

Terrorism and its Impact on Global Economy

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Abstract

The article presents the general causes of terrorism and its impact on different sectors. During the past decades, the world has witnessed nearly twenty thousand terrorist incidents. Due to the increasing global scope of terrorism it has been raised important questions about its economic impact in countries around the world. While it was noted that terrorist incidents have a significant negative impact on tourism, investment, trade and capital formation.

Keywords: *terrorism; economic impact; counter-terrorism*

JEL Classification: *K42; H56; O17*

Introduction

Under the laws of Romania (Law no. 535/2004), “terrorism represents all the shares and / or threats which represents public danger and affect national security.” Generally, terrorist actions present the following characteristics:

- they are made, deliberately, by terrorist entities that have extremist beliefs and attitudes hostile to other entities that act violent or destructive;
- their main target aim to achieve specific objectives that have political nature;
- they are considering human factors and/or material factors within public authorities and institutions and also the civilian population;
- they have a strong psychological impact on the population in order to draw attention to the aims pursued.

The main actors involved in terrorist activities are organized groups (with different ethnic or religious motivations), complemented by actions of groups or isolated individuals driven by certain ideology. There are also types of organized crime which have as purpose the obtaining of profits, but in general, terrorist actions require financial support to achieve their goals.

The main sources of terrorist financing are:

- sponsors - countries of terrorism, with sufficient resources to support large-scale actions and sufficient infrastructure to collect and distribute funds to terrorist organizations. Also, there may be single individuals, able to provide support to terrorists.
- indirect gain from a series of income generating activities, which are essential funds for terrorist organizations.

Terrorist phenomena are based on many reasons such as:

- underground economy, support for terrorist activities, characterized by poverty, corruption, high taxation and social inequalities, which favours the emergence of structures willing to make radical changes;
- social, ethnical, religious and group conflicts - in recent decades, religious impact on societies was increased, so across Europe several bodies charged with oversight of this phenomenon have created. Created sects are struggling for spiritualization world, and they met strong resistance in secular ideologies. Thus, these differences create prerequisites for wars on religious subjects.
- economic instability and social conflicts - economy reforms often affect the economic stability of the countries that adopt them, so economic instability creates risk factors and increase terrorist actions.

Terrorism is a difficult activity, due to its complexity and the conflicts that arose between the views of people, organizations, groups or states involved in counter-terrorism. In order to analyse and monitor the evaluation terrorism, there are three types of indicators (see Table 1).

Table 1. The main indicators used in assessing terrorism

System indicators and status indicators	Dynamics indicators
<ul style="list-style-type: none"> ● number of permanent and temporary members and their geographical distribution ● number of deposits ● number of victims of terrorist attacks ● number of terrorist attacks ● number of terrorist networks ● number of terrorist organizations ● number of terrorist groups ● network configuration ● number of locations of terrorist organizations and groups 	<ul style="list-style-type: none"> ● the effects of terrorist actions ● types of terrorist actions in their dynamics ● extent of terrorist actions ● frequency of terrorist actions per time unit ● annual average annual of terrorist actions ● intensity of terrorist actions

Source: Voinescu, G.V., 2011. *Impactul terorismului asupra economiei mondiale*, Economic Publishing House, Bucharest.

The phenomenon of terrorism is difficult to forecast because nobody knows exactly when and where it will occur, being unpredictable and having different forms.

Combating Terrorism

The beginning of the 20th century is deeply marked by terrorist attacks being intensified by advances in technological weapons. It is worth noting that since 2001 until now there have been numerous investigations to counterterrorism being set-up national strategies against this phenomenon; but it remains a threat and a danger to everyone.

