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ANNOTATION

This thesis focuses on the economic impacts of terrorist attacks in different countries. It draws our attention to the history and the present situation of terrorism. The main part deals with economic results of terrorism (labour, goods and services and infrastructure).

KEYWORDS

terrorism; economic results; macroeconomics; microeconomics; security; investment

NÁZEV

Ekonomické důsledky terorismu

ANOTACE

Bakalářská práce se zaměřuje na ekonomické důsledky terorismu v různých zemích. Přibližuje historické a současné události terorismu. Hlavní část práce je zaměřená na analýzu důsledků terorismu ve směru ekonomickém (např. na trh práce, výrobků a služeb a na infrastrukturu).

KLÍČOVÁ SLOVA

terorismus; ekonomické důsledky; makroekonomie; mikroekonomie; bezpečnost; investice

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Introduction

The present is a time of overwhelming interest to all living. Thinking men and women of all classes have their attention fixed on the events that seem to be hastening the world forward in an ever-increasing momentum toward its rendezvous with destiny. Statesmen, rulers, church leaders, businessmen, men and women everywhere sense that something great and decisive is about to take place-that the world is on the verge of a stupendous crisis.

One such thing is terrorism. Since the 11th of September 2001 (hereinafter 9/11) when in New York terrorists brought the World Trade Centre to ruins, terrorism has become a vice that has changed the way the world handles security of the human race. It has affected the way tourists plan their holidays. It rings in the minds of business men and women who may want to invest not only in their own countries but in others as well. It has changed Air transport forever. Though people against their will anticipate a terrorist attack anywhere in the near future, they still hope it will not affect them. Fear of this terrible vice has led governments to sign different treaties. Some countries have been attacked by those hoping to wipe terrorism away. Hence more innocent people have died and much infrastructure has been destroyed and thus lies desolate.

The word Terrorism as is understood today dates back to the late eighteenth century. This was the time when French nobilities were intimidated and killed by their government. Other historians say terrorism was first used in the time of the Zealots in the thirteenth century. Nevertheless, the history of the world changed after the unexpected devastating terrorist attacks of 9/11 at the world trade centre in New York.

My thesis will show how places that have experienced terrorism attacks have been affected. A few countries will be mentioned and the effects of terrorism stated. It will also explain how terrorism affects the whole world at large.

In the first part of my thesis I will give the definition of terrorism and its related terms. There is no universally accepted definition of terrorism. People everywhere define terrorism slightly differently according to their profession and the capacity of their knowledge on the matter. Examples are: - the army, the police, politicians, and laymen.

The second part will focus on the history of terrorism. It will show how terrorism has changed from the late 1780s to date. It will show the origin and mention which countries to date are associated with this vice.

The third part will talk about the security of the Czech Republic. It will major on how the Czech Republic is combating terrorism and will name a few institutions that are involved.

The fourth part which is the main one and the aim of writing this thesis will talk about the economic impacts of terrorism. I will show how different countries are distinctively affected by terrorist attacks. It is common knowledge that countries can be divided into small and large economies but I will bring to the realisation that large economies such as the United States of America, Britain, and Russia are not badly affected economically by this vice. Large or developed economies are economically diversified and easily absorb any economic losses that may have resulted from a terrorist attack of any magnitude. Small or developing economies are economically negatively affected by any kind of a terrorist attack and it is difficult for them to repair the damages that may have been caused by such attacks.

The aim of this thesis is to analyze basing on facts whether or not terrorism acts have any economic impacts on the countries of occurrence and to determine to what extent terrorism affects other countries where a particular attack has not been staged.

1 Definition of Terrorism

The universally agreed definition of terrorism does not exist. The presence or threat of violence and a political or social motive are two essential ingredients that characterize most modern definitions of terrorism. In the absence of a political or social motive, any kind of a violent act is a crime rather than an act of terrorism.

Terrorism is therefore the premeditated use or threat to use violence by individuals or sub national groups in order to obtain a political, religious, or social objective through the intimidation of a large audience beyond that of immediate victims¹. It is a tactic unconventional offensive action to achieve political or ideological goals through violence, the threat of violence, or other harmful acts committed on civilians. The key factor is creating fear and panic and attracting attention with the help of violence. Terror is a synonym of fear.

A **terrorist** is someone who engages in terrorism. Terrorist operations include hostage missions e.g. kidnapping, skyjacking, barricade and hostage taking, bombings, assassinations, threats and hoaxes, suicide attacks, armed attacks, sabotage, nuclear - related weapon attacks, and chemical or biological attacks.

1.1 Types of terrorism

According to Bruce Hoffman, to be considered **religious terrorism** the perpetrators must use religious scriptures to justify or explain their violent acts or to gain recruits and there must be some sort of clerical figures involved in some leadership roles. For the religious terrorist, violence is first and foremost a sacramental act or divine duty executed in direct response to some theological demand or imperative. This kind of terrorism thus assumes a transcendental dimension, and its perpetrators are consequently unconstrained by the political, moral, or practical constraints that may affect other terrorists.

¹ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

Domestic terrorism is home-grown and its consequences only affect the host country, its institutions, citizens, property, and policies. In this case the perpetrators, victims, and audience are all from a host country.

I think **state or government terrorism** is when a government uses terror, violence, and all kinds of intimidations against its own citizens in order to achieve their political ambitions.

Transnational terrorism is when in a particular country a terrorist attack involves perpetrators and victims of different nationalities or institutions or governments of other countries. I will give two examples of transnational terrorism so that we can clearly understand it. The first one is kidnappings of foreigners in the 1980s and early 1990s in Lebanon. About 96 foreigners believed to be coming from 26 countries were held hostage. This was meant to end Israeli-occupied territory. The second one is the four hijackings of 9/11 and the disaster at the world trade centre. People from more than 90 countries died in the tragedy. Terrorists from other countries staged their attacks on the United States.

Transnational terrorist incidents are transboundary externalities, insofar as actions conducted by terrorists or authorities in one country may impose uncompensated costs or benefits on people or property of another country. As such, myriad market failures are associated with collective actions to curb international terrorism.²

Agro terrorism is the malicious use of plant or animal pathogens to cause devastating disease in the agricultural sector. It may also take the form of hoaxes and threats intended to create public fear of such events.

Bioterrorism is the deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants. These agents are typically found in nature, but it is possible that they could be changed to increase their ability to cause disease, make them resistant to current medicines, or to increase their ability to be spread into the environment. Biological agents can be spread through the air, through water, or in food. Terrorists may use biological agents because they can be extremely difficult to detect

² RICHARDSON, H. W.; GORDON, P.; MOORE II, J. E. *The Economic Impacts of Terrorist Attacks*. Cheltenham: Edward Elgar, 2007. ISBN 978-1-84720-336-6.

and do not cause illness for several hours to several days. Some bioterrorism agents, like the smallpox virus, can be spread from person to person and some, like anthrax, cannot.

Chemical terrorism is the use of chemical agents such as poisonous gases, liquids, or solids that have toxic effects on people, animals, or plants. Most chemical agents are capable of causing serious injuries or death. The severity of injuries depends on the type and amount of the chemical agent used, and the duration of exposure.

Cyber terrorism - cyber terrorists use information technology to attack civilians and draw attention to their cause. This means that they use information technology, such as computer systems or telecommunications, as a tool to orchestrate a traditional attack. More often, cyber terrorism refers to an attack on information technology itself in a way that would radically disrupt networked services. For example, cyber terrorists could disable networked emergency systems or hack into networks housing critical financial information. There is wide disagreement over the extent of the existing threat by cyber terrorists.

Ecoterrorism also called green terrorism is the destruction or the threat of destruction, of the environment by states, groups, or individuals in order to intimidate or to coerce governments or civilians. The term also has been applied to a variety of crimes committed against companies or government agencies intended to prevent or to interfere with activities allegedly harmful to the environment.

