evidence that foreign aid is used as a tool of

counter-terrorism (see for example Azam and Delacroix 2006). There can be moral hazard problems arising from limited observability and preference divergence (Bapat 2011; Boutton 2013). By establishing benchmarks for ratifiers to accomplish agreements may mitigate this effect, making aid more effective and reducing terrorism. I test whether Conventions influence terrorism with by testing Hypothesis :

Hypothesis 2: *States that ratify international counter-terrorism will have less terrorist events perpetrated by their nationals than states that do not.*

Hypothesis 2 is broken out into hypotheses about each convention, I test whether the Convention for the suppression of bombing is effective at reducing terrorist bombing, whether the Convention for the suppression of Hostage taking reduced kidnappings and so on for each of the 8 agreements considered in this study.

# 4 Research Design

One of the major issues when assessing the impact of international agreements is the possibility of selection bias. Because states decide whether or not to join treaties and are not randomly assigned to join or not, empirical studies which do not take into account may bias their results. For instance, states who expect to comply may join treaties more often that other states. If one simply looked at compliance levels they would appear to be quite high, but in reality the agreement is having little or no impact [Downs et al., 1996]. To avoid such spurious inferences, I will take into account the ratification process in my empirical model. I employ a 2 stage least squares instrumental variable model with fixed effects to control for unobserved unit heterogeneity [Wilson and Butler, 2007] and state selection into the convention. For this model I transformed dependent variable by taking the natural log of the event counts plus 1. Because this transformation is a bit arbitrary, I also ran instrumental variable probit models [Nichols, 2007] as a robustness check.

Another statistical issue arises from the fact that transnational terrorist attacks are a fairly rare event. A large number of null values on the dependent variable may bias inferences [King and Zeng, 2001]. To cor-

rect for potential bias I employ a zero inflated negative binomial model using the count as a dependent variable. Rare event logit models are also estimated with a dummy variable for whether any events occurred.

Each model includes control variables GDP per Capita, Population, Civil War, Regime Type, and Post 2001. To account for temporal dynamics each model is also run with the lagged dependent variable as a covariate. Beck and Katz [2009] suggest that a lagged dependent variable can help account for temporal dynamics. To take into account the panel structure of the data, I employ clustered standard errors [Beck and Katz, 1995].

## Transnational Terrorism

Number of events perpetrated by nationality drawn from the ITERATE dataset on transnational terrorism [Mickolus et al., 2011].While data on the nationality of the perpetrator is only available for 65% of cases in ITERATE and is not publicly available through GTD, this dataset does provide a useful, if noisy measure of the dependent variable. Unit of analysis is the nationality of perpetrator -year, with the dependent variable being the number of events perpetrated by that nationality in that year. ITERATE counts for Skyjackings, Kidnappings, Bombings and a sum total of

events are all used depending on the issue area of the agreement being tested.

## Foreign Aid

To measure foreign aid flows I use the AidData recipient aggregates [Tierney et al., 2011].

## Instrumental Variable: lagged ratification by adjacent states

The percent of adjacent states adjacent states ratifying is used as instrumental variable for treaty ratification. Much literature in the study of international organizations argues that due to diffusion and norms, neighbor ratification is a good instrument for ratification [Buthe and Milner, 2008] . The t statistics for the variable in the first stage were all highly significant and the F statistics of excluding the instrument are highly significant. This variable is lagged in order to correct for potential endogeniety.

## Ratification of Counter-Terrorism Agreements and Treaty Capital Index

Ratification information was compiled from UN depositories. Following the approach to measuring participation in multiple treaties taken in Arvind Magesan's study of human rights agreements 2013, I construct an index to account for the fact that there have been multiple conventions over a period of five decades. Because the number of agreements available for ratification is increasing in time, using a simple count of the number of agreements ratified is undesirable. Instead I use an index is given by $K = T - W$ where $T$ is the total number of conventions ratified and $W$ is the average number ratified worldwide. This gives a relative score, which has desirable properties for dealing with time trends and the fact that the number of agreements available to ratify varies over time.

## Control Variables

I also include a battery of controls in the analyses including the natural log of gross domestic product per capita and population, both are logged and lagged by one year. I also control for whether the country is in a

civil war using the UCDP/PRIO Armed Conflcit Dataset Thermer and Wallensteen [2014], as this has been found to drastically influence rates of terrorism [Findley and Young, 2012]. I use the polity combined regime type variable as a measure of regime type. I also control for post 2001 due to possible changes in state and terrorist strategy following the World Trade Center bombings [Enders and Sandler, 2005].

# 5 Results

Below I present the results of the analyses described above. I find broad support for all of the hypotheses except for those regarding air safety conventions. I find no evidence that the air safety conditions are effective, the results for those conventions are presented in the appendix.

## Ratification and Foreign Aid Allocation

Table 1 shows the results for models testing hypothesis 1 that state which ratify will receive more foreign aid than those that do not. in column A1 are the results for the fixed effects regression. Model A2 is the results for the fixed effects regression with lagged dependent variable. Model A3 is the results for Two stage least squares instrumental variable regression with fixed effects and Model A4 is the results for the same model with the lagged dependent variable included as a covariate.