This phenomenon is based on identifying different types of vulnerabilities, the scale of terrorism being directly proportional to their volume. There are many types of vulnerabilities, of which the most important are (Voinescu, 2011):

- vulnerabilities of democratic political systems - have as features the respect for human rights, transparency, respect for the person and opinion, the system of democratic elections autonomy of state institutions;
- vulnerabilities caused by philosophical and interest conflicts - aim to undermine the lower systems by prevailing economic and financial systems as it creates diversions and offensive

- attitudes against competitors;
- social, religious, and cultural vulnerabilities - interest groups aim to annihilate the spirit of identity, which creates prerequisites for the emergence of a religious or cultural terrorism;
- armed forces vulnerabilities against terrorism - armed forces are rigid, immovable and unable to adapt quickly to changes in the economic environment;
- process vulnerabilities - caused by continuous movement of human societies that are in a continuous process of adaptation. Human communities involved in production processes, creation, and services are permanently vulnerable to terrorist attacks, manifesting process vulnerabilities.

Terrorism has existed for centuries, but after the attacks of 11 September 2001 from USA and the launch of global war on terrorism, this phenomenon has gained importance. There were numerous political decisions for the adoption of strategies to combat terrorism. On the basis of the Charter of the United Nations, the European Union has promoted an effective multilateral system, which involves reducing faults including areas that produce terrorism through a direct and indirect strategy system. By implementing this system, democratic governance and international policies can achieve their political wishes.

The United Nations have included terrorism among international crimes, representing an actual threat to the international peace and security, generating negative influences in economic and social development of all states, affecting stability worldwide.

Strategies of counterterrorism include actions initiated to counter this phenomenon. These may be included in the following categories:

- the violent radicalization involves the annihilating processes of terrorism by identifying personal, psychological, ideological and communication factors which can generate this phenomenon;
- the protection of critical infrastructure reflects the correlation between the level of security of each state and the security offered by infrastructure (roads, railways, bridges, communication networks). In this regard, each State must apply minimum security standards in terms of infrastructure;
- information sharing must be done respecting fundamental rights, especially the protection of personal data. The responsibility of Internet service providers and telecommunications is to keep the confidentiality of the data (for instance, the European Commission is considering financing some activities to create an information system on Visas which will store ten fingerprints from the world of each applicants);
- chemical, biological, radiological and nuclear weapons should not be available to terrorists, as it may cause great damage such as infecting humans, animals, soil, buildings, transport, agriculture destruction etc. Member States of the Organization for the prohibition of Chemical Weapons (OPCW) have signed the Chemical Weapons Convention (CWC) representing an arms control treaty. According to the Convention, it is prohibited the production, stockpiling and use of chemical weapons and their precursors. Also, the Convention has provided several steps for the complete destruction of chemical weapons by specifying certain deadlines and proceedings relating to the possibility of extending them (see Table 2).

Table 2. Phases of destruction of chemical weapons

Phase	Reduction (%)	Deadline
I	1 %	April 2000
II	20 %	April 2002
III	45%	April 2004
IV	100 %	April 2007

Source: www.opcw.org

- detection technologies developed in recent decades are available including to terrorists; they represent a necessary component act of defence against terrorism. Thus, detection tools are

extremely important in the work of security authorities, and collaboration with the private sector is paramount (European Commission, 2014).

- terrorists deprivation from financial resources – it have been adopted laws in most countries, but increasingly there is a need to provide non-legislative actions, such transparency measures which can ensure that tools necessary for the fight against terrorism financing are owned by the states. The Commission's work consists in applying certain measures to confiscate the financial resources of terrorism, thus postponing for the moment their intentions (European Commission, 2016).
- research and technological development - an important role in security it has “European Security Research and Innovation Forum (ESRIF)”, whose goal is to support decision-making about security through the use of modern technologies, but also by establishing connections between countries in the long-term security.

International organizations support the Member States in the fight against global threats and strategies mentioned above contribute to ensuring global security.

Terrorism Impact on Investment

Terrorist attacks deeply affect the economic activity and they have long-term effects on investment, perpetuating this impact over time and affect the rest of the economy. For example, in 2013 the 10 countries most affected by terrorism had declines in GDP between 0.5 and 0.8 percentage points. Worse negative impacts continue for many years after the attack, lasts up to five years as the effects disappear.