Narcoterrorism has had several meanings since its coining in 1983. It once denoted violence used by drug traffickers to influence governments or prevent government efforts to stop the drug trade. In the last several years, narcoterrorism has been used to indicate situations in which terrorist groups use drug trafficking to fund their operations.

Nuclear terrorism refers to a number of different ways nuclear weapons or radioactive materials might be exploited as a terrorist tactic. These include attacking nuclear facilities, disrupting critical inputs (e.g. water supply) for the safe running of a nuclear reactor, stealing nuclear fuel or waste, acquiring fissile material and fabricate a crude nuclear bomb, acquiring a ready-made nuclear weapon or taking over a nuclear-armed submarine, plane or base, purchasing nuclear weapons, or building nuclear weapons or otherwise finding ways to disperse radioactive materials.

It is possible for a terrorist group to detonate a radiological or dirty bomb. A dirty bomb is composed of any radioactive source and a conventional explosive. The radioactive material is dispersed by the detonation of the explosive. Detonation of such a weapon is not as powerful as a nuclear blast, but can produce considerable radioactive fallout. There are other radiological weapons called radiological dispersal devices where an explosive is not necessary. A radiological weapon may be very appealing to terrorist groups as it is highly successful in instilling fear and panic amongst a population (particularly because of the threat of radiation poisoning), and would contaminate the immediate area for some period of time. This could disrupt or delay attempts to repair the damage. The economic losses could be enormous - easily reaching into the tens of billions of dollars.

2 History of terrorism

The Zealots are said to be the forerunners of modern terrorism. Zealotry was originally a political movement in first century Judaism which sought to incite the people of Iudaea Province to rebel against the Roman Empire and expel it from the holy land by force of arms, most notably during the Great Jewish Revolt (AD 66-70).³

The term terrorism was first used with the advent of state terrorism as the post revolutionary government massacred the French nobility and associates between 1789 and 1795.

2.1 The Russian anarchists and Revolutionaries

Terrorism as is commonly known today arose during the time of the socialist radicals in Europe in the 1840s. These radicals resorted to bombings and assassinations to terrorize the established order in a failed attempt to bring about a revolution. With the aim of creating a government - less state, these anarchists followed the philosophy and teachings of Pierre Joseph Proudhon and later adopted the same terrorist tactics in the 1850s and thereafter. Basing on the writings of Mikhail Bakunin and Sergey Nechaev, the Russian anarchists formed Narodnaya Volya translated as People's Will and engaged in a terrorist campaign involving the assassination of government officials. They operated between 1878 and 1891. It's most noteworthy assassination victim was Czar Alexander II, whose murder resulted in Alexander III ending reforms and repressing those who sought political change in Russia. Despite being unsuccessful, People's Will played a major role in shaping modern day terrorism. Firstly, their influence was transnational by exporting tactics, adherents, and philosophy to other countries, most notably to the labor movement of USA. Secondly, their terrorist tactics were imitated by anarchists and nationalist movements through out Europe in the late 1800s and early 1900s. Thirdly, they were the forerunner to the Russian revolutions of 1905 and 1917. In 1917 it was seen that a well devised terrorist campaign with a large constituency could overthrow a ruling government. This was a shocking revelation that influenced nationalist or separatist

³ Wikipedia, the free encyclopedia. *Zealotry* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://en.wikipedia.org/wiki/Zealotry>](http://en.wikipedia.org/wiki/Zealotry)

struggles thereafter. Fourthly, during the Ireland's struggle for independence from Britain from 1919 – 1921, the Irish Republican Army (hereinafter IRA) under the leadership of Michael Collins applied and intensified the terrorist tactics of the People's Will. The IRA a nationalist movement was successful.

The Russian Revolution of 1905 after they were defeated by the Japanese started with two events – a demonstration in St. Petersburg by the unemployed workers and a revolt by the Russian navy. The revolution was restrained by the Russian government, whose brutality forced the movement to go undercover and planted the seeds of a future revolution. This second revolution commenced in February 1917 with a general strike in St. Petersburg that turned into a countrywide rebellion, with the workers joined by the Russian army. A recent Russian government headed by the Mensheviks was unpopular because of the Russian involvement in the World War I. Lenin supported by the Germans returned to Russia and took over the administration of Bolsheviks with the aim of devising a revolt to overthrow the Menshevik government. Lenin and Trotsky applied terrorist tactics during this second revolution of October 1917. They bombed and assassinated government officials and the middle class constituency. When Lenin and Trotsky were in power, they utilized state terrorism against their opponents in order to silence them. While in exile in Mexico, Trotsky was assassinated to silence him. To ensure that there was no going back to Czarist Russia, the Bolsheviks executed Czar Nicholas II and his family in 1918. An important innovation was Lenin's threat to export terrorism, unlike the Islamic revolutionaries' threat over sixty years later, following the establishment of an Islamic government in Iran under Khomeini – as a means to keep other governments out of the new government's affairs.

2.2 Terrorism and the state of Israel

The Middle East and the Zionists struggle for a home land in the period 1947-1948. The two terrorist groups Irgun Zvai Leumi and Stern Gang purified and utilized Michael Collins' tactics to make hard British rule in Palestine. They bombed and assassinated the British so that they could concede to Jewish demands for statehood. The Jewish terrorists resorted to urban guerrilla warfare to keep the British troops occupied and to make despair the British public so that Israel could be granted its independence. In the course of time their strategy worked.

2.3 Algeria 1954-1962 and Cyprus 1956-1959

The Algerian revolt against French rule was led by the Front de Libération Nationale (hereinafter FLN), which took its tactics from those of the Jewish terrorists, as laid out in Begin's book of *The Revolt*. The movie *The Battle of the Algiers* illustrated the urban guerilla warfare waged by the FLN, whose primary targets were the police, the French military, and symbols of authority. Because attacks on these targets were having little influence on French or Algerian public opinion, the FLN raised the stakes and bombed the milk bars. Women were used to plant the bombs in these bars, where victims included ordinary French citizens. These brutal attacks resulted in the French military being brought in. From the movie, one learns that the subsequent repressive and brutal measures – the tortures and executions – by the French military backfired, hardening the terrorists' resolve and giving the FLN the moral ground and more recruits. The Muslim majority in Algeria started to turn against French rule because of its repressive response.⁴

By staging its attacks in Algiers, where there were many foreign journalists and residents, the FLN succeeded in capturing world attention. The FLN internationalized its struggle further by having terrorist campaigns coincide with propitious events – for example, the opening session of the UN General Assembly (Hoffman 1998, p.57) Although FLN knew that it could never defeat the French forces, it reasoned correctly that a terrorist- based war of attrition would eventually raise the cost to the French sufficiently that independence would be granted. A similar tactic was used by the Cypriot insurgents, who also borrowed their tactics from the Jewish terrorists of the 1940s and also tried to internationalize their campaign.⁵

2.4 Ireland after independence

Irish independence did not end trouble in Ireland, because Northern Ireland remained under British rule. As the civil rights and economic prospects of the Catholic minority waned in Northern Ireland, catholic discontent grew. From 1930 until the end of the century, the fight for Irish unification was orchestrated by IRA and the more military Provisional IRA. The blood

⁴ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

⁵ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

shed increased greatly when the British army was deployed to Northern Ireland in 1969 to maintain order. With the arrival of British troops, the Provisional IRA's urban guerrilla warfare tactics evolved, making attacks against police and soldiers appear random and relentless in Belfast, Londonderry, and other urban centers in Northern Ireland. The Provisional IRA borrowed methods used in the late 1940s by Jewish terrorists in Palestine and in the 1950s by Algerian terrorists. The cities provided cover for the terrorists, who could tie down the British troops and make the British rule difficult and costly. To place additional costs on the British public, the Provisional IRA exported its bombing campaign to British cities in the hope that a besieged and fearful British public would pressure its government to support Irish unification.⁶ Here we see again how an audience is vital to terrorist campaigners.