The coefficient on lagged treaty capital is positive for all three models. It is significant at the .05 level for models A1, A3 and A4 and is significant at the .1 level for model A2. This shows broad support across a wide array of models for Hypothesis A. It appears that states with a higher treaty

Table 1: Treaty Ratification and Foreign Aid Receipts

| | (A1) Foreign Aid (logged) | (A2) Foreign Aid (logged) | (A3) Foreign Aid (logged) | (A4) Foreign Aid (logged) |
|---|---|---|---|---|
| Treaty Capital (lagged) | 0.194*** | 0.0732 | 2.183*** | 1.013*** |
| | (0.0460) | (0.0377) | (0.274) | (0.209) |
| GDP Per Capita (lagged logged) | -0.592** | -0.524** | -2.087*** | -1.238*** |
| | (0.214) | (0.175) | (0.315) | (0.236) |
| Population (lagged logged) | 3.632*** | 0.970*** | 4.192*** | 1.317*** |
| | (0.354) | (0.295) | (0.424) | (0.323) |
| Civil War | -0.934*** | -0.434* | -1.212*** | -0.605** |
| | (0.214) | (0.176) | (0.252) | (0.188) |
| Regime Type | 0.0593*** | 0.0319* | 0.0416* | 0.0237 |
| | (0.0154) | (0.0126) | (0.0182) | (0.0134) |
| Post Cold War | 0.620*** | 0.378* | 0.803*** | 0.477** |
| | (0.186) | (0.152) | (0.219) | (0.162) |
| Lagged Dependent Variable | | 0.553*** | | 0.535*** |
| | | (0.0110) | | (0.0122) |
| Intercept | -37.85*** | -4.489 | -36.24*** | -4.704 |
| | (5.824) | (4.807) | (6.817) | (5.100) |
| Fixed Effects | YES | YES | YES | YES |
| Instrumental Variable | NO | NO | YES | YES |
| *N* | 5279 | 5279 | 5254 | 5254 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

capital, those states which ratify more treaties relative to other states are more likely to receive aid *ceteris paribus*.

## Ratification and Transnational Terrorism

The second hypothesis is split up into 8 separate hypotheses, which I will refer to as hypotheses B-I, one for each of the Conventions. Each of these models appears in a column of the tables, grouped by the convention which they test and indexed by 1-8 Each hypothesis is tested a 2-stage least squared instrumental variable with fixed effects model, indexed by *1 for hypotheses 2-9, Column (*2) is the same model with the addition of a lagged dependent variable. Column (*3) is the instrumental variable Poisson model, and *4 is the instrumental variable Poisson Model with lagged dependent variable. *5 is the zero inflated negative binomial (ZINB) model , and *6 is the ZINB with lagged dependent variable. *7 is the Rare Events Logit Model and *8 is the Rare Events Model with lagged dependent variable. The dependent variable for each model is at the top of the table below the index number.[3]

Table 2 shows that the coefficient on lagged ratification for both 2 stage least square fixed effect models is negative and significant. Lagged ratification coefficients were negative but insignificant for the instrumental

[3]The Convention for the suppression of Terrorist Financing does not have a specific issue area, but likely has wide ranging impact for general ability of terrorist groups to fund activities, therefore use terror events in general including but not limited to all the types discussed above.

variable Poisson models. In Table 3, the coefficients on lagged ratification for all four rare events models is negative, but only significant for the rare events logit models and not for the zero inflated negative binomial models.

For the instrumental variable models in Table 4 for the Convention for the Suppression of Terrorist Bombing Ratification and Terrorist Bombing events all of the coefficients on lagged ratification are negative, but none of them are significant. However, the rare events models for this convention in Table 5 provide some support for the hypothesis that this convention is effective. All of the coefficients on lagged ratification are in the predicted direction (negative in the main stage and positive in the inflation stage). The coefficients on lagged ratification are significant for the rare events logit and for the inflation stage of model C5.

I also find strong support for the hypothesis that the Convention on the Marking of Plastic Explosives reduces terrorist bombings. Coefficients on lagged ratification are in the expected direction for all eight models, and are significant for the inflation stage of D5, the main stage of D6,

