INTERNATIONAL TERRORISM A longitudinal statistical analysis

Prof. Dr. Rik Coolsaet Teun Van de Voorde



Department of Political Science September 2004

1. Introduction

Underestimating terrorism is dangerous. But exaggerating the threat is just as dangerous – so is groupthink. In 1985, Walter Laqueur, author of the standard work *Terrorism* (1977), observed that anyone who studies international terrorism in a historical perspective will come to unexpected conclusions. With regard to the extensive attention paid to the issue of terrorism during the eighties, he remarked:

"[Historians] will note that presidents and other leaders frequently referred to terrorism as one of the greatest dangers facing mankind. For days and weeks on end, television networks devoted most of their prime-time news to covering terrorist operations. Publicists referred to terrorism as the cancer of the world, growing inexorably until it poisoned and engulfed the society on which it fed. [...] In countless articles and books, our historian will read about the constantly rising number of terrorist attacks. Being a conscientious researcher he will analyse the statistics, which are bound to increase his confusion, for he will find that more American civilians were killed in 1974 (22) than in 1984 (16)."

Proceeding from this assertion in 1985, we have subjected today's wave of international terrorist incidents to a longitudinal analysis. For this purpose, we have drawn from two authoritative datasets in the field of terrorism research, respectively from the US State Department and the RAND Corporation.

A preliminary methodological remark must be made. Every definition of 'terrorism' is arbitrary. Some will call an action terrorist, whereas others will hesitate to characterise it as such. The State Department and RAND Corporation apply different definitions and criteria concerning international terrorism. This will result in sometimes widely diverging estimates of the absolute number of attacks. This research paper deals with the long term trends that can be derived from the figures and not with the number of attacks as such. Rather than placing our emphasis on the absolute numbers, we will look at the relative evolution within both datasets; in other words at the trends within the applied definitions of both datasets.

Patterns of Global Terrorism

The annual Patterns of Global Terrorism report is submitted in compliance with Title 22 of the United States Code, Section 2656f(a), which requires the Department of State to provide Congress with a full and complete annual report on terrorism. As stipulated in the legislation of 1979, every report includes a detailed assessment of foreign countries where large terrorist attacks occurred and a list of countries supporting terrorism. The Patterns report also provides relevant information on the activities of individual terrorists, terrorist groups and umbrella-organisations during the previous year. In 1996, US Congress instructed that State Department should report on the level of cooperation of other countries with the United States on counterterrorist policy and the prevention of future terrorist acts.

For the purposes of this report, State Department has chosen the definition of terrorism as contained in Title 22. The statute, which has been used by the American government since 1983 for statistical and analytical purposes, contains the following definitions:

-

¹ Laqueur, 1986:86-87

"The term **terrorism** means premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience."

"The term **international terrorism** means terrorism involving citizens or the territory of more than one country."

The successive editions of the Patterns of Global Terrorism can be consulted on the website of the State Department. Key to our longitudinal statistical analysis is the yearly annex of the total amount of terrorist incidents.² This research paper has integrated all available editions so as to be able to reconstruct international terrorist activity since 1977.

The most recent edition, *Patterns* 2003, was published in April 2004 and includes the account for the year 2003. On the 10 June 2004 however State Department declared a revision in the light of apparent inaccuracies and miscalculations. The controversy prompted an inquiry and this resulted in a report of the Congressional Research Service (CRS).³ The revised edition was presented on 22 June. In this paper we use the new, revised figures.

RAND datasets

Since its inception in 1984, the main objective of the RAND Corporation has been "the objective analysis of the challenges for the American nation and the world". RAND has been actively involved in the study of terrorism for the past 30 years. The institute began exploring the problem of terrorism as a separate domain in the wake of the murder of Olympic athletes in Munich (1972) and has carried on this research without interruption since then. RAND conducts research on potential terrorist attacks on an ongoing basis, drawing on a staff with regional expertise, language skills, and relevant field work. As of April 2001, the institute collaborates with the Oklahoma City National Memorial Institute for the Prevention of Terrorism (MIPT). This collaboration is intended to provide the public with an online databank of terrorist attacks; the more explicit goal is to assist analysts, professionals and policymakers in their research of general trends in terrorism.