In terms of investment growth, a study was done for the period 1994-2013, taking into account 156 countries, which concluded that this was the worst affected (with indices between 1.3 and 2.1 pp). Regarding the degree of focus of terrorist attacks, most were Iraq (24%) and Pakistan (19%), but only four states have registered 60% of all incidents analysed (Bandyopadhyay, Sandler and Younas 2014).

Analysing Iraq in the absence of terrorism, between 2008 and 2013, GDP would have to be higher by 8.2% and the borrowing costs lower by 150 points. Also, investments in the economy would have been 15.1% higher than in Iraq. In addition, Pakistan's situation is similar; GDP must be 5.1% higher, borrowing costs by 100 points lower and investments in the economy would have to be 9.3% higher.

Terrorist events have adversely affected also the mature economies. For example, the 11 September 2001 attacks in the USA, in 2004 in Spain or in 2005 in the United Kingdom had significant negative effects on economic activity and infrastructure costs.

Terrorism affects investment structure, discouraging foreign direct investment, affecting both the stock market and capital stock.

- damage to capital stock - the stock of capital, both physical and human of a nation is affected by the terrorist attacks, in some cases reaching impressive levels. Thus, the attacks of 11 September 2001 led to a relatively small destruction of capital stock (4 % losses of spaces for offices in Manhattan, and the subsequent rescue operations have represented 11 billion US dollars - 0.1 % of US GDP in 2001).
- discouraging foreign direct investment - the impact of terrorism on such investments is higher than on economic growth. Thus it was calculated an index of global terrorism which proved to be negative, compared with net FDI to GDP (see Table 3).

Enders and Sandler also studied the impact of terrorism on FDI, using an auto regression model. Their results are relatively consistent with those of Abadie and Gardeazabal, though, based on data for Greece and Spain, found a greater negative impact of terrorism, namely a negative

impact of 13.5% compared to FDI in Spain in the period 1976-1991 and a percentage of 11.9% compared to the negative impact of foreign direct investment in Greece during 1975-1991.

Table 3. Global index of terrorism

Rank	Country	Score
1	Iraq	10
2	Afghanistan	9.233
3	Nigeria	9.213
4	Pakistan	9.065
5	Syria	8.108
6	India	7.747
7	Yemen	7.642
8	Somalia	7.6
9	Libya	7.29
10	Thailand	7.279

Source: www.economicsandpeace.org

To highlight the impact of terrorism on the capital market there were conducted numerous analyses by various economists that showed negative aspects of terrorism. Thus, Rafi and Rafi (2004) used data on capital from Tel Aviv Stock Exchange's index TSE100 to study the effects of terrorism on equity prices in Israel. They used Chow test to examine whether there was a structural break in TSE100 index values on September 27, 2000 (this day was identified as the beginning of massive terrorist attacks) and to see if it can find such a structural break. Then they applied the impact test to various types of terrorist attacks and they calculated the value of TSE100 index. They found that all the significant effects have a negative sign. They also found that although not all types of attacks have significant effects, those inside the Green Line, which demarcates Israel (1967) border and suicide attacks are significant in all the equations estimated. Moreover, they found that only suicide attacks have a permanent impact on TSE100 index, while attacks inside the Green Line effects are transient.

However, terrorism mitigates negative effects on investment with positive impact on government spending, redirecting resources to areas of social investments or increasing government spending.

Terrorism Impact on Trade and Tourism

Terrorist attacks, rapid, precise and with fixed targets, also affect the tourism worldwide, involving citizens from many countries and greatly affecting tourism activity.

Tourism suffers when terrorist attacks are prolonged, especially when tourists are targeted, they being seen as ambassadors of their country. Terrorists are aware of their actions, the importance of their actions, and the impact they produce on the population in terms of tourists kidnapped or shot. At the same time, terrorists have as main objectives those that are tactical, strategical and ideological. Regarding ideological objectives, these take place on long-term and in the case of a national struggle. In terms of tactical objectives, they may be motivated by immediate interests such as tourist sites and institutions, tourists, places of residence of the political, economic and social elite. One of the terrorist objectives is the area with significant tourism potential, so they

have to gain by attacking sights, by the fact that a terrorist attack on tourist targets would mean foreign trade instability, terrorist attacks affecting the economy state. Moreover, tourists will choose whether to remain within their country or decide to go to other safer destination, which means big economic losses for countries that have been attacked by terrorists, for example: Spain, England, Egypt etc. In the same time, tourism represents the capitalism; therefore if an opponent state is attacked by its tourists, in fact this attack is on the State itself.