Table 2: Convention against the Taking of Hostages Ratification and Terrorist Kidnappings, Instrumental Variable Models

| | (B1) Kidnappings Logged Count | (B2) Kidnappings Logged Count | (B3) Kidnappings Count | (B4) Kidnappings Count |
|---|---|---|---|---|
| Ratification (lagged) | -0.239*** (0.0464) | -0.169*** (0.0436) | -2.536 (5.375) | -1.892 (4.707) |
| GDP per Capita (lagged logged) | 0.00109 (0.0219) | 0.0111 (0.0204) | 0.175 (0.296) | 0.170 (0.253) |
| Population (lagged logged) | 0.0847** (0.0309) | 0.0499 (0.0289) | 0.372 (0.196) | 0.328 (0.181) |
| Civil War | 0.194*** (0.0178) | 0.130*** (0.0168) | 1.884*** (0.557) | 1.406** (0.442) |
| Regime Type | 0.000951 (0.00140) | 0.000779 (0.00130) | -0.00477 (0.0446) | -0.00939 (0.0354) |
| Post-2001 | -0.0149 (0.0181) | -0.00558 (0.0169) | -0.0346 (1.002) | -0.0869 (0.903) |
| Lagged Dependent Variable | | 0.341*** (0.0133) | | 0.633*** (0.140) |
| Intercept | -1.181* (0.560) | -0.762 (0.524) | -8.376 (4.389) | -8.335** (3.191) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [4]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Convention against the Taking of Hostages Ratification and Terrorist Kidnappings, Rare Events Models

| | (B5) Kidnappings count | (B6) Kidnappings count | (B7) Kidnappings dummy | (B8) Kidnappings dummy |
|---|---|---|---|---|
| Ratification (lagged) | -0.739 | -0.471 | -0.672** | -0.548** |
| | (0.438) | (0.336) | (0.240) | (0.182) |
| GDP per Capita (lagged logged) | 0.217 | 0.0789 | 0.171* | 0.130* |
| | (0.148) | (0.0981) | (0.0698) | (0.0554) |
| Population (lagged logged) | -0.000315 | 0.0197 | 0.262*** | 0.212*** |
| | (0.0965) | (0.0792) | (0.0651) | (0.0536) |
| Civil War | 1.037** | 0.472* | 1.680*** | 1.299*** |
| | (0.337) | (0.186) | (0.199) | (0.149) |
| Regime Type | 0.00687 | -0.000521 | -0.0100 | -0.0105 |
| | (0.0202) | (0.0134) | (0.0137) | (0.0108) |
| Post 2001 | -0.721 | -0.0687 | -1.163*** | -0.914*** |
| | (0.655) | (0.604) | (0.237) | (0.204) |
| Lagged Dependent Variable | | 0.260*** | | 1.747*** |
| | | (0.0419) | | (0.146) |
| Intercept | -2.386 | -1.539 | -7.641*** | -6.864*** |
| | (1.918) | (1.096) | (1.230) | (0.981) |
| **Inflation Stage** | | | | |
| Ratification | 0.573 | 0.211 | | |
| | (0.668) | (0.431) | | |
| Lagged Dependant Variable | | -2.147*** | | |
| | | (0.390) | | |
| Intercept | 10.53*** | 7.233*** | | |
| | (2.502) | (2.086) | | |
| $\alpha$ (logged) | 1.265*** | 0.379** | | |
| | (0.142) | (0.137) | | |
| *N* | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

Table 4: Convention for the Suppression of Terrorist Bombings Ratification and Terrorist Bombings, Instrumental Variable Models

| | (C1) Bombings (count logged) | (C2) Bombing (count logged) | (C3) Bombings (count) | (C4) Bombings (count) |
|---|---|---|---|---|
| Ratification (lagged) | -0.117 | -0.119 | -3.128 | -2.187 |
| | (0.0757) | (0.0699) | (4.753) | (4.096) |
| GDP per Capita (logged lagged) | -0.0700** | -0.0376 | 0.397* | 0.298** |
| | (0.0250) | (0.0231) | (0.179) | (0.108) |
| Population (logged lagged) | 0.0132 | -0.00924 | 0.727* | 0.560** |
| | (0.0322) | (0.0298) | (0.303) | (0.216) |
| civilwar | 0.199*** | 0.105*** | 1.267 | 0.987*** |
| | (0.0236) | (0.0220) | (1.225) | (0.225) |
| Regime Type | 0.00156 | 0.00109 | -0.0132 | -0.00150 |
| | (0.00162) | (0.00150) | (0.0324) | (0.0161) |
| Post 2001 | -0.0180 | 0.0200 | 0.395 | 0.107 |
| | (0.0462) | (0.0426) | (3.130) | (2.299) |
| Lagged Dependent Variable | | 0.383*** | | 0.387*** |
| | | (0.0130) | | (0.0798) |
| Intercept | 0.505 | 0.546 | -15.67** | -12.88*** |
| | (0.527) | (0.486) | (5.149) | (3.720) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [5]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Convention for the Suppression of Terrorist Bombings Ratification and Terrorist Bombings, Rare Events Models