At present time the system includes three RAND databases: the RAND Terrorism Chronology Database, the RAND-MIPT Terrorism Incident Database and the MIPT Knowledge Database. The RAND Terrorism Chronology Database records international terrorist incidents that occurred between 1968 and 1997, while the RAND-MIPT Terrorism Incident Database records domestic and international terrorist incidents from 1998 to the present. Recently, these two datasets were integrated in the MIPT Knowledge Database.⁴

² US Department of State, 2004:176 (http://www.state.gov/s/ct/rls/pgtrpt/2003/c12153.htm)

³ Congressman Henry Waxman (D-California) and the scholars Alan B. Krueger (Princeton) and David Laitin (Stanford) expressed severe criticisms Patterns 2003 was published. This edition being an important reference tool for the last 15 years, Congress immediately reacted with an review of the Report by its research service. The resulting report pointed to shortcomings in the procedures of the data gathering process, but there was also a more fundamental criticism on the structure, the type of information and the general content of Patterns which has been left unchanged since its first publication. (Perl, Raphael, The Department of State's Patterns of Global Terrorism Report: Trends, State Sponsors, and Related Issues. CRS Report for Congress, 1 juni 2004, 8 pp. Via: http://www.fas.org/irp/crs/RL32417.pdf)

⁴ The RAND Terrorism Chronology (1968-1997) and the RAND-MIPT Terrorism Incident Database (1998-present) can be consulted on http://db.mipt.org/index.cfm. The MIPT Knowledge Database can be found on http://beta.tkb.dfi-intl.com: 8080/TKB/Home.jsp

The definitions used by MIPT-RAND differ somewhat from those one used by the State Department:

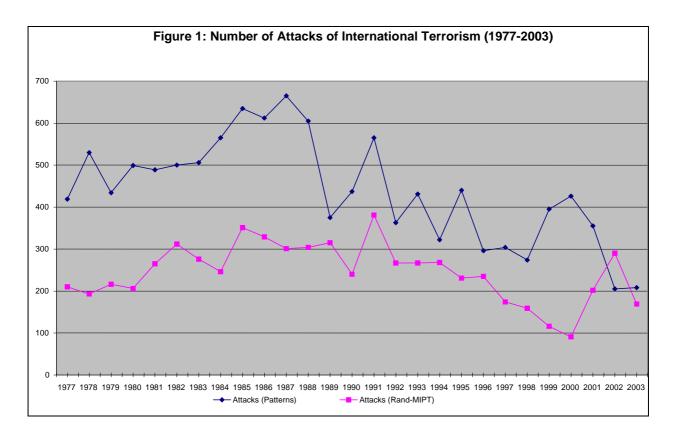
"Terrorism is defined by the nature of the act, not by the identity of the perpetrators or the nature of the cause. Terrorism is violence, or the threat of violence, calculated to create an atmosphere of fear and alarm. These acts are designed to coerce others into actions they would not otherwise undertake, or refrain from actions they desired to take. All terrorist acts are crimes. Many would also be violation of the rules of war if a state of war existed. This violence or threat of violence is generally directed against civilian targets. The motives of all terrorists are political, and terrorist actions are generally carried out in a way that will achieve maximum publicity. Unlike other criminal acts, terrorists often claim credit for their acts. Finally, terrorist acts are intended to produce effects beyond the immediate physical damage of the cause, having long-term psychological repercussions on a particular target audience. The fear created by terrorists may be intended to cause people to exaggerate the strengths of the terrorist and the importance of the cause, to provoke governmental overreaction, to discourage dissent, or simply to intimidate and thereby enforce compliance with their demands."

"Domestic terrorism is defined as incidents perpetrated by local nationals against a purely domestic target."

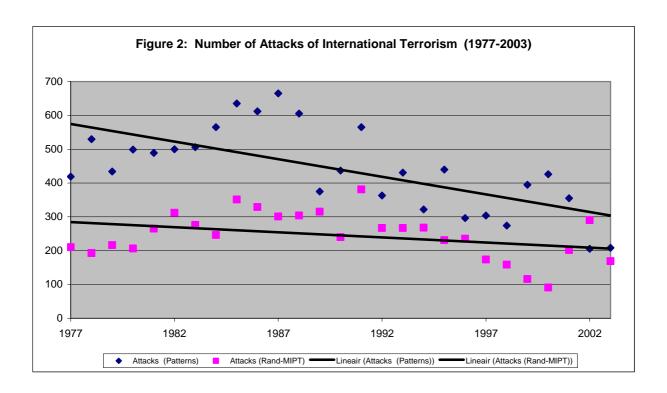
"International terrorism: incidents in which terrorists go abroad to strike their targets, select domestic targets associated with a foreign state, or create an international incident by attacking airline passengers, personnel or equipment."