2.5 The Tupamaros

The Tupamaros also known as the MLN (Movimiento de Liberación Nacional or National Liberation Movement) was named after the Inca revolutionary Túpac Amaru II. In Uruguay 1968 – 1972 and elsewhere in Latin America, similar tactics were exercised in other nationalist and separatist struggles. The movement in Uruguay engaged in robbing of banks, gun clubs and other businesses in the early 1960s, and then distributed stolen food and money among the poor in Montevideo. It later staged assassinations and kidnappings. Its slogan was "Words divide us; action unites us". Like their predecessors (the Jewish, Algerian terrorists) and probably influenced by Irgun Zvai Leumi and the FLN, Tupamaros purified the tactics of urban terrorism and managed to tie up authorities. Unlike their predecessors, they failed to win a constituency and people viewed them as unnecessarily brutal. Moreover, the working class never indentified with these students, who claimed to be leading a Marxist-Leninist revolution of distribution. The movement is important because its urban terrorist method influenced the fighting communist organizations in Europe during the modern era of terrorism.⁷

⁶ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

⁷ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

2.6 Terrorism and a Palestinian state

A final noteworthy historical terrorist campaign is the ongoing Palestinian struggle against Israel for a Palestinian state, a struggle that began after the 1967 Arab-Israel war. The Palestinian Liberation Organization (hereinafter PLO) and its splinter groups studied IRA, Jewish and Algerian terrorism tactics in designing their own campaign against Israel. The PLO saw the importance of internationalizing their fight, a tactic made even more important because Israel refused to recognize them. If the world came to recognize the PLO and its grievances, then the PLO believed that Israel would also have to address its concerns. The PLO's new tactics signalled the rise of modern transnational terrorism. Terrorists began to stage their acts abroad to attract the world's attention. The advent of satellite broadcasts meant that terrorist acts thousand miles away could be viewed live anywhere on earth as dramatic events unfolded.

The history of terrorism is summarised in *table 1*.

Table 1: Summarised history of terrorism up to 1967 ⁸

Perpetrators	Place	Year
The zealots	Israel	AD 66-77
Socialist radicals	Europe	1840s
Anarchists and Revolutionaries	Russia	1878-1791
Irgun Zvai Leumi and Stern Gang	Palestine	1947-1948
FLN	Algeria	1954-1959
Cypriot insurgents	Cyprus	1956-1959
IRA	Ireland	1919-1969
The Tupamaros	Uruguay	1968-1972
The PLO	Palestine and abroad	1967

⁸ Wikipedia, the free encyclopedia. *History of terrorism* [online]. [cit. 2010-04-18]. Dostupné na [www: <http://en.wikipedia.org/wiki/History_of_terrorism>](http://en.wikipedia.org/wiki/History_of_terrorism)

3 Security of the Czech Republic

The events of 9/11 shocked the world because billions of people all over the world had never imagined or even thought that such devastating attacks would take place in USA. This globally triggered fear and a strong sense of insecurity. Therefore governments took and are still taking different measures to increase their security system to prevent or if possible to forever eradicate terrorism on their soil and on the planet at large.

And so like many other governments, the Czech Republic embarked on strengthening its security to combat terrorism. Although no terrorist attack has ever been recorded in the Czech Republic, the security service received information about such an incident being planned between September and October in 2006.

Some people linked to acts of terrorism have been arrested, charged, and sentenced abroad. These people have had either acquired the Czech Republic visas or have had used the country as an entry to other countries where they committed or planned terrorist crimes.

Therefore, the National Action Plan to Combat Terrorism deals with the following themes: ⁹

- Improvement of Communication and Cooperation between the Bodies Involved in the Fight against Terrorism and Enhancing Conditions for Their Work;
- Protection of the Population, Critical Infrastructure, and the Environment;
- Prevention against the development of non-transparent immigrant communities and the radicalisation of their members
- The Czech Republic's Foreign Policy in the Fight against Terrorism

In relation to the European Union the Czech Republic has to: ¹⁰

- Improve quality of information exchange and information sharing at the national level.

⁹MINISTRY OF INTERIOR OF THE CZECH REPUBLIC, SECURITY POLICY DEPARTMENT. *National action plan to combat terrorism update for 2007 – 2009* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://aplikace.mvcr.cz/archiv2008/dokument/2008/nap_2007_en.pdf>](http://aplikace.mvcr.cz/archiv2008/dokument/2008/nap_2007_en.pdf)

¹⁰MINISTRY OF INTERIOR OF THE CZECH REPUBLIC, SECURITY POLICY DEPARTMENT. *National action plan to combat terrorism update for 2007 – 2009* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://aplikace.mvcr.cz/archiv2008/dokument/2008/nap_2007_en.pdf>](http://aplikace.mvcr.cz/archiv2008/dokument/2008/nap_2007_en.pdf)

- Bridge the gap of non-existing mechanisms that would consistently interlink those agencies of Member States that engage in particular aspects of combating terrorism;
- Be Systematic in the use of the existing mechanisms and international information exchange between Member States' institutions;
- Exchange information and intelligence between the Member States and Europol;
- Intensify the use of Europol's analytic capabilities by Member States;
- Reduce the scope for misusing the non-profit sector by those involved in financing terrorism;
- Reduce the scope for misusing explosives by terrorists. Improve efforts to limit misusing of the Internet for posting instructions to make improvised weapons;
- Develop activities in the field of integrating immigrants (studies, seminars, research activities);
- Have a wide array of tasks in the protection of critical infrastructure and in preventing terrorists from using chemical, biological, and radiological substances or nuclear materials;
- Increase the involvement of non-governmental providers of critical infrastructure networks in drawing up security plans and assign those providers to channels of communication with security services;
- Intensify activities in the area of security research, both nationally and within the EU;
- Further enhance activities to counter the Internet misuse ("Check the Web" etc.);
- Raise the standard of cooperation among rapid response units (the Atlas initiative);
- Perform more cross-border crisis management exercises to improve readiness and consequence management capabilities of Member States regarding the terrorist attacks;
- Involve Member States in international cooperation outside the EU (with the United States of America, the Russian Federation, the Western Balkan Countries, the Near East and northern Africa etc.);
- Offer financial and technical assistance to third world countries.

The major bodies in the Czech Republic responsible for fighting the vice are: the Ministry of interior, the Security information service, and the police. When there is need, the Ministry of Defence, the Ministry of External Affairs and the Ministry of Health are incorporated.

The Ministry of Interior coordinates crisis events solutions and any such situations associated with complete threats to public order. The procedure of Government bodies in response to foreign political crisis situations abroad, that affect the interests of the Czech Republic is coordinated by the Ministry of External Affairs.

Combating terrorism involves both police components (Unit for the Detection of Organized Crime of the Service of Criminal Police and Investigation of the Czech Republic Police, departments of general criminality of the Czech Republic Police, Protection Service of the Czech Republic Police, international Police Cooperation Department of the Police Presidium of the Czech Republic – Interpol Praha, Rapid Response Unit of the Police Presidium of the Czech Republic and the Police Service for the Detection of Corruption and Serious Economic Crime of the Service of Criminal Police and Investigation, the Police Service for Financial Crime and Protection of State of the Service of Criminal Police and Investigation of the Police Presidium of the Czech Republic) and the intelligence components (Security Information Service, Office for International Relations and Information, Military Defensive Intelligence, Military Intelligence Service)¹¹

As proposed by the National Security Council, the government of the Czech Republic takes relevant measures to secure the Czech Republic against Terrorism. It evaluates the achievements of these measures, and it works closely with responsible bodies in NATO and in the European Union and other international organizations.