| | (C5) Bombings (count) | (C6) Bombings (count) | (C7) Bombings (dummy) | (C8) Bombings (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.486 | -0.479 | -0.867** | -0.687** |
| | (0.724) | (0.465) | (0.284) | (0.251) |
| GDP per Capita (lagged logged) | 0.419*** | 0.211** | 0.307*** | 0.232*** |
| | (0.119) | (0.0725) | (0.0604) | (0.0462) |
| Population (lagged logged) | 0.0220 | 0.0498 | 0.385*** | 0.298*** |
| | (0.0873) | (0.0638) | (0.0612) | (0.0490) |
| Civil War | 0.815** | 0.441* | 1.381*** | 0.979*** |
| | (0.309) | (0.206) | (0.221) | (0.170) |
| Regime Type | 0.00715 | 0.00804 | -0.0120 | -0.0120 |
| | (0.0176) | (0.0113) | (0.0129) | (0.00980) |
| Post 2001 | | -0.181 | -0.340 | -0.257 |
| | | (0.242) | (0.239) | (0.204) |
| Lagged Dependent Variable | | 0.136*** | | 1.911*** |
| | | (0.0210) | | (0.143) |
| Intercept | -3.781* | -2.472* | -10.49*** | -8.936*** |
| | (1.698) | (1.090) | (1.159) | (0.892) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 2.014*** | 0.437 | | |
| | (0.602) | (0.548) | | |
| Lagged Dependent Variable | | -1.930*** | | |
| | | (0.264) | | |
| Intercept | 15.99*** | 9.033*** | | |
| | (2.984) | (1.769) | | |
| $\alpha$ (logged) | 1.482*** | 0.668*** | | |
| | (0.167) | (0.104) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

both rare events logits and all four instrumental variable models in Table 7. This shows broad support for the hypothesis across a wide spectrum of models designed to account of endogeniety, temporal dynamics, and rare events bias.

There is also strong support for the hypothesis that the Convention for the Suppression of the Financing of Terrorism has been effective at reducing transnational terrorism perpetrated by ratifying countries. All lagged ratification coefficients are in the predicted direction. Table 8 shows that the coefficient on lagged ratification is significant for both of the two stage least squares fixed effects models (E1 and E2). Table 9 shows that coefficients on lagged aid were significant for the main stage of E5 and the inflation stage of E5 and E6. Coefficients on lagged ratification are significant for both of the rare events logit models as well.

I found little support for the hypothesis that any of the air safety related conventions are effective. These results are presented in the appendix, see Tables 10-17. None of the coeffiencents on lagged ratification were significant for those agreements.

Table 6: Convention on the Marking of Plastic Explosives Ratification and Terrorist Bombings, Instrumental Variable Models

| | (D1) Bombings (count logged) | (D2) Bombing (count logged) | (D3) Bombings (count) | (D4) Bombings (count) |
|---|---|---|---|---|
| Ratification (lagged) | -0.456*** | -0.307*** | -1.906*** | -1.204* |
| | (0.0736) | (0.0685) | (0.537) | (0.488) |
| GDP per Capita (lagged logged) | -0.0262 | -0.0135 | 0.493*** | 0.324*** |
| | (0.0255) | (0.0234) | (0.122) | (0.0983) |
| Population (lagged logged) | 0.0828* | 0.0410 | 0.596*** | 0.526*** |
| | (0.0338) | (0.0311) | (0.130) | (0.102) |
| Civil War | 0.186*** | 0.0998*** | 1.318*** | 0.908*** |
| | (0.0240) | (0.0222) | (0.277) | (0.219) |
| Regime Type | 0.00302 | 0.00199 | -0.0308 | -0.0148 |
| | (0.00166) | (0.00152) | (0.0209) | (0.0143) |
| Post 2001 | 0.106** | 0.0801* | 0.0569 | -0.124 |
| | (0.0361) | (0.0333) | (0.574) | (0.399) |
| Lagged Dependent Variable | | 0.372*** | | 0.393*** |
| | | (0.0134) | | (0.0490) |
| Intercept | -0.904 | -0.413 | -14.28*** | -12.50*** |
| | (0.579) | (0.532) | (2.077) | (1.717) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [6]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Convention on the Marking of Plastic Explosives Ratification and Terrorist Bombings, Rare Events Models

| | (D5) Bombings (count) | (D6) Bombings (count) | (D7) Bombings (dummy) | (D8) Bombings (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.476 | -0.840** | -0.420 | -0.339 |
| | (0.478) | (0.325) | (0.252) | (0.191) |
| GDP per Capita (lagged logged) | 0.418*** | 0.244*** | 0.315*** | 0.240*** |
| | (0.122) | (0.0697) | (0.0616) | (0.0471) |
| Population (lagged logged) | 0.0408 | 0.0350 | 0.382*** | 0.296*** |
| | (0.0929) | (0.0607) | (0.0627) | (0.0501) |
| Civil War | 0.801* | 0.485** | 1.376*** | 0.973*** |
| | (0.317) | (0.185) | (0.219) | (0.169) |
| Regime Type | 0.00543 | 0.00493 | -0.0127 | -0.0130 |
| | (0.0171) | (0.0108) | (0.0131) | (0.00996) |
| Post-2001 | -0.487 | 0.176 | -0.600*** | -0.443** |
| | (0.403) | (0.375) | (0.168) | (0.138) |
| Lagged Dependent Variable | | 0.131*** | | 1.918*** |
| | | (0.0192) | | (0.143) |
| Intercept | -4.026* | -2.461* | -10.49*** | -8.950*** |
| | (1.701) | (1.069) | (1.195) | (0.922) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 0.907* | -0.419 | | |
| | (0.419) | (0.390) | | |
| Lagged Dependent Variable | | -1.932*** | | |
| | | (0.247) | | |
| Intercept | 15.82*** | 8.877*** | | |
| | (3.060) | (1.692) | | |
| $\alpha$ (logged) | 1.478*** | 0.639*** | | |
| | (0.181) | (0.0991) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