2. Statistical Analysis of the Number of International Terrorist Attacks

<u>Figure 1</u>, showing the number of international terrorist attacks graphically, tells us that Patterns (June 2004) identifies 2002 and 2003 as the absolute low with respectively 205 and 208 attacks. RAND-MIPT figures point to the year 2000 (91) as the absolute low since 1982. The total number of attacks during 2003 (169) has returned to the level of 1997-1998 (174 and 159).



In <u>Figure 2</u> we examine these figures by means of a 'best fitting line'. Over the medium long term, i.e. from 1997 to 2003, a clear systematic decline in the number of international terrorist attacks can be noted. This regression can be observed in the figures of RAND, but even more so in those of the State Department.



Even with diverging definitions of terrorism, State Department and RAND identify a similar trend of a declining number of terrorist attacks. In other words, whichever definition is used for international terrorism, the statistical analysis will show the same downward curve.

The numbers of incidents in the Patterns make clear that the number of attacks for 2002 and 2003 represented an all-time low since 1977, with respectively 205 and 208 attacks. But as referred to in the introduction of the Patterns 2003, we can even trace back to 1969 as a marker instead of 1977. This means that 2002 and 2003 were the most 'terror free' years of the past 32 years. 5 The records of RAND indicate the same downward trend. Accounted for in absolute terms, 1997-2000 ranks as the most 'terror free' period, followed by an increase between 2000 and 2002, but ending with a decline in 2003 down to the - relatively low levels of 1977-1980.

It should be noted, as is also stressed by RAND, that none of these trends hold a predictive value. However, Figure 1 and 2 lead to the conclusion that over the past two decades, the importance of international terrorism as a political tool has declined gradually but in a sustained manner.

This confirms the Walter Laqueur's thesis of 1985. Once more, we notice a remarkable discrepancy between rhetoric and reality concerning the magnitude of the threat of international terrorism.

3. Statistical Analysis of the Number of Casualties

It would not be the first time that this downward trend is identified. However, several experts detected a simultaneous trend of a higher number of casualties per terrorist attack.⁶

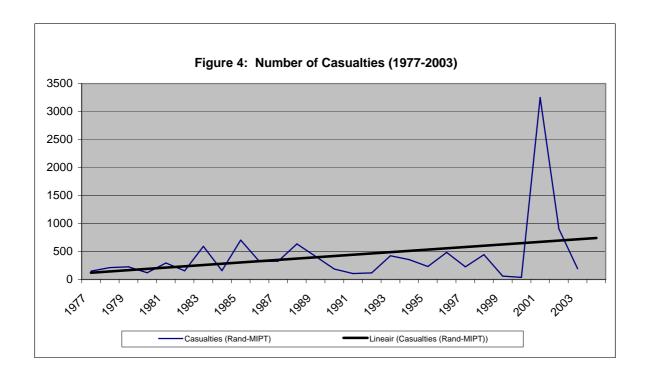
Relying on the RAND datasets, we have outlined the absolute number of deadly victims ('casualties'), as well as the best fitting line ('linear'), again for the period 1977-2003.

A first glance on the available figures of the deadly victims of international terrorist attacks reveals an increased lethality. This however is due to the high number of casualties as a result of 9/11.

A closer look indeed reveals a great variation in the number of deadly victims, which clearly is a result of unusual, spectacular attacks with a high number of casualties: e.g. the series of bombs in Lebanon against American targets in 1983 with dozens of victims for each attack, the 329 victims on a hijacked aircraft between Montreal and London in 1985 by Sikh militants, the 270 victims on the PanAm 103 Flight that crashed in Lockerbie (Scotland) in 1988, the bombs in Bombay in 1993 that resulted in 317 deaths, the attack in Colombo (Sri Lanka) by the Tamil Tigers in 1996, and of course the attacks on September 11, 2001. Such attacks explain a higher number of casualties as opposed to the downward trend in the amount of attacks.

⁵ US Department of State, 2004:1

⁶ Enders, Sandler, 2002:145-165; Enders, Sandler, 1999:145-167; Hoffman,1999:10-15



Due to these vast variations in the annual number of victims, it is difficult to speak of any trend whatsoever. Nevertheless, common perceptions and contemporary counterterrorist policies are based on a potentially high number of casualties, or so to speak, on mass terrorism. With the dramatic events of September 11, we regard this as an understandable perception. Nevertheless, this type of generalisation is flawed and incorrect. We prefer to consider spectacular attacks, like those on September 11th, as a 'low probability, high consequence event'.⁷

4. Catastrophic Terrorism?

The dramatic and unexpected nature of the attacks on September 11th, the anthrax letters (of which the author remains unknown) or the indications that some activists, such as José Padilla, think of fabricating a 'dirty bomb' clearly have raised the attention to and concerns about the use of chemical, nuclear, biological or radiological weapons (CBRN-weapons) by terrorists.