3.1 The Ministry of Interior

It develops analytical and conceptual documents in the area of public order and security, and coordinates the proposed measures with other ministries and with the requirements arising from international cooperation. It deals with issues of control mechanisms of trading and handling of weapons, ammunition, military equipment, including exports and imports of goods and technologies subject to international control regimes. It carries out tasks in the area of asylum, refugees, entry, and stay, and integration of foreigners, and Schengen cooperation.

¹¹ MINISTRY OF INTERIOR OF THE CZECH REPUBLIC, SECURITY POLICY DEPARTMENT. *National action plan to combat terrorism* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://aplikace.mvcr.cz/archiv2008/dokument/2003/nap02.pdf >](http://aplikace.mvcr.cz/archiv2008/dokument/2003/nap02.pdf)

3.2 The Police of the Czech Republic

The department for the Detection of Organized Crime of the Service of Criminal Police and Investigation cooperates in investigating attacks and exposing additional terrorist networks within the framework of international police cooperation. It screens the presence of persons or organizations suspected of terrorist activities and their possible activities on the territory of the Czech Republic. It cooperates with the Service of Alien and Border Police in checking persons at border crosses and in granting visas. It provides information for the security of protected persons and facilities for the Protection Service of the Police of the Czech Republic. It provides information, and investigation services of weapons of mass destruction. It provides information service for NATO actions. It cooperates with the Office of International Relations and Information and the Security Information Service in areas concerned. ¹²

3.3 Other organisations

The Protection Service protects persons, diplomatic facilities, facilities of special importance, performs public hygiene, protects against toxicology, it disposes off bombs and it provides technical protection in cooperation with other components of the Police of the Czech Republic.

The Departments of General Crime specifically handles explosion events and it deals with extremist groups' activities and with their possible connection to terrorist organizations.

The Rapid Response Unit is responsible for carrying out official responses against terrorists, kidnappers of persons, and theft of transport vehicles. It is responsible for apprehending dangerous persons who have committed crimes especially dangerous malicious crimes. It is also involved in developing plans to undertake such actions.

The International Police Cooperation Department of the Police Presidium of the Czech Republic (Interpol Praha) is responsible for and coordinates the handling of requests of the Police

¹²MINISTRY OF INTERIOR OF THE CZECH REPUBLIC, SECURITY POLICY DEPARTMENT. *National action plan to combat terrorism* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://aplikace.mvcr.cz/archiv2008/dokument/2003/nap02.pdf >](http://aplikace.mvcr.cz/archiv2008/dokument/2003/nap02.pdf)

of the Czech Republic for flexible cooperation and exchange of information with foreign Interpol organizations. It provides collaboration with the Police of the Czech Republic and the Europol.

The Police Service for the Detection of Corruption and Serious Economic Crime of the Service of Criminal Police and Investigation takes part in finding out the financing of terrorist activities and of terrorist groups.

The Police Service for Financial Crime and Protection of State of the Service of Criminal Police and Investigation of the Police Presidium of the Czech Republic is an exclusive investigation body of terrorist crimes that are classified as "Secret" or "Top Secret".

The Fire-fighter Rescue Corps perform tasks within the integrated rescue system. They give direction of integrated rescue system, prepare for extraordinary events, organize the involvement of the Czech Republic in international rescue operations in case of stupendous events abroad, and in provision of international humanitarian assistance. They coordinate rescue operations and disposal work. They direct the emergency planning process and elaborate plans to deal with extraordinary events; They are also responsible for preventing serious accidents caused by selected hazardous substances; They for example in the fields of fire fighting, civil emergency planning and population protection harmonize procedures with NATO and EU countries, and ensure collaboration with the Ministry of External Affairs in cooperation with UN, OSCE and other related entities. They also serve as a contact point for requesting assistance.

3.4 Intelligence Services

The Security Information Service secures information on threats of terrorist action against the interests and representatives of the Czech Republic and important foreign visitors; It secures information required for the protection of interests of the Czech Republic and partner countries against potential continuing terrorist attacks and activities. It secures information on matters of mass destruction, weapons proliferation, and their carriers. It represents the Czech Republic in the Special Committee of NATO.

The Office for International Relations and Information secures information originating abroad that is important for the security and protection of foreign political and economic interests of the Czech Republic. It develops intelligence summary information from all intelligence sources available, focusing on events, associated with terrorist attacks, to be used by the Emergency Team of the Ministry of Interior. It pays intensified attention to the identification of signals on threats to the interests of NATO anywhere in the world, it processes individual intelligence reports originating abroad (e. g. on interests of persons, suspected of involvement in terrorist activities); It analyzes signals on threats of terrorist attacks and submits them to the Government, Police of the Czech Republic, or to other relevant entities.

The Military Defensive Intelligence and The Military Intelligence Service Secure information on plans and activities constituting a military threat to the Czech Republic, secure information on intelligence services of a foreign power in the area of defence, secure information on plans and activities targeted against the Czech Republic's defence, secure information on activities threatening the state and official secrets in the area of defence of the Czech Republic.

The Regional Offices within the framework of regional security councils (regional emergency teams) take the necessary measures in order to provide security within a region. In the area of exercising measures associated with combating terrorism, they cooperate with the National Security Council, the Central Emergency Team and with district security councils - emergency teams.

3.5 Expenditure on security

Figure 1 shows the expenditure in the budget of the Czech Republic that is meant for its security. The graph covers the budget of the ministry of defence and the ministry of interior from the year 2000 to 2009. We can observe an increase from 2001 onwards. I think it is because of the 9/11 attacks, research and the implementation of measures to combat terrorism.

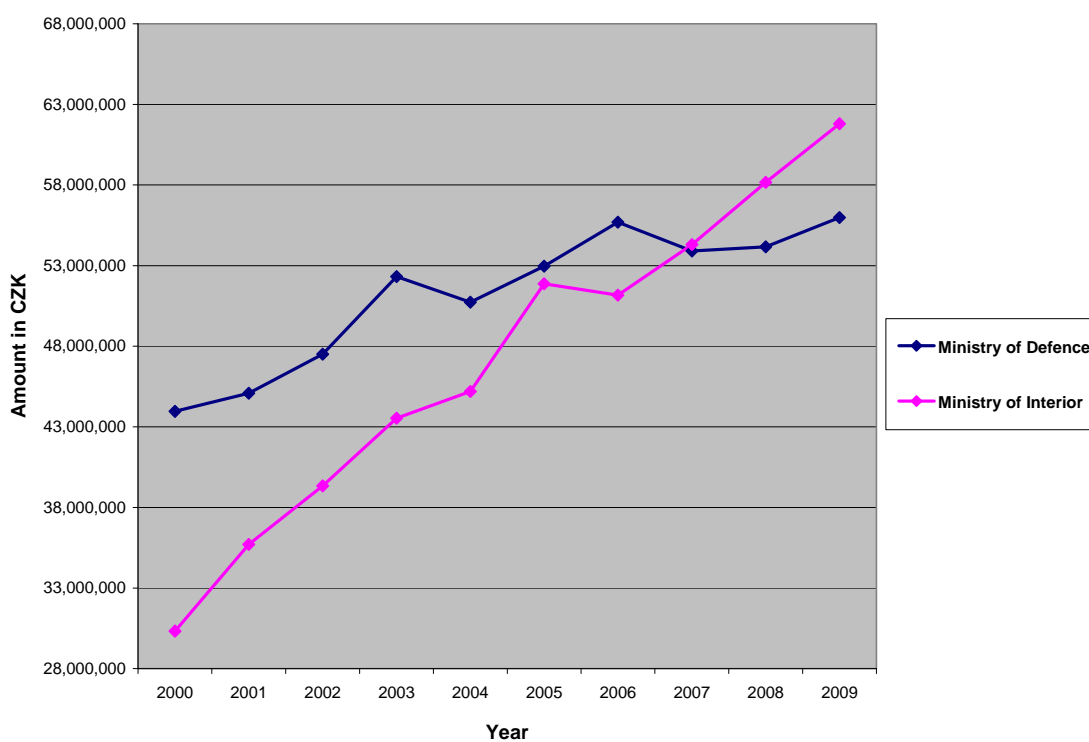


Figure 1: Budget for the ministry of defence and the ministry of interior ¹³

¹³ Ministerstvo financí České republiky. *Státní rozpočet* [online]. [cit. 2010-04-21]. Dostupné na www: http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/stat_rozp.html

4 Economic results of terrorism

Before I outline some economic results of terrorism, I think it is vital to give a definition of Economics and its related terms. The term *economics* comes from the Ancient Greek words for "management of a household, administration" and "custom" or "law", hence "rules of the house (hold)". Economics is the social science that studies choices that individuals, businesses, governments, and entire societies make as they cope with scarcity and the incentives that influence and reconcile those choices. It studies the production, distribution, and consumption of goods and services and it is divided into two main branches which are microeconomics and macroeconomics.