Table 8: Convention for the Suppression of the Financing of Terrorism and Terrorist Events, Instrumental Variable Models

| | (E1) Terror Events (count logged) | (E2) Terror Events (count logged) | (E3) Terror Events (count) | (E4) Terror Events (count) |
|---|---|---|---|---|
| Ratification (lagged) | -0.229*** (0.0636) | -0.169** (0.0572) | -1.539 (3.958) | -1.026 (0.652) |
| GDP per Capita (logged lagged) | -0.111*** (0.0296) | -0.0526* (0.0267) | 0.344** (0.111) | 0.221** (0.0767) |
| Population (logged lagged) | 0.0441 (0.0395) | -0.00288 (0.0356) | 0.533*** (0.0988) | 0.432*** (0.0722) |
| Civil War | 0.357*** (0.0291) | 0.196*** (0.0266) | 1.399*** (0.221) | 0.930*** (0.169) |
| Regime Type | -0.00176 (0.00200) | -0.00124 (0.00180) | -0.0266 (0.0166) | -0.0137 (0.0120) |
| Post 2001 | -0.0536 (0.0403) | 0.00221 (0.0363) | -0.405 (3.940) | -0.364 (0.490) |
| Lagged Dependent Variable | | 0.435*** (0.0126) | | 0.270*** (0.0351) |
| Intercept | 0.474 (0.650) | 0.630 (0.584) | -11.50*** (1.610) | -9.654*** (1.313) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [7]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9: Convention for the Suppression of the Financing of Terrorism and Terrorist Events, Rare Events Models

| | (E5) Terror Events (count) | (E6) Terror Events (count) | (E7) Terror Events (dummy) | (E8) Terror Events (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.960* | -0.0130 | -0.662** | -0.571** |
| | (0.426) | (0.300) | (0.233) | (0.201) |
| GDP per Capita (logged lagged) | 0.372** | 0.108* | 0.306*** | 0.233*** |
| | (0.115) | (0.0535) | (0.0559) | (0.0429) |
| Population (logged lagged) | 0.147 | 0.148*** | 0.393*** | 0.293*** |
| | (0.0876) | (0.0433) | (0.0595) | (0.0446) |
| Civil War | 1.108*** | 0.396** | 1.573*** | 1.179*** |
| | (0.261) | (0.128) | (0.180) | (0.143) |
| Regime Type | -0.0110 | -0.00307 | -0.0180 | -0.0159 |
| | (0.0141) | (0.00758) | (0.0118) | (0.00890) |
| Post-2001 | | -0.479* | -0.702*** | -0.461** |
| | | (0.207) | (0.175) | (0.147) |
| Lagged Dependent Variable | | 0.128*** | | 1.704*** |
| | | (0.0126) | | (0.114) |
| Intercept | -5.058** | -3.100*** | -9.845*** | -8.231*** |
| | (1.583) | (0.745) | (1.062) | (0.796) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 1.415** | 0.891* | | |
| | (0.527) | (0.402) | | |
| Lagged Dependent Variable | | -1.850*** | | |
| | | (0.215) | | |
| Intercept | 13.22*** | 8.168*** | | |
| | (2.329) | (1.324) | | |
| $\alpha$ (logged) | 1.158*** | 0.387*** | | |
| | (0.117) | (0.0867) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

# 6 Conclusion

In this paper I have found that states who ratify international counter-terrorism agreements see a boost in foreign aid receipts and that for many, but not all conventions have a signification effect on transnational terrorism. While these results provide some reason for confidence that counter-terrorism conventions are effective they also raise compelling questions for future research. The first is why the air safety conventions are ineffective while the others are effective. Future research should consider how the design of these treaties differs in order to explain this result. Such a pursuit should yield important insights for understanding the design of effective treaties and the role of non-state actors.

The second issue raised is that while I have established that conventions have an effect on aid and levels of transnational terrorism, I cannot be certain that the effect of ratification occurs *because* states receive more aid for ratifying. To fully show that aid mitigates the moral hazard problem between aid donor and recipient and consider other ways that conventions might have an effect future research should test competing arguments using causal mediation analysis with endogenous regressors by adapting recently proposed estimators for causal mediation analysis

with treatment noncompliance [Yamamoto, 2014] to the context of state selection into treaties. Mediation analysis is a way to get at how IO's work, rather than just if they work as has been proposed Martin and Simmons [1998]. However, because of the assumption of sequential ignorability [Imai et al., 2010] it has previously been infeasible to apply to the study of IO's in which states self select into treatment. By following the instrumental variable approach taken by Yamamoto [2014] the percent of the effect identified here that operates through increased capacity building aid could be identified.

