# **Sticks and Carrots in International Terrorism**

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Abstract. In their fight against international terrorism, countries and international bodies heavily rely on strategies that are intended to change the incentives of terrorists and their supporters. The most prominent role among these sticks and carrots is played by economic sanctions against alleged sponsor states and economic and military aid for home countries of terrorists. Economic sanctions remain important since the early days of the UN sanctions against Iran in 1980, sponsored by the United States. Similarly, aid has become an increasingly popular weapon in the fight against terrorism, especially in the aftermath of the 9/11 attacks. The despair of people living in poverty and weak governments in developing countries are widely thought to be underlying causes of terrorism. Thus, economic and military aid is intended to uproot these problems. Despite the prominence of sanctions and aid in actual counter-terrorism policies, little is known about their effectiveness. Some evidence exists about the effects of individual sanctions and conventions (e.g., Enders et al. 1990) or development aid. However, no evidence exists as to how these strategies work in general. Moreover, in the international context, counter-terrorism policies may have positive and negative externalities. Therefore, it is not only important to know how sanctions and aid affect the level of terrorism in general but also how these strategies change the level of terrorism directed against senders and/or sponsors of sanctions and aid donors. In order to address these questions, we analyze the effect of sanctions and aid on terrorism in a gravity model framework. In particular, we use a comprehensive data set of economic sanctions, economic, and military aid that is organized in directed country-dyads.

Keywords: Terrorism, Sanctions

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Economic sanctions are an integral part of [the] peaceful measures that we can take to deter states from supporting terrorism.

U.S. Department of State (1986: 27)

Sanctions against terrorism ... involve complexity compounded by complexity.

Abbott (1987: 292-293)

## **1. Introduction**

In response to the terrorist attacks on Pan Am flight 103 and UTA flight 772 in 1988/9 the United Nations Security Council (UNSC) imposed a series of sanctions against Libya. Resolution 731 in January 1992 demanded that Libya accepts responsibility for the attacks, cooperates in the investigation, pays compensation for the damages occurred, and turns over two Libyan suspects accused of being involved in the bombings. Libya's failure to comply lead to Resolution 748 in March 1992, imposing tight sanctions.<sup>1</sup> One month before the passage of Resolution 731 – apparently in an attempt to prevent its passing – Libya's dictator Muammar al-Gaddafi announced that Libya would discontinue relations with terrorist organizations (Collins 2004). After continued pressure, in 1993 al-Gaddafi first offered to turn the two suspects to the Arab League for trial, and later gave in to turn them over to a U.S. ally like Germany. In 1999, Libya finally released the suspects to The Hague in the Netherlands. The sanctions were immediately suspended (Jonge Oudraat 2003, Collins 2004). Apparently, economic sanctions can be an effective tool in the fight against state-sponsored terrorism. Further, the United States and other countries heavily rely on sanctions in the fight against terrorism. Hufbauer et al. (2001: 2) assert that "US counterterrorism policy [...] has been heavily sanctions oriented."

The successful example of Libya and the prominence of sanctions in actual politics are in stark contrast to the bulk of the scholarly literature, where most authors conclude that economic sanctions are ineffective. According to Olson (1979: 473), there is a consensus in the literature that "economic sanctions are largely ineffective." In the words of Bienen and Gilpin (1980: 89) "economic sanctions have historically proven to be an ineffective means to achieve foreign policy objectives," while Pape (1997: 110) claims the evidence is showing that "sanctions are not likely to achieve major foreign policy goals." When it comes to

<sup>&</sup>lt;sup>1</sup> Additional sanctions have been introduced in Resolution 883 in November 1993.

measuring the effects of sanctions on the degree of terrorism, however, any systematic analysis is lacking. Most evidence is derived from case studies comparing the behavior of state-sponsors of terrorism before and after the imposition of sanctions (e.g., Davis 1990, Prunckun and Mohr 1997, O'Sullivan 2003, Cortright et al. 2000). In most cases, authors do not analyze the effect of sanctions on the degree of terrorism but rather investigate whether support for terror came to a complete halt after the imposition of sanctions.<sup>2</sup>

The bulk of case studies focus on the United States as sanctioning country. However, in the 1970-2009 period, X countries imposed sanctions on a total of Y countries. Of equal importance, the literature ignores potential spill-overs of sanctions on third countries. Arguably, even if a state-sponsor continues to support terror after sanctions have been imposed, other states might react to these sanctions in an attempt to avoid becoming the target of sanctions in the future. Given the prominence of sanctions as a means in the fight of terror, the lack of systematic evidence is surprising. We try to fill this gap in the literature.

Specifically, we estimate ...

To foreshadow our results, ...

The next section discusses our hypotheses on whether and to what extent sanctions might affect terrorism. Our data and method of estimation is outlined in Section 3, while Section 4 presents the results. The final section concludes and discusses policy implications.