Microeconomics is the branch of economics that analyzes the market behaviour of individual consumers and firms in an attempt to understand the decision-making process of firms and households. It is concerned with the interaction between individual buyers and sellers and the factors that influence the choices made by buyers and sellers. In particular, microeconomics focuses on patterns of supply and demand and the determination of price and output in individual markets (e.g. coffee industry).¹⁴

Macroeconomics on the other hand, looks at the big picture (hence "macro"). It focuses on the national economy as a whole and provides a basic knowledge of how things work in the business world. For example, people who study this branch of economics would be able to interpret the latest Gross Domestic Product figures or explain why a 6% rate of unemployment is not necessarily a bad thing. Thus, for an overall perspective of how the entire economy works, one needs to have an understanding of economics at both the micro and macro levels.¹⁵

¹⁴ *Microeconomics* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://www.investopedia.com/terms/m/microeconomics.asp>](http://www.investopedia.com/terms/m/microeconomics.asp)

¹⁵ *Microeconomics* [online]. [cit. 2010-04-21]. Dostupné na [www: <http://www.investopedia.com/terms/m/microeconomics.asp>](http://www.investopedia.com/terms/m/microeconomics.asp)

4.1 The economic impacts of transnational terrorism

A terrorist incident results in direct and indirect costs. Direct costs can be obtained by adding up the replacement costs of damaged goods, equipment, structures, and inventories. Though the cost of a human life or the cost of pain and suffering is difficult to measure, such calculations are now becoming routine. They are using either lost earnings or the value of a statistical life. Indirect costs are those that are not directly accountable to a cost object. They are either fixed or variable and they include decline in shipping revenues, taxes, administration, personnel, and security costs.

On 12 October 2000 in Aden, Yemen a small motorboat carrying explosives rammed the USS Cole while it was in port for a refuelling stop. Seventeen sailors died and another thirty nine were injured by the explosion, which ripped a 12 meter hole in the ship's side. The USS Cole returned to the United States carried aboard a transport ship on 13 December 2000 for repairs that lasted fourteen months. Two years later (6 October 2002), Yemeni terrorist attacked the French tanker Limburg while it was readying to receive its cargo of crude oil from an offshore terminal. Although Yemen is ideally located as Middle Eastern port because it borders the Red Sea and the Arabian Sea, the combined attacks on USS Cole and the Limburg crushed Yemen's shipping industry. A US Department fact sheet (2002) indicates that a 300% increase in premiums has led to ships routinely bypassing Yemen for competitive facilities in Djibouti and Oman. As a result of a 50% decrease in port activity, Yemen expects to lose \$3.8 million every month because of the attacks. Beyond these lost revenues, Yemen faces increased security costs as it decided to purchase additional patrol boats and helicopters to guard its waters. Because the psychological effects of the two Yemeni attacks were mutually reinforcing, they increased the "risky premiums" necessary to compensate insurers for the potential damage of future attacks.

4.2 The impacts of 9/11

The largest terrorist incident so far in the largest economy is the unprecedented attack of 9/11. The Bureau of Economics Analysis (BEA) (2001) reports that damage to structures and equipment including the destruction of the World Trade Centre amounted to approximately \$16.2 billion. As a result of work disruptions, layoffs, and a two – day partial work stoppage,

wages, and salaries of private sector employees fell by \$3.3 billion. This loss was partially offset by gains of \$0.8 billion by state and local government employees primarily the police and fire-fighters. Clean up expenses, estimated to be \$10 billion, are not included in the BEA measure of direct losses because they are a component of government spending that appears elsewhere in the gross domestic product (hereinafter GDP) calculations. Moreover, the direct costs of the attack (such as reduction in GDP growth) are not included in the BEA totals insofar as they could be clearly indentified.

After 9/11, the US - led war on terror has resulted in capturing and killing of many al-Qaida leaders. More than 3400 al-Qaida suspects have been arrested around the world. The white house in 2003 reported that following 9/11 more than \$200 million in assets of al-Qaida has been frozen.

4.2.1 Real estate markets

As a result of the 9/11 attack, high quality office space amounting to about 2.60128 m² in lower Manhattan New York was destroyed. Almost half of this space was in the WTC complex itself. Because demand and supply reduced, prices and rents for this office space fell at least for a year after the attack. We find out that the fear of being attacked increases the cost of supplying space in targeted locations, because developers have to make buildings that are less vulnerable, and insurers have to charge high premiums (or otherwise refuse to provide terrorism coverage) to indemnify themselves against an attack.

The current plans call for a mixed residential - office development at the World Trade Centre. This suggests that the supply of office space in lower Manhattan will be permanently lower than it was prior to the destruction of the twin towers. This implies that the supply of residents will be higher.

The FIRE sector is considered the core of New York State's economy. New York City accounts for 40% of national valuation in this sector. Companies in this sector saw their valuation decline following 9/11. Although this decline begun in mid 2000, 9/11 shows a blip – the valuation goes down steadily and then later goes up.

4.2.2 The Lost Stock Market Wealth

The stock market prices declined immediately after 9/11. The declines in the prices of shares selling on the New York Stock Exchange (NYSE) market were 11.24%, NASDAQ market 16.02%, American stock exchange (AMEX) market 8.10% and The Dow Jones Industrial Average (DJIA) 7.1%. The sum total of these market value declines is \$ 1.7 trillion.

4.2.3 The Victim Compensation Fund

Shortly after the September 11, 2001 terrorist attacks, George W Bush who then was President of the United States of America signed the “September 11th Victim Compensation Fund of 2001” into law.

The main goal of this fund was to provide a no- fault alternative to compensate individuals who were either killed or injured in the 9/11 attacks. Individuals were compensated for economic and non-economic losses in order to make the awards commensurate with those obtainable through the court system. Compensation for non-economic losses, such as pain and suffering, were set at \$250,000 for each deceased victim plus an additional \$100,000 for the victim’s spouse and each dependent. Some individuals received far more than others, because the economic loss to any individual included the present value of the victim’s estimated stream of future earnings. The average amount of compensation paid to date to the 7, 407 families of those who died on 9/11 is \$2,082, 128. Individual death amounts ranged from \$250,000 to \$7.1 million. The fund also settled 2,682 personal injury claims for amounts reflecting the nature of the injury, the long-term prognosis, and the ongoing pain and suffering. To date, awards have ranged from a low of \$500 to a high of over \$8.6 million. Including the payments received from insurance companies and charities, the payouts to the victims of 9/11 (dead or injured), and their families totaled \$38.1 billion. Likewise the families of the military personnel killed in the war in Iraq receive a death benefit of \$250,000, which was significantly raised in 2005.¹⁶

¹⁶ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

4.2.4 The long - term costs

The long-term indirect costs of terrorism also include higher security expenditures. The cost of additional airport security is \$4 per one flight takeoff and landing. The security checks compel travellers to make use of an additional half-hour per flight segment, which includes the increased waiting time as a result of rescheduled and missed flights. If we say that the time of an air traveller is valued at \$20 per hour, then the increased airline security costs are estimated at \$10 billion per year. This is in addition to the Congressional Budget office (hereinafter CBO) (2004) which is approximately \$20 billion in increased security costs for the year 2002. For the period 2005-2009 the CBO further estimates that the total non defence outlays for homeland security will be \$144 billion. Such expenses include Project Bioshield's multiyear \$5.6 billion meant to assist in the coming up of medicines that could counter a potential biological weapons attack.