The third issue is that the use of zero-inflated count models with endogenous regressors might improve model fit and yield more efficient estimates of the coefficient on ratification. Adapting zero-inflated count models with endogenous regressors [Stephan et al., 2007, Roebuck et al., 2004] to the study international agreements with count data as their outcome variable should be promising.

Overall the results in this paper show that UN counter-terrorism agreements have with the exceptions of air safety conventions have been effective at reducing transnational terrorism. This result is robust to a broad array of model specifications designed to account for selection bias, rare

events bias, temporal dynamics, and unobserved unit heterogeneity.

# 7 Appendix

Table 10: Convention on Offenses and Certain Other Acts Committed on Board Aircraft Ratification and Terrorist Skyjackings, Instrumental Variable Models

| | (F1) Skyjackings (count logged) | (F2) Skyjackings (count logged) | (F3) Skyjackings (count) | (F4) Skyjackings (count) |
|---|---|---|---|---|
| Ratification (lagged) | 0.00829 | 0.00761 | -0.779 | -1.749 |
| | (0.0447) | (0.0444) | (5.289) | (7.537) |
| GDP Per Capita (lagged logged) | -0.00972 | -0.00822 | 0.396* | 0.461* |
| | (0.00977) | (0.00971) | (0.176) | (0.210) |
| Population (lagged logged) | -0.0108 | -0.00900 | 0.441** | 0.508** |
| | (0.0311) | (0.0309) | (0.155) | (0.164) |
| Civil War | 0.0263** | 0.0239** | 1.292*** | 1.145** |
| | (0.00853) | (0.00846) | (0.315) | (0.400) |
| Regime Type | -0.000857 | -0.000760 | -0.0618 | -0.0700* |
| | (0.000556) | (0.000552) | (0.0317) | (0.0329) |
| Post 2001 | -0.0120 | -0.0104 | -0.706 | -0.192 |
| | (0.00658) | (0.00654) | (0.646) | (1.730) |
| Lagged Dependent Variable | | 0.118*** | | 1.939*** |
| | | (0.0135) | | (0.492) |
| Intercept | 0.266 | 0.223 | -13.01* | -14.09 |
| | (0.506) | (0.502) | (5.199) | (7.251) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [8]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11: Convention on Offenses and Certain Other Acts Committed on Board Aircraft Ratification and Terrorist Skyjackings, Rare Events Models

| | (F5) Skyjackings count | (F6) Skyjackings count | (F7) Skyjackings dummy | (F8) Skyjackings dummy |
|---|---|---|---|---|
| Ratification | -0.574 | -0.434 | -0.187 | -0.193 |
| ( lagged ) | (0.340) | (0.587) | (0.220) | (0.195) |
| GDP per Capita | 0.501** | 0.249 | 0.228** | 0.209** |
| (logged lagged) | (0.189) | (0.155) | (0.0750) | (0.0658) |
| Population | 0.428*** | 0.207 | 0.354*** | 0.308*** |
| (logged lagged) | (0.116) | (0.147) | (0.0807) | (0.0791) |
| Civil War | 1.285*** | 0.847* | 1.174*** | 1.056*** |
| | (0.261) | (0.387) | (0.226) | (0.201) |
| Regime Type | -0.0710*** | -0.0264 | -0.0441** | -0.0401** |
| | (0.0188) | (0.0265) | (0.0150) | (0.0131) |
| Post 2001 | | -2.319*** | -0.955** | -0.814** |
| | | (0.511) | (0.330) | (0.306) |
| Lagged | | 0.235* | | 1.736*** |
| Dependent Variable | | (0.112) | | (0.357) |
| Intercept | -13.69*** | -6.935** | -10.90*** | -10.14*** |
| | (1.679) | (2.683) | (1.473) | (1.406) |
| **Inflation Stage** | | | | |
| Ratification | -8.342 | -0.168 | | |
| (lagged) | (17.66) | (0.756) | | |
| Lagged | | -16.75*** | | |
| Dependent Variable | | (1.443) | | |
| Intercept | -73.52 | 8.416* | | |
| | (136.3) | (3.540) | | |
| $\alpha$ | 2.152*** | 1.094*** | | |
| (logged) | (0.296) | (0.277) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

Table 12: Convention on the Suppression of Acts of Violence at Airports Ratification and Terrorist Skyjackings, Instrumental Variable Models