#### 2. Theory

As Collins (2004) points out, the frequency of Libyan-supported terror declined markedly after the United States imposed unilateral sanctions and military force in 1986 following an attack on TWA flight 840 and the La Belle disco in West Berlin. In the two years preceding the attack, 52 terrorist attacks have been connected to Libya. After the American attacks, the number dropped down to 19 in a two-year period. Collins attributes this decline in the number of attacks to al-Gaddafi's attempt to better disguise Libyan involvement in supporting terrorism to avoid further attacks.

Generally, economic sanctions can affect terrorism in a number of distinct ways, depending on the type of a sanctioned country's involvement in terrorist activity. Abbott (1987) distinguishes three different types. The first type refers to independent terrorist groups operating without significant state involvement from a particular state's territory. Second,

 $<sup>^{2}</sup>$  For example, Hufbauer et al. (2001: 5) conclude that sanctions cannot be an effective means in the fight against terror because "[d]espite several decades of economic sanctions, the majority of designated state sponsors have continued to shelter and harbor international terrorists and terrorist groups in their territories." A notable exception to the all-or-nothing analysis is Collins (2004).

states provide support to terrorist groups, such as training, passports, financing, or material. Third, and most severe, states may actively sponsor terrorism, inciting individuals or groups to commit terrorist acts. To the extent that economic sanctions impose costs on the sanctioned country, weighting costs against perceived benefits from terror, a country's government might rationally decide to abstain from supporting terror. Sanctions can affect all three forms of terrorism: The first by inducing states to fight the independent terrorists more forcefully, the second by inducing them to withhold support from terrorist organizations, and the third by no longer actively becoming involved in the sponsoring of terror.

But even when a sanctioned government does not actively change its behaviour following the imposition of sanctions, sanctions might affect the degree of terrorism by what Abbot labels denials of means. By effectively preventing terrorists from access to material required for an attack, the frequency of terrorist attacks would be reduced. Finally, sanctions might signal the degree of the sanctioning country's resolve to take measures against the terrorist attacks, in particular when the signal is costly (in terms of foregone trade, e.g.). Receiving such signal, and anticipating even stricter sanctions or military strikes in the future, sanctioned countries might react by reducing their support to terrorism, even if a particular sanction itself does not weigh heavily on their economy (Gray and Wilson 2006). These consideration lead to our hypothesis 1a:

H1a: The *frequency* of terrorist attacks on the sanctioning country perpetrated by citizens of the sanctioned country declines when unilateral sanctions are imposed.

However, sanctions can also be ineffective or even counterproductive. As one example, unilateral U.S. sanctions on Libya in the early 1980s had little effect, because Libya could easily sell oil to other countries and buy weapons from the Soviet Union rather than the United States (Collins 2004). The most comprehensive study on the effectiveness of economic sanctions is Hufbauer et al. (1985), assessing the impact of each sanction over the 1914-?? period. They conclude that in only 36 percent of the cases investigated the intended policy change has been achieved. When it comes to "high policy goals," the success rate is lower, amounting to 19 percent. Reconsidering the evidence in Hufbauer et al., Pape (1997) comes to even more unfavourable conclusions. According to Pape, many of the alleged successes in Hufbauer et al. can be attributed to factors other than the economic sanctions. He concludes that the success rate of economic sanctions is less than five percent.

One problem is insufficient information. As Abbott (1987) points out, responding with sanctions to states not involved in terrorism, or to a lower degree than expected, can easily deepen the conflict rather than reducing terror. To the extent that sanctions are perceived to be "unfair" by the sanctioned state, a defiant increase in terrorism can be expected (Gray and Wilson 2006).

In particular, the *severity* of attacks might well increase as a consequence of sanctions. According to Collins (2004), the lethality of Libyan-sponsored terrorist attacks increased substantially after unilateral U.S. action, in spite of the reduced number of terrorist attacks. The death toll increased from 91 in the five-year-period prior to the U.S. air strike to 491 in the five-year period thereafter, amounting to an increase of 440 percent. American fatalities even increased by 2000 percent. While al-Gaddafi apparently tried to mask Libya's role in terrorism by supporting fewer activities, Libya concentrated on supporting more lethal attacks at the same time (Collins 2004). We intend to test whether this pattern could hold in general. Our hypothesis 2 is thus:

H1b: The *frequency* and *severity* of terrorist attacks on the sanctioning country perpetrated by citizens of the sanctioned country increases when unilateral sanctions are imposed.