4.2.5 Insurance in New York after 9/11

Insurers and reinsurers reduced or stopped providing insurance after 9/11 because they bore majority of the financial cost of these terrorist attacks and were unwilling to bear the potential losses from another attack. This resulted in the reduction of insurance supply and in the increase of insurance demand as shown in *figure 2* below.

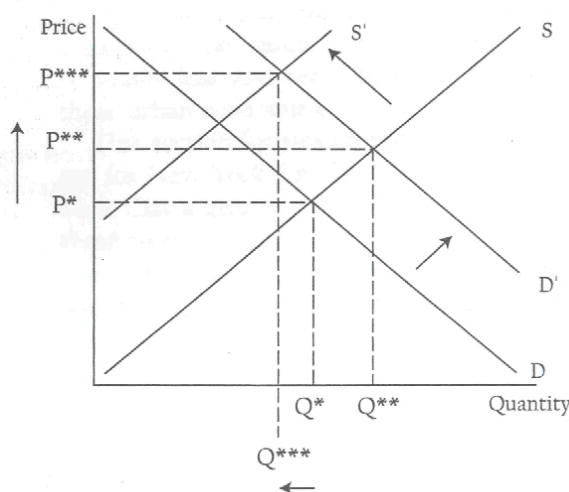


Figure 2: Supply shift exceeds Demand shift - price increases and quantity decreases ¹⁷

¹⁷ CHERNIK, H. *Resilient City: The Economic Impact of 9/11*. Russell Sage Foundation Publications, 2005. ISBN 0-87154-160-2.

However, with the passage of TRIA, the federal government mandated that insurers should offer a minimum supply of terrorism insurance as shown in *figure 3*.

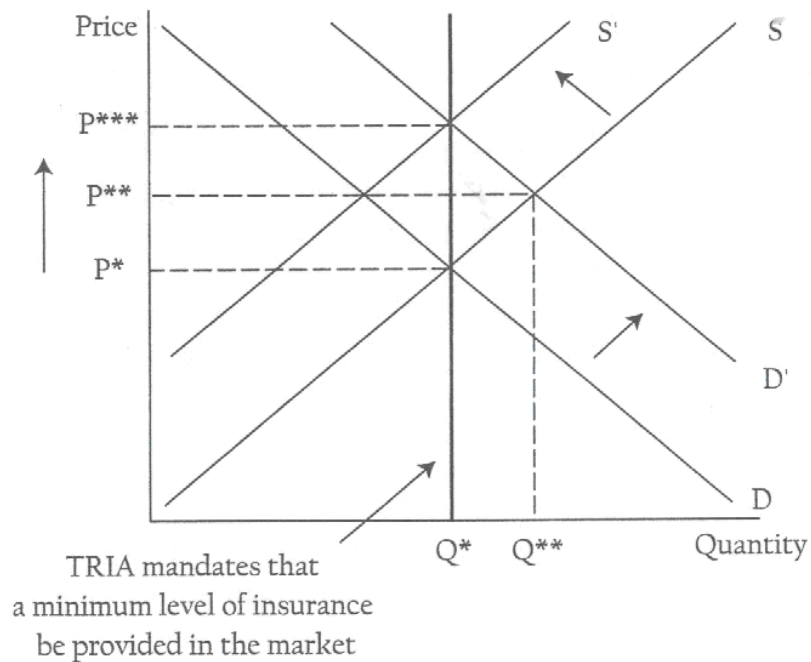


Figure 3: Supply and Demand Shifts Are Restricted by quantity -floor provided by Government Involvement (TRIA) ¹⁸

The New York City comptroller's office conducted a survey of insurance agents and brokers serving businesses located through out New York City. The survey asked them to report rate increases and availability for nine lines of property and casualty coverage in the year and the year following 9/11. The survey found that premiums for all business sizes increased dramatically after 9/11. For large accounts (more than 1\$million in premiums), the average premium jumped from 11.4 percent to 73.3 percent as shown in *figure 4*. This increase was also observed through out the country (20 percent increment), roughly one third of the rate of premium increase in New York City. About half of the national increase was related to 9/11.¹⁹

¹⁸ CHERNIK, H. *Resilient City: The Economic Impact of 9/11*. Russell Sage Foundation Publications, 2005. ISBN 0-87154-160-2.

¹⁹ CHERNIK, H. *Resilient City: The Economic Impact of 9/11*. Russell Sage Foundation Publications, 2005. ISBN 0-87154-160-2.

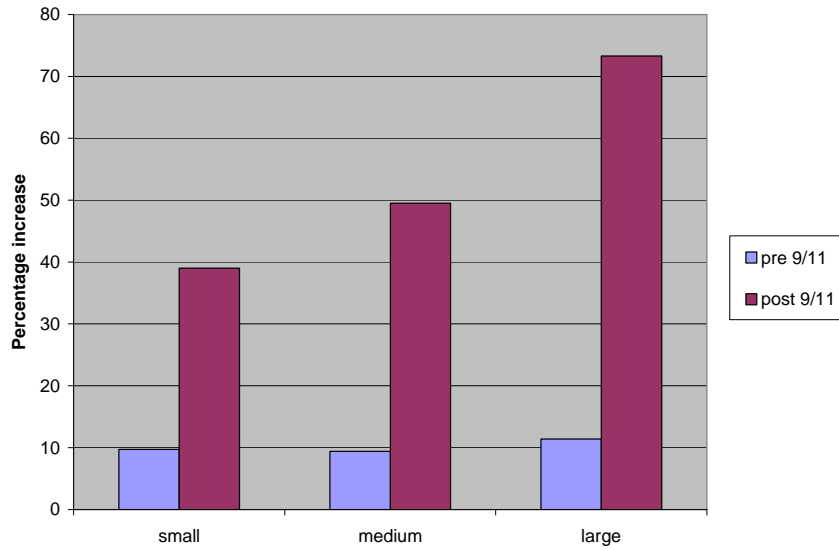


Figure 4: Average Premium Increases By Account Size In New York City ²⁰

The comptroller’s survey also found a decline in the availability of insurance for all accounts. For large accounts in New York City, those survey respondents who rated insurance as being readily available or somewhat available fell from 84.1 percent to 20.2 percent as shown in *figure 5*.