| | (G1) Skyjackings (count logged) | (G2) Skyjackings (count logged) | (G3) Skyjackings (count) | (G4) Skyjackings (count) |
|---|---|---|---|---|
| Ratification (lagged) | -0.0339 (0.0177) | -0.0305 (0.0176) | -1.064 (0.740) | -0.810 (0.823) |
| GDP per Capita (lagged logged) | 0.000662 (0.00936) | 0.00114 (0.00929) | 0.386* (0.169) | 0.391* (0.176) |
| Population (lagged logged) | 0.00773 (0.0128) | 0.00778 (0.0127) | 0.402** (0.132) | 0.453** (0.139) |
| Civil War | 0.0246** (0.00811) | 0.0225** (0.00805) | 1.271*** (0.309) | 1.013** (0.356) |
| Regime Type | -0.000620 (0.000559) | -0.000547 (0.000555) | -0.0576* (0.0266) | -0.0746** (0.0276) |
| Post 2001 | 0.000516 (0.00933) | 0.000823 (0.00926) | -0.0410 (0.641) | 0.162 (0.733) |
| Lagged Dependent Variable | | 0.116*** (0.0135) | | 1.731** (0.561) |
| Intercept | -0.0952 (0.229) | -0.104 (0.228) | -12.76*** (2.684) | -13.91*** (3.005) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [9]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 13: Convention on the Suppression of Acts of Violence at Airports Ratification and Terrorist Skyjackings, Rare Events Models

| | (G5) Skyjackings (count) | (G6) Skyjackings (count) | (G7) Skyjackings (dummy) | (G8) Skyjackings (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.657 | 0.256 | -0.345 | -0.281 |
| | (0.549) | (0.501) | (0.268) | (0.234) |
| GDP per Capita (logged lagged) | 0.133 | 0.198 | 0.235** | 0.212** |
| | (0.110) | (0.136) | (0.0770) | (0.0670) |
| Population (logged lagged) | 0.411* | 0.173 | 0.354*** | 0.306*** |
| | (0.160) | (0.118) | (0.0785) | (0.0767) |
| Civil War | 0.882** | 0.685 | 1.161*** | 1.046*** |
| | (0.326) | (0.386) | (0.229) | (0.201) |
| Regime Type | -0.0644* | -0.0265 | -0.0443** | -0.0408** |
| | (0.0301) | (0.0275) | (0.0147) | (0.0130) |
| Post 2001 | | -2.593*** | -0.770* | -0.666* |
| | | (0.568) | (0.309) | (0.296) |
| Lagged Dependent Variable | | 0.244* | | 1.723*** |
| | | (0.104) | | (0.356) |
| Intercept | -10.68*** | -6.270** | -11.04*** | -10.23*** |
| | (3.104) | (2.166) | (1.461) | (1.388) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 1.203 | 0.906 | | |
| | (2.878) | (0.663) | | |
| Lagged Dependent Variable | | -15.97*** | | |
| | | (1.206) | | |
| Intercept | 15.66 | 9.509** | | |
| | (24.21) | (3.013) | | |
| $\alpha$ (logged) | 2.155*** | 1.115*** | | |
| | (0.335) | (0.318) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

Table 14: Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation Ratification and Terrorist Skyjackings, Instrumental Variable Models

| | (H1) Skyjackings (count logged) | (H2) Skyjackings (count logged) | (H3) Skyjackings (count) | (H4) Skyjackings (count) |
|---|---|---|---|---|
| Ratification | -0.00173 | -0.000615 | -0.606 | -1.232 |
| (lagged) | (0.0173) | (0.0172) | (2.847) | (4.953) |
| GDP per Capita | -0.00834 | -0.00714 | 0.376* | 0.428* |
| (logged lagged) | (0.00862) | (0.00855) | (0.152) | (0.179) |
| Population | -0.00380 | -0.00346 | 0.422** | 0.479*** |
| (logged lagged) | (0.0192) | (0.0190) | (0.134) | (0.138) |
| Civil War | 0.0269*** | 0.0245** | 1.298*** | 1.139*** |
| | (0.00810) | (0.00804) | (0.281) | (0.324) |
| Regime Type | -0.000832 | -0.000740 | -0.0636* | -0.0702* |
| | (0.000551) | (0.000547) | (0.0258) | (0.0297) |
| Post-2001 | -0.0122 | -0.0106 | -0.698 | -0.212 |
| | (0.00665) | (0.00661) | (0.565) | (0.590) |
| Lagged | | 0.118*** | | 1.907*** |
| Dependent Variable | | (0.0135) | | (0.502) |
| Intercept | 0.152 | 0.133 | -12.71*** | -13.86* |
| | (0.319) | (0.316) | (3.561) | (5.536) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5254 | 5254 | 5254 |

Clustered standard errors in parentheses [10]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 15: Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation Ratification and Terrorist Skyjackings, Rare Events Models