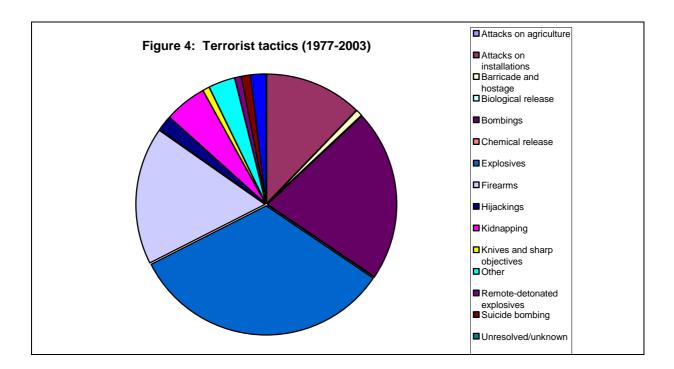
Yet, those fears for the use of weapons of mass destruction would have been more appropriate during the eighties, when a number of states supported terrorists as part of their foreign policies. Furthermore, according to Bruce Hoffman, there has always been an inclination amongst policymakers and experts alike, to exaggerate the attention and resources in preventing 'high-end terrorist trends': terrorist organizations have historically chosen to use proven attack methods, rather than attempt attacks with less well-established technologies. Most experts agree that the probability of a C/B attack on a domestic target remains much smaller than that of a comparably damaging attack with conventional weapons. For less than a 100 cases out of more than the 9000 terrorist incidents included in the RAND Chronology

⁷ This concept is taken from Hoffman, 2001:428

⁸ Shea, Gottron, 2004: 5

(1968-present), there were indications of terrorists plotting the use of CBRN-weapons, and in even fewer cases those attacks were actually carried out.⁹

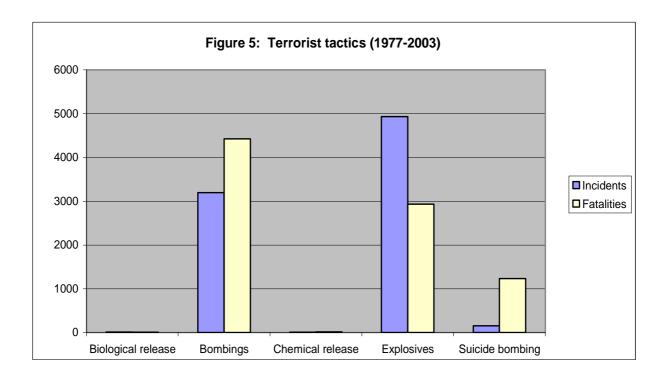
<u>Figure 4</u> demonstrates the diverse terrorist tactics for the period between 1977 and 2003. It appears that attacks involving bombings (3194) and explosives (4932) were the most preferred tactics. In other words, terrorists keep relying on the classic weaponry. Put together, they account for 8126 incidents of international terrorism, whereas the number of biological attacks (13) and chemical incidents (6) represent an insignificant minority.¹⁰



However, this does not mean that the fear for CBRN-weapons is completely without foundation. It is impossible to completely eliminate the risk of chemical and biological terrorism. Again, we are dealing with incidents that are low on the probability scale, though they carry the potential of large damaging effects ('high-consequence/low-probability-of-use weapons'). Policymakers and experts need to take the consequences of the possible use of such weapons into account. When taking the empirical data into account however, one sees the need to place this danger in a somewhat less dramatic perspective. Figure 5 displays the numbers of the most common tactics used for international terrorism and their according number of victims between 1997 and 2003, this against the figures of chemical and biological attacks. Bomb attacks (4426), attacks with conventional explosives (2932) and suicide bombs (397) together counted for 7755 victims. Thus far, chemical (16) and biological attacks (5) are responsible for much fewer victims.