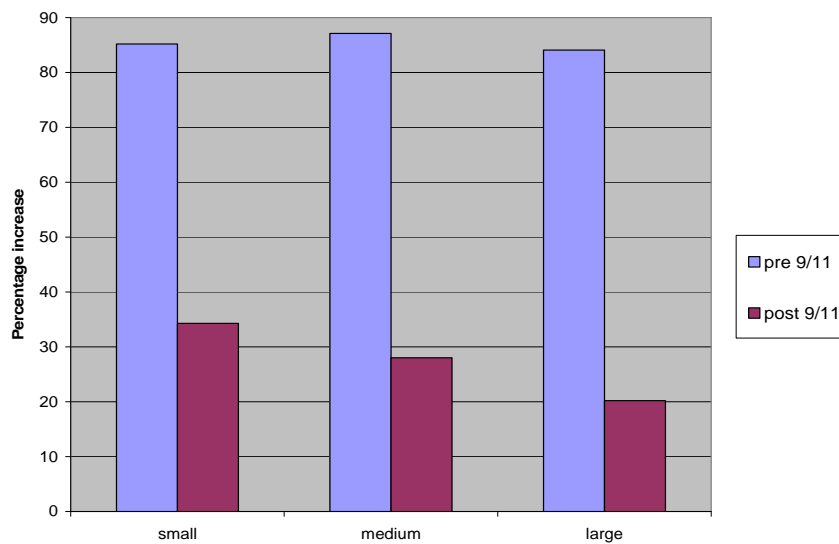


Figure 5: Availability of insurance By Account Size ²¹

²⁰ CHERNIK, H. *Resilient City: The Economic Impact of 9/11*. Russell Sage Foundation Publications, 2005. ISBN 0-87154-160-2.

²¹ CHERNIK, H. *Resilient City: The Economic Impact of 9/11*. Russell Sage Foundation Publications, 2005. ISBN 0-87154-160-2.

4.3 Terrorists attack Russia

On 29th March 2010 Chechen terrorists bombed two metro stations in Russia's capital city, Moscow. The first explosion took place just before 8 a.m. at the Lubyanka station in central Moscow, beneath the headquarters of the Federal Security Service or FSB, the KGB's main successor agency. About 45 minutes later, a second blast hit the Park Kultury station on the same subway line, which is near renowned Gorky Park. In both cases, the bombs were detonated as the trains pulled into the stations and the doors were opening.

The ornate Moscow subway system is the world's second-busiest after Tokyo's, carrying around 7 million passengers on an average workday, and is a key element in running the sprawling and traffic-choked city. Traffic was paralyzed for hours as large sections of downtown were closed off. Some gypsy cab drivers jacked up their rates for seemingly panicky passengers trying to get to work. At 4 p.m., the two subway stations reopened and dozens boarded waiting trains. The last confirmed terrorist attack in Moscow was in August 2004, when a suicide bomber blew herself up outside a subway station, killing 10 people. Chechen rebels claimed responsibility. In February 2004, a suicide bomber from the North Caucasus attacked a subway train during the morning rush hour, killing more than 40 people and wounding more than 100.

Because of these recent attacks New York increased security in its transportation network with officers assigned to subways overnight held in place so they overlapped with the day tour. Special units also were assigned to transit facilities. Washington, D.C., Metro police conducted random inspections of stations and rail yards. Atlanta's public transit system said its police department was increasing the number of officers and patrols in the system.²²

4.4 The NEWSTART treaty

Barrack Obama and Dmitrij Medvedev's visit to Prague on 8th April 2010 to sign an arms reduction treaty called NEWSTART has also shown that terrorism is an ongoing threat to mankind. The fear is that nuclear weapons can be used in wars or in terrorism attacks. The security for these two heads of states was the most important operation that the Czech police

²² *Moscow subway explosions: Dozens killed by two female suicide bombers* [online] [cit. 2010-04-12] Dostupné na www : < http://www.huffingtonpost.com/2010/03/29/moscow-subway-explosion-k_n_516581.html >

has ever participated. It exceeded other security operations like those during the annual meeting of the Boards of Governors of the International Monetary Fund and the World Bank group in 2000 and NATO summit in 2002.

Jammers were used to halt the transmission of signals. The secret service wanted to block any communication between terrorists within the vicinity of the Presidents' convoys up to 500 meters and to prevent terrorists from blowing any bomb from a distance using mobile phones. According to the president of Czech police Oldřich Martinů this operation cost 50 million Czech Crowns which is about \$ 277 000. In 2003 the then president of Pakistan Pervez Musharraf survived an assassination attempt due to jammers that were used. The powerful bomb exploded a few minutes after his highly guarded convoy crossed the bridge in Rawalpindi.

Mr. Obama will later on 12th and 13th April 2010 host more than 40 heads of USA government. He wants them to pledge to secure nuclear materials around the world and to crack down harder on illicit traffickers. This is ahead of May's five-yearly review of the Nuclear non-Proliferation Treaty which is the world's main bulwark against proliferation and Nuclear Terrorism.

4.5 Macroeconomic Effects Of Terrorism

Many economists and political scientists say that US macroeconomics should experience only minimal effects of terrorism because few attacks are staged on US soil. Moreover the economic activities of the US are sufficiently diverse and can absorb the impact of an attack of any magnitude by moving these activities to unaffected sectors. If for example, airlines become risky, factors of production will hastily leave the airline sector to find worthwhile employment in now relatively less risky areas.

Some economists say that effects of acts of terrorism can in diverse economies be handled like any other natural disaster. Loss of life, security, loss of property, and lost GDP growth are ongoing costs of terrorism and in the US are estimated to be around 0.3 % of GDP.

In small economies such as the Basque region of Spain, Israel and Columbia where terrorism is prevalent, development and economic growth are depressed. The anticipation of future attacks leads to high risk premiums in terrorism-prone activities. Small economies have few available avenues to diversify the risk.

In the US, 9/11 had some macroeconomic effects. Stock market trading resumed on 17th September, and bond market trading was halted for a day. Much of the physical infrastructure of the markets was destroyed. Computer systems and communication at the Bank of New York which is the world's largest settlements bank were badly damaged. Many firms in the financial district of New York took a number of days to make their back up systems operate. Investors flock to highly liquid assets when there is uncertainty and so the demand for liquidity rose very high. Because of this unprecedented increased demand the Federal Reserve sharply cut the federal funds rate. The Federal Reserve encouraged banks to borrow from the discount window and this increased liquidity. As of September 12 2001, this kind of borrowing and repurchases skyrocketed from an average everyday level of \$24 billion to a total of \$61 billion.

4.5.1 The Lost Output

It has been estimated that the cost of the Two-day partial work stoppage and associated loss of productivity is \$ 35 billion. The estimate of the total output loss is \$47 billion. The Bureau of Labour statistics (2003) reports that at least 145 000 workers were laid off for thirty days or more as a result of the 9/11 attacks. The unemployment rate jumped by almost one percentage point in the quarter following 9/11. Immediately after 9/11, passengers fares plummeted by \$1.5 billion, and the hotel industry suffered losses estimated to be \$700 million. Ito and lee (2004) estimate that the heightened albeit temporary, fear of flying reduced airline demand by more than 30% while other factors, such as increased passenger screening and security checks, caused a permanent 7.4% decline in airline demand.²³

4.5.2 Terrorism effects on Foreign direct investment

If terrorists target foreign companies, the risk of anticipated attacks can compel investors to move out of the now high risk holdings of foreign assets for a number of reasons. Firstly, even when an attack has not yet been realized, a firm has to gather resources to protect its employees and its infrastructure and this raises operating and insurance costs. Secondly, an attack can

²³ ENDERS, W.; SANDLER, T. *The political economy of terrorism*. Cambridge: Cambridge University Press, 2006. ISBN 0-521-61650-6.

destroy a company's infrastructure which can lead to business disruptions and delays in the delivery of goods and services. And finally but not the least, recruiting costs may increase as the security personnel may not wish to be deployed in a terrorism prone area. Domestic firms in a country prone to terrorism may as well move to other countries which are not because it might be cheaper to shift operations than to have to incur enormous costs before and after an attack.

4.5.3 Effects of terrorism on trade

Higher risks and enhanced security measures augment transaction costs and reduce the capacity of international trade. When the airline, port, and border security increases, acts like a tariff and the cost of trading are augmented. In addition, the goods may not arrive on time or intact as the terrorist activities heighten.