With respect to the frequency of attacks, it might well be that the positive and negative effects cancel themselves out. While we can only estimate the net effect of sanctions on terror, we argue that the effect of sanctions will arguably be more effective the more important the sanctioning country is for the sanctioned country. In a similar vein, to the extent that today's sanctions signal a country's future willingness to engage in military strikes we would expect economic sanctions to be more effective if imposed by strong military powers (Abbott 1987):

H2: Sanctions are more effective, the more "important" the sanctioning country is for the sanctioned country.

Another likely determinant of the effectiveness of sanctions is the sanctioning country's bureaucratic capacity. As Fitzgerald (2001) describes for the United States, the Treasury Department's Office for Foreign Assets control – in charge of enforcing economic and trade sanctions – is a small office with a staff of around 100 and a yearly budget below US\$ 20 million. Still, it is in charge of 21 self-contained sanctioning programs. According to

Fitzgerald, the substantial number of programs and scarce resources undermine the effectiveness of sanctions. More generally, we assume that scarce bureaucratic capacity will undermine the effectiveness of a sanction against a particular country, especially when the country's authorities have to manage many different sanctions at the same time. On the contrary, the more experienced a country is in imposing sanctions, the more likely it can manage and enforce a particular sanction well. We hypothesize:

H3: The effectiveness of sanctions depends on the number of sanctions imposed by a country at the same time, experience with sanctions, and administrative capacity.

According to case study evidence presented in Collins (2004), the consequences of multilateral sanctions can be quite different from unilateral ones. After multilateral sanctions have been imposed on Libya in 1992, for example, Libya effectively distanced itself from terrorism. According to Collins (2004: 1), "[t]he significant economic and political pressures generated by the broadly multilateral sanctions appear to have induced Libya's departure from the ranks of terrorism sponsors." According to Fitzgerald (2001), multilateral sanctions have more legitimacy and a greater impact than unilateral ones. Jonge Oudraat (2003) concludes that UN-imposed sanctions can indeed change the behaviour of state-sponsors of terrorism.

Clearly, states are not immune against the economic costs of sanctions. As Collins (2004) points out, when a country's support for terror jeopardizes its core interests, states will reduce or terminate their support for terror. Given that the consequences of multilateral sanction regimes cannot as easily be avoided as those of unilateral sanctions, we expect them to be more effective.

If multilateral sanctions are indeed more effective in the fight of terror as compared to unilateral sanctions, it is important to distinguish two main channels. First, multilateral sanctions make it more difficult for the sanctioned country to avoid the negative consequences by exporting to and importing from countries other than the sanctioning state. For example, it has frequently been argued that unilateral U.S. sanctions are costly for the United States, but lack effectiveness as American firms get replaced by firms from other countries and natural resources can easily be sold to other countries as well (e.g., Abbott 1987). Clearly, the more countries are involved in multilateral sanctions, the more difficult is gets to circumvent them. The second main channel by which multilateral sanctions might work better, or even in the opposite direction, is legitimacy. Arguably, unilateral sanctions can be framed by the sanctioned government as external aggression and attack on a country's sovereignty. Unilateral sanctions can thus increase support for the sanctioned government ("rally-roundthe-flag"). Multilateral sanctions, to the contrary, might signal to the sanctioned country's population that the whole world is against its government (Collins 2004).

H3: The degree of terrorist attacks on the sanctioning countries perpetrated by citizens of the sanctioned country declines when multilateral sanctions are imposed.

H3a: Multilateral sanctions decrease the degree of terrorist attacks on the sanctioning countries to avoid economic losses.

H3b: Multilateral sanctions decrease the degree of terrorist attacks on the sanctioning countries for reasons of legitimacy.

Another potentially important factor for why some terrorist-supporting states may weigh sanctions differently than others is ideology (Abbott 1987). A radical Islamic state may react differently – e.g., may react with increased levels of terror – from a more rational state (Abbott 1987). Generally, we expect sanctions to be more effective, when the ideological position/ strengths of feelings are less severe.

When supporting terror endangers the survival of the government or other vital interests, we expect sanctions to be more effective, ceteris paribus. As one reason for the ineffectiveness of U.S. economic sanctions against Libya in the early 1980s, Collins (2004) stresses the low level of trade integration with the United States, and the eagerness of European countries to trade manufactured goods for oil. As Collins (2004: 4) points out, "economic globalization, the expansion of democracy, and the ascendancy of liberal economics have created an international environment more conducive to the effective use of economic statecraft." Collins (2004) also stresses the importance of political globalization. Arguably, political leaders might enjoy being in the international spotlight. Sanctions preventing politicians from travelling reduce politicians' stature in international politics. This holds the more so, the more globalized the country.

Powerful countries can easily alleviate the impact of sanctions on their allies and friends (Fitzgerald 2001). We would thus expect the impact of sanctions on countries with powerful allies to be smaller than on countries without such alliances.

H4: Countries that are more vulnerable are more likely to give in to sanctions.