⁹ Hoffman, 2001:423-424

¹⁰ http://beta.tkb.dfi-intl.com:8080/TKB/Home.jsp



5. Concluding Remarks

- 1. Based on the figures as provided by the State Department, the terrorist incidents in 2002 and 2003 represent an **all-time low for the past 32 years**. According to parallel figures of the RAND Corporation, the number of attacks in 2002-2003 has returned to the relatively low levels of 1977-1980. We may conclude that the present international climate, which places international terrorism at the centre of the political agenda, is based on **inaccurate assumptions**.
- 2. The American government calls upon these figures to declare the Global War on Terrorism a success. The decline in the number of attacks surely is, among other factors, a result of international cooperation since September 11th. The figures, however, point to a structural decline in the number of terrorist attacks over the medium long period. The explanation, suggested by the US government, is thus unsatisfactory, for it was only in the last two years and a half that international cooperation was really stepped up. In addition, one can argue that a decline in the number of attacks due to intense international cooperation has been neutralised at least partly by the ongoing war in Iraq, as it probably has given the recruitment of islamist terrorists a new momentum. To sum up, when looking terrorism from 1977 until 2003, we can conclude that **terrorism as a political tool has diminished gradually but in a sustained manner. Without the war in Iraq, the number of attacks would more than likely be at an even lower level.**
- 3. Sensational news coverage on the possible acquisition of weapons of mass destruction by terrorist groups is understandable, but should be considered with caution. We should remind ourselves that this fear is nowhere a new phenomenon. Nowadays, because of the decrease in the number of states actually supporting terrorism, the probability of the acquisition and the actual use of weapons of mass destruction by terrorist groups is probably lower than before. Worst-case scenarios on the number of victims and the

potential use of CBRN weapons have hereto benefited from a disproportionate amount of attention, at the academic and policy level, as well as in the media. With most of the attention going to these high-end terrorist threats, one should not loose sight of the fact that the terrorists of today mainly use the very same weaponry and tactics of their predecessors, namely bombs and other explosives.

- 4. Over the medium long term, i.e. over the last thirty years, we noted only a slight increase in the annual number of casualties. This increase is solely due to specific spectacular incidents. Thus, increased lethality is not of a scale that permits to suggest a dramatic increase in the number of deadly victims nor to qualify today's international terrorism as 'catastrophic'.
- 5. Summarizing, one might conclude that there is a **wide gap looming between perception and reality** when dealing with today's terrorism. Since it is upon perceptions that men act in shaping their conduct, the risk of overreacting is thus real. A pervasive short term perspective is preventing us from a critical assessment of the **root causes** of terrorism. Only a minimum of consensus on these root causes of contemporary international terrorism can bring us closer to devise effective counterterrorist strategies. This would be the best tribute we could pay to all the victims of international terrorism.

References

MIPT Knowledge Database http://beta.tkb.dfi-intl.com:8080/TKB/Home.jsp

RAND Terrorism Chronology 1698-1997 http://db.mipt.org/rand_68_97.cfm

RAND-MIPT Terrorism Incident Database 1998-present http://db.mipt.org/mipt_rand.cfm

US Department of State, Patterns of Global Terrorism 2003. April 2004, 181 pp. http://www.state.gov/s/ct/rls/pgtrpt/2003/c12153.htm

Perl, Raphael, The Department of State's Patterns of Global Terrorism Report: Trends, State Sponsors, and Related Issues. CRS Report for Congress, June 1, 2004, 8 pp. http://www.fas.org/irp/crs/RL32417.pdf

Coolsaet, Rik, Al-Qaeda. The Myth. Brussels (unpublished), 2004, 51 pp.

Enders, Walter, Sandler, Todd, Patterns of Transnational Terrorism, 1970-1999: Alternative Time-Series Estimates. In: *International Studies Quarterly*, 2002, 46, pp. 145-165

Enders, Walter, Sandler, Todd, Transnational Terrorism in the Post-Cold War Era. In: *International Studies Quarterly*, 1999, 43, pp. 145-167

Hoffman, Bruce, Terrorism, trends and prospects. In: Hoffman, Bruce, Lesser, Ian, Jenkins, Brian, et al, *Countering the new terrorism*. Santa Monica, Rand Corporation, 1999, pp. 7-38

Hoffman, Bruce, Change and Continuity in Terrorism. In: *Studies in Conflict and Terrorism*, 24, 417, 2001, pp. 417-428

Laqueur, Walter, Reflections on Terrorism. In: Foreign Affairs, Fall 1986, Vol. 65, n° 1, pp. 86-100

Laqueur, Walter, Terrorism. London, Weidenfeld and Nicoloson, 1977, 277 pp.

Shea, Sana A., Gottron, Frank, Small-scale Terrorist Attacks Using Chemical and Biological Agents: An Assessment Framework and Preliminary Comparisons, CRS Report for Congress, 20 May 2004

Further information

Teun Van de Voorde (Ms)
Department of Political Science
Ghent University
Universiteitstraat 8
B-9000 Gent (Belgium)
(32) 09/264.68.70
Teun.Vandevoorde@UGent.be
www.psw.UGent.be/polwet