For tourism, the effect of terrorism was substantially. Annually, over five million Americans visit Europe, but in time approximately 60% of American tourists have cancelled bookings to Europe due to terrorist attacks. The World Tourism Organization estimated that the losses in terms of international tourism receipts are approximately 105 billion dollars. The terrorist attacks carried out on a state are perceived by tourists as a risk to the entire region, so there is the possibility of a decline in tourism to the country where the attack occurred, but also for its other neighbours.

The media is an important factor in determining the tourist behaviour regarding terrorist threats, for example in some states it serves terrorist interests (TV station Al Jazerra). Following the attacks of 11 September 2001, tourism was influenced in all regions of the world. Also, the development of world tourism was reduced, while international arrivals fell by 0.6% under the effect of terrorist attacks and economic slowdown of major tourism markets issuers.

Tourist regions experienced a different impact, depending on their level of development: South Asia (- 24% in September - December 2001), America (- 20% over the same period), Middle East (-11%). Overall, in 2001 the decline was 6% for America and South Asia, 3 % for Middle East, and 0.6% for Europe. In contrast, East Asia and Pacific benefited from an increase of 5%, and 4% for Africa. In the next years, terrorism had negligible effects on the tourism activity.

Following the terrorist attacks from Egypt, at Cairo and Luxor, tourism has been hard affected, although it was growing. 1998 was a year of regression in terms of tourism, approximately 13%. Recovery was rapid with a progress of 40% for 1999. Like many countries from the Middle East, Egypt was affected by the attacks of 11 September 2001. The country ended the year with an increase of 15.6% on tourism frequency.

In Turkey, 1999 was a year of regression in terms of tourism. The attacks in this country have sparked many cancellations and prompted a large number of travelers to give up flying. The earthquake of August, 17 made Turkey a risky destination.

The costs of terrorism prompted a negative impact on tourism, these costs of billions dollars deeply affecting the country's economy.

Conclusions

Although pessimistic predictions about a global recession after the attacks of 11 September 2001 did not come true, however the impact on medium and long of terrorist attacks (especially if attacks repeat) and their indirect costs should not be neglected especially in the case of countries with vulnerable economies or developing countries. These negative effects can manifest themselves through increased insurance costs and transport, diversion of resources from productive uses to ensure security (both at the state level, through increased spending for defence and security, and at the company level, by increasing spending security headquarters, production, transport, etc.), loss of public confidence, reduced demand for transport services and tourism, etc. A recent study on long-term costs of terrorism suggests that global economic activity would be reduced by 0.7% (about 300 billion US dollars), five years after a major terrorist attack.

Given the negative effects of terrorism on developed countries, most countries may prove more vulnerable to this type of threat, given that developing economies are more susceptible to

terrorist attacks due to increased reliance on foreign trade, foreign investment combined with a lower degree of diversification of production, capital markets vulnerable and with pre-existing internal problems.

The location of US military bases on the territory of developing countries can bring a series of economic benefits, but also an increased risk of potential terrorist attacks against these targets, hurting the communities where these bases are located. These countries may become a ground for terrorist's incorporation, both among Muslims and among the inhabitants of those countries. Thus, these terrorist actions may adversely impact the growth of various countries, affecting industry, commerce, insurance and slowing the rise of economy.

The attacks of 11 September 2001 have generated numerous studies attempting to estimate the impact of terrorist attacks on the economy. An International Monetary Fund study estimated that losses from attacks amounted for US \$ 75 billion per year, or 0.75% of GDP. Also, the Congressional Budget Office estimated that American attacks led to a reduction of 0.3% in productivity of factors of production, accompanied by a reduction in investment by 0.2% of GDP.

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