H5: Countries that are less ideologically biased are more likely to give in to sanctions.

It will also be important to test for structural breaks on the potential impact of sanctions and terror. Arguably, sanctions can be expected to be less effective during the Cold War period. During the bipolar world in the Cold War period, sanctioned countries could easily turn to the opposite block for support, constraining the effectiveness of sanctions. Potential leverage over adversaries was limited by low levels of economic exchange; it was difficult to sanction allies and unaligned countries in order to avoid pushing them in the opposite block (Collins 2004).

H6: Sanctions are more effective after the end of the Cold War.

An important potential effect so far ignored by the literature is an indirect one. Assuming state-sponsors of terror have a fixed budget or capacity to support terror, unilateral economic sanctions might well detract terror from other countries. When unilateral sanctions by the United States, e.g., provoke increased terror from the sanctioned country, this might well imply that other countries benefit from a reduction in terrorist attacks. Similarly, when unilateral sanctions are effective in reducing terror to the sanctioning country, but the budget in support for terrorism is held constant, other countries might experience an increase in the number of attacks following the imposition of unilateral sanctions. This might be particularly severe for neighbor countries or close allies of the sanctioning state (U.S. Department of State 1986).

H7: Economic sanctions affect the degree of terror in neighboring countries or close allies of the sanctioning state.

Another form of externalities might also affect the effectiveness of sanctions. Arguably, unilateral sanctions will be more likely to be successful, the more support these sanctions have among other countries in the world. Acceptance of a sanction by other countries might prevent them from readily filling the gaps in trade arising from declining exports and imports between the sanctioning and the sanctioned country.

Unilateral sanctions might be particularly unwelcome by third countries if their own relations with the sanctioned country are affected. As one example, unilateral U.S. sanctions against Libya in 1996 also affected companies from third countries doing business with Libya, placing strains on American relationships with its European allies (Collins 2004). As Fitzgerald (2001: 95) points out, "the unilateral imposition of economic sanctions by the

United States achieves no other end than exacerbating relations with other states including our allies."

H8: Unilateral sanctions are more effective when supported by more countries.

# 3. Data and Method

Turning to our measure of terrorist activity, we use "International Terrorism: Attributes of Terrorist Events" (ITERATE), provided by Mikolus et al. (2004). ITERATE provides data on global terrorist acts, including information on the type of attack, casualties and fatalities, and information about perpetrators and victims. The data is available from 1968-2005. According to Mikolus et al. (2004: 2) "International/ transnational terrorism is the use or threat of use, of anxiety inducing extranormal violence for political purposes by any individual or group, whether acting for or in opposition to established government authority, when such action is intended to influence the attitudes and behavior of a target group wider than the immediate victims and when, through its location the mechanics of its resolution, its ramifications transcend national boundaries."

We extract the number of terror incidents for each country and year as our variable of main interest. Transnational terrorism is defined as attacks in which the attacker and/or the target are of foreign nationality. We also employ the number of severe incidents (i.e., events which result in at least one person being wounded or killed) and the number of people killed in a certain year and country.

Figure 1 shows how terror has evolved over time by plotting the average number of attacks per country. We have included both the number of terror events and the fatalities created by these events.<sup>3</sup> It is apparent that in particular transnational terrorism was more pronounced in OECD countries until the mid 1990ies. In more recent years, however, there is no obvious difference between OECD and non-OECD countries (with 2001 being an obvious exception). Regarding total terrorism (i.e., including domestic terror attacks) there is no such a clear distinction between OECD and non-OECD countries.

In selecting our control variables, we follow the studies adapting the gravity set-up of international trade when analyzing the determinants of terrorism. Blomberg and Hess (2008), Blomberg and Rosendorff (2009), Neumayer and Plümper (2009, 2010), and Plümper and Neumayer (2010) suggest the following variables to be robust predictors of a country's level

<sup>&</sup>lt;sup>3</sup> For time-series studies on the occurrence and distribution of terrorism see Enders and Sandler (2005, 2006).

of terrorist events: The logarithm of a countries' population and the logarithm of (per capita) GDP, as well as a number of bilateral measures which will discuss below. GDP and population are taken from the World Bank's (2009) World Development Indicators. Blomberg and Hess (2008) also control for a country's openness to trade, or, more generally, its degree of globalization. While trade openness is again taken from the World Bank (2009), we use the KOF Index of Globalization to capture globalization more generally (Dreher et al. 2008). Blomberg and Hess (2008) also include a measure of religious fragmentation. following the spirit of Blomberg and Hess we control for religious tensions and also include data on ethnic tensions, both taken from the ICRG.

Finally, we control for different types of bilateral aid. The definitions and sources of all variables are summarized in Appendix A while the corresponding summary statistics are presented in Appendix B.

### 4. Results

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