| | (H5) Skyjackings (count) | (H6) Skyjackings (count) | (H7) Skyjackings (dummy) | (H8) Skyjackings (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.633 | -0.380 | -0.373 | -0.317 |
| | (0.346) | (0.514) | (0.220) | (0.196) |
| GDP per Capita (logged lagged) | 0.109 | 0.238 | 0.240** | 0.216** |
| | (0.113) | (0.158) | (0.0760) | (0.0669) |
| Population (logged lagged) | 0.404** | 0.196 | 0.365*** | 0.316*** |
| | (0.155) | (0.132) | (0.0829) | (0.0817) |
| Civil War | 0.929** | 0.859* | 1.191*** | 1.072*** |
| | (0.295) | (0.423) | (0.228) | (0.203) |
| Regime Type | -0.0600** | -0.0279 | -0.0432** | -0.0398** |
| | (0.0183) | (0.0276) | (0.0149) | (0.0130) |
| Post-2001 | | -2.294*** | -0.906** | -0.776* |
| | | (0.554) | (0.331) | (0.308) |
| Lagged Dependent Variable | | 0.228* | | 1.718*** |
| | | (0.101) | | (0.360) |
| Intercept | -10.07** | -6.742** | -11.06*** | -10.25*** |
| | (3.260) | (2.526) | (1.523) | (1.458) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 0.470 | 0.0576 | | |
| | (1.225) | (0.632) | | |
| Lagged Dependent Variable | | -14.37*** | | |
| | | (1.384) | | |
| Intercept | 20.15 | 8.923** | | |
| | (11.33) | (3.321) | | |
| $\alpha$ (logged) | 2.153*** | 1.096*** | | |
| | (0.264) | (0.293) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

Table 16: Convention for the Suppression of the Unlawful Seizure of Aircraft Ratification and Terrorist Skyjackings, Instrumental Variable Models

| | (I1) Skyjackings (count logged) | (I2) Skyjackings (count logged) | (I3) Skyjackings (count) | (I4) Skyjackings (count) |
|---|---|---|---|---|
| Ratification (lagged) | 0.0237 | 0.0232 | -0.191 | -0.845 |
| | (0.0223) | (0.0222) | (2.825) | (4.402) |
| GDP per Capita (lagged logged) | -0.0121 | -0.0106 | 0.362* | 0.420* |
| | (0.0086) | (0.00856) | (0.150) | (0.179) |
| Population (lagged logged) | -0.0259 | -0.0242 | 0.416** | 0.465*** |
| | (0.0222) | (0.0221) | (0.138) | (0.136) |
| Civil War | 0.0258*** | 0.0235** | 1.233*** | 1.078*** |
| | (0.0080) | (0.00802) | (0.289) | (0.327) |
| Regime Type | -0.0008 | -0.000786 | -0.0701* | -0.0749* |
| | (0.0005) | (0.000545) | (0.0285) | (0.0309) |
| Post 2001 | 0.0107 | -0.00921 | -0.765 | -0.292 |
| | (0.0066) | (0.00664) | (0.563) | (0.572) |
| Lagged Dependent Variable | | 0.118*** | | 1.851*** |
| | | (0.0135) | | (0.451) |
| Intercept | 0.5141 | 0.470 | -12.80*** | -13.84** |
| | (0.3637) | (0.361) | (3.562) | (4.985) |
| Fixed Effects | YES | YES | NO | NO |
| Instrumental Variable | YES | YES | YES | YES |
| $N$ | 5254 | 5253 | 5254 | 5254 |

Clustered standard errors in parentheses [11]
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 17: Convention for the Suppression of the Unlawful Seizure of Aircraft Ratification and Terrorist Skyjackings, Rare Events Models

| | (I5) Skyjackings (count) | (I6) Skyjackings (count) | (I7) Skyjackings (dummy) | (I8) Skyjackings (dummy) |
|---|---|---|---|---|
| Ratification (lagged) | -0.456 | -0.373 | -0.257 | -0.218 |
| | (1.586) | (0.499) | (0.251) | (0.226) |
| GDP per Capita (lagged logged) | 0.126 | 0.246 | 0.234** | 0.211** |
| | (0.674) | (0.163) | (0.0749) | (0.0660) |
| Population (logged lagged) | 0.405 | 0.193 | 0.360*** | 0.310*** |
| | (0.286) | (0.128) | (0.0849) | (0.0832) |
| Civil War | 0.909* | 0.855* | 1.180*** | 1.061*** |
| | (0.385) | (0.417) | (0.227) | (0.203) |
| Regime Type | -0.0609*** | -0.0270 | -0.0440** | -0.0405** |
| | (0.0178) | (0.0266) | (0.0149) | (0.0130) |
| Post-2001 | | -2.311*** | -0.939** | -0.805** |
| | | (0.539) | (0.332) | (0.308) |
| Lagged Dependent Variable | | 0.236* | | 1.728*** |
| | | (0.108) | | (0.361) |
| Intercept | -10.37 | -6.750** | -10.99*** | -10.19*** |
| | (12.01) | (2.497) | (1.535) | (1.465) |
| **Inflation Stage** | | | | |
| Ratification (lagged) | 0.905 | -0.0469 | | |
| | (16.67) | (0.606) | | |
| Lagged Dependent Variable | | -16.04*** | | |
| | | (1.336) | | |
| Intercept | 21.61 | 8.887** | | |
| | (70.69) | (3.282) | | |
| $\alpha$ (logged) | 2.199* | 1.108*** | | |
| | (0.988) | (0.309) | | |
| $N$ | 5279 | 5279 | 5279 | 5279 |

Clustered standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Control variables GDP per Capita (lagged logged), Population (lagged logged), Civil War, Regime Type, and Post 2001 included but not reported in the inflation stage of models 1 and 2.

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