The effects of terrorism in one country affect also that nation's trading partners. In other words terrorism negatively affects the pattern of international trade. When the effect of terrorism doubles bilateral trade simultaneously reduces by 4%. Therefore high- terrorism nations have to a large extent reduced trade volume. The magnitude of the effects of terrorism on trade is relative to the alternative terrorism measures.

Fiscal policy also played a significant role. In May 2001 the first tax cut was signed into law since 1985. Real disposable income had dropped but in the first quarter of 2002 it rose considerably. Congress on September 12 approved \$40 billion to be used for emergency spending. This money was used for items such as tightening security and searching and rescuing efforts at the crash sites. This spending did not only provide disaster relief but also served as a direct stimulus to aggregate demand. Consumer and business confidence was restored partly due to this kind of crisis management.

4.6 Microeconomic effects of terrorism

At the height of Spanish tourism season in July 1996, ETA bombed Reus Airport in Tarragona, twenty British vacationers were injured. The number of tourists travelling to Spain deeply declined for many months after the bombing. This implies that tourism revenues collected sharply reduced.

Tourists are said to be rational consumers dividing their resources between various services, goods, and trips. When a certain country is constantly attacked by terrorists, tourists stop visiting it, they start going to other places. This happens especially when these attacks are aimed at them. Hence the affected country loses out to another one where tourists will feel more secure.

Using the transfer function, some economists have been able to calculate the tourist revenue losses of different countries and periods. A number of terrorist attacks took place in Greece from the first quarter of 1970 to the fourth quarter of 1988. It is generally noted that although there are fears of a terrorist attack in a particular country, tourists have a tendency not to revise their plans, not to cancel bookings on airlines, and cruise ships because of the sizable penalties. As a result existing plans are honored but new booking to this country are curtailed. Hence these economists say that because of terrorism the total loss of tourism revenues in Greece is about \$ 575 million. This amount is approximately 23.4% of its 1988 annual tourism revenues.

Though small a country, Austria has experienced quite a number of brutal attacks. The first incidents in 1979 and 1980 were directed at the Jewish interests. The infamous Abu Nidal attack on the tourists on 27 December 1985 at Vienna airport and other incidents followed between 1985 and 1987. The total tourism losses were \$3.474 billion which was 40.7% of its 1988 tourism revenues.

Italy only lost 6% of its 1988 tourism revenues. France's losses were insignificant. The sum of the effects for Europe as a continent was greater than those for a single country, thereby implying a strong transnational externality. The implication of terrorism in this case is that tourists from other parts of the world are deterred from visiting Europe in general.

Terrorism against the United States initiated with the commencement of the Gulf War in 1991 has caused a total decline in US tourism revenues of more than \$56 million.

Low intensity terrorist attacks in one country increases tourism revenues in another in the same region. On the contrary high intensity terrorism in one country reduces these revenues for another country as well. This negatively affects the whole region.

Small economies as already mentioned have few resources and an attack directed against net foreign direct investments can harm their economies. Two such examples are Greece and Spain. The Revolutionary Popular Struggle and the Revolutionary Organization 17 November of Greece had aims of attacking the capitalist interests and to cease the US and NATO occupation in Greece. The Autonomous Anti-Capitalists Commandos (CAA), ETA, and Iraultza of Spain have targeted attacks on foreign enterprise. Iraultza's exclusive aim was to deter foreign investment in the Basque region. As stated above, large economies such as the US and the UK are diversified. They have enough resources such that even an attack of whatever magnitude may not severely affect their economies.

Moreover, terrorism induced risk is also a long-term tax on the economy. In order to avoid potential losses rational investors will substitute out of high-terrorism activities. Consumers try to avoid anything that may expose them to terrorism acts which may lead to injury or death. When investors and consumers move out of risky activities, resources are reallocated and as a result terrorism-prone sectors contract while others expand. This actually makes it hard to calculate the total lost output or unemployment resulting from terrorism because one sector's loss may be another's gain. If, for example a group of people decide to drive rather than to fly to a tourist destination or somewhere else, some of the lost airfares accrue to oil companies and roadside hotels or motels.

4.6.1 Market inefficiency

The American-led invasion of Iraq led to the loss of **oil production** in the Gulf state. In mid- 2002, there were over six million barrels per day of excess production capacity and by mid 2003, this had dropped to below two million. It dropped still further in 2004-2005.

A million barrels per day is not enough spare capacity to cover for any sudden drop in production and it led to an increase in oil prices.

Terrorism has resulted in the **loss of jobs**. Places where they have been terrible hit by terrorism have resulted in loss of jobs. Thereby increasing the demand for jobs and lowering supply for jobs in other words the supply of labour increases but the demand for labour decreases.

Some governments are concentrating much more on fighting terrorism than other fields of production. They are spending more money on investigations and research than they used to in an effort to combat terrorism. This means that there is an increase in the production of up-to-date technology and weapons to eradicate terrorism. The firearm industry is the fastest growing industry in the world.

Conclusion

Since 9/11, terrorism has become one of the most concerned problems on earth. We read about it in the news papers and online. We hear about it in the news on Radio, TV, and online. It has led governments and security services to devise new and probably improved security systems. It has led to some economical changes although they are not mentioned in the news.

I wanted to write about this topic because I have come to understand that most of the things that happen around us including some decisions we make on a daily basis have economic repercussions that we usually don't recognize or figure out. More than natural disasters people are afraid of terrorism.

After the 9/11 attacks, governments world wide especially in countries where a terrorist attack is likely to be staged have increased their security services in order to combat and prevent acts of terrorism. Countries that have already experienced such attacks have had to cover for infrastructure that may have been destroyed, repair modes of transport that may have been damaged and may have had to strengthen security in affected areas and in the country as a whole. All theses are additional expenses caused by a terrorist attack which would not have been the case if no attack has been staged. I can go further to say that some people who have died or lost jobs as a result of such an attack are bread winners. This makes the family economically weak because there is no one to financially support them depending on the social system existing in a given country. This kind of data can take years and is very expensive to collect. This is why in this thesis I have not concentrated on such detailed information but I have basically shown in most instances what happens to a country or region as a whole when there has been an attack of this sort.

The Czech Republic is actively involved in the fight against terrorism. Due to this involvement, many people connected to terrorism have been arrested.

I have observed that terrorism is an ongoing threat to the human race. Besides governments working out security measures to protect their countries from terrorist attacks, entrepreneurs and investors have to reconsider areas in which to conduct their business. They evaluate security in relation to terrorism as well.

I think that the introduction of full-body scanners at some airports and the recent signing of the arms reduction treaty called NEWSTART by USA president Barrack Obama and Russian

president Dmitrij Medveděv in Prague on 8th April 2010 are good examples showing that terrorism is an on going threat to the world and how governments are trying hard to eradicate this vice from the globe.

In my own opinion terrorism has resulted in market inefficiency. There has been an increase in production of some goods while the production of other goods has reduced. For instance, there has been an increase in the production of arms but a decrease in the production oil.

Frequent terrorist attacks in an area causes loss or reduced investments in the same area. Investors do not only look at the amount of profits that they can gain by investing into something but also at how risky security wise that environment is. I also think that the more terrorist attacks are staged in a particular area the less the investments are expected in the same place.

The effects of terrorism are likely to be greater in small, non diversified economies facing sustained terrorist campaigns. In large market economies, terrorism is more likely to cause a substitution from sectors vulnerable to terrorism into relatively safe areas; prices can quickly reallocate capital and labour to the sectors where they have the greatest marginal product. This reallocation can limit the impact of terrorism in diversified market economies. Small economies don't have this capacity and if terrorist attacks are continued in these countries, their economies can be badly affected.

Finally I would like to say that this thesis has achieved its aim as stated in the introduction. It has analyzed basing on facts from different sources whether or not terrorism acts have any economic impacts on the countries of occurrence and has determined beyond any reasonable doubt to what extent terrorism affects other countries where a particular attack has not been staged.

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