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"Gresham's theorem" for Terrorists' Behavior and Government's Strategy Choice[2]

Abstract

In the paper alternative theoretical approaches for the Terrorist Activity Determinant Analysis are tested. Classical "Crime and Punishment" approach is found to be the most appropriate for the analysis of terrorist's motives. Data on victims of acts of terrorism is used for hypothesis verification. Concessions and policy of economic aid seem to be inefficient for prevention of violence escalation.

Content

Problem Statement and Definitions

Terrorism (The U.S. Department of State, 1990 definition[3] is taken with authors' comments in bold) is the unlawful **and rational (well planned)** use of, or threatened use of, force or violence against individuals or property to coerce and intimidate governments or societies, often to achieve political, religious, or ideological objectives.

During last decade before and even after September, 11 the new "social" approach to problem of terrorism is predominated. It is based on the assumption that terrorism is caused by

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poverty and frustration. Concessions are supposed to mitigate the frustration and Foreign Aid ("social policy promotion") would strengthen "doves" faction and weaken "hawks" (Garoupa, Gata, 2002). Free-trade supporters believe that free-trade agreements should encourage underdeveloped Muslim countries to make a reasonable political choice (Lindsay, Preble C, 2003).

Traditional approach is based on the assumption that terrorism is a dangerous type of criminal activity. Therefore we can apply "Crime and Punishment" economic approach (Becker 1968) for the analysis. The issue is also discussed from the opposite viewpoint by various politicians: W.Brandt (1980, 1983), M.Thatcher (2002). Brandt believes in the large-scale Aid programmes efficiency. Thatcher is convinced, that institutional and personal failures of underdeveloped countries and their leaders cause backwardness. So this problems couldn't be decided by foreign aid.

We argue that the *Rule of Force* society institutions (*discretionary governed society where leader or dictator is legitimated and supported by force and violence mainly*) in underdeveloped countries make "hawks" predominance the only stable equilibrium. Incentives to invest are destroyed by absence of personal immunity and property rights guarantees under Rule of Force (Mau, Yanovskiy, Javoronkov 2002, 2003). Therefore in these countries violence cann't be prevented through economic progress.

Some regimes and private persons (with special Preference profile) make investments in terror. Leaders of terrorist organizations are interested to receive evidence that the funds are spent efficiently. World mass media can be used for reporting casualties. The cost per capita of an attraction of mass media attention is lower for civilian victims than for combatants. Therefore *"Type 2" terrorist groups*[4], attacking civilian for maximization of victim number have been "forcing out" *"Type I"terrorist groups*[5], aimed at military victory and fight against military personal only. A "Type 2" terrorist groups seem to win competition for the specific investments due to better reporting effect: greater media-coverage return per one victim (Yanovskiy, 2004).

CALEA - The Commission on Accreditation for Law Enforcement Agencies (USA) web-site.

[4] Type 2 terrorist groups refers to groups, aimed at maximization of civilian victims number as all-sufficient intermediate goal. The ultimate goal of these groups is civil society demoralization, and destruction of Rule of Law system and Democratic state. This group includes but not limited to Sendero Luminoso (Peruvian), HAMAS, Hizballa (Arabian). Terrorism of Type 2 is based on the "Spider-web theory", describing Western Society as vulnerable (because of high value of an individual life and cowardice) spider-web which could be easily destroyed by terror – see Gen. M.Yalon's interview to Ha'aretz August 30, 2002 (http://www.cdn-friends-icej.ca/isreport/aug02/yaalon.html).

[5] Type 1 terrorist groups refers to groups aimed at power seizure by means of demoralization and destruction of armed forces and security services. They mainly attack military goals and politicians. The difference from militant groups lies in readiness to attack in spite of high probability of concurrent civilian victims. This group includes Kurdish Labor Party, initially – IRA, which evolved to Type 2 group (see CDISS Terrorism Programme web-site http://www.cdiss.org/terror.htm).

Political correctness is defined [for this paper] as ideologically motivated approach based on the moral relativism. Quasi-moral or good in accordance with political correctness ideology is only things good for defended groups chosen by intellectual leaders. The same intellectual leaders decides that exactly is good or bad for defended groups[6] without any formal procedure of revealing this very groups' own will or preferences.

Sources of Data

Victims of Terror database:

Bituah Leumi (National Insurance company under the Ministry of Labor of Israel):

http://www.gal-ed.co.il/leumi/search.asp

ICT terror database:

http://www.ict.org.il/casualties_project/incidentsearch.cfm

Israel Legislation database.

CDISS Terrorism Programme data (for International terrorism) http://www.cdiss.org/terror.htm

US Department of State Historical Background Office of the Historian Bureau of Public Affairs

Significant Terrorist Incidents, 1961-2001: A Brief Chronology

http://www.state.gov/r/pa/ho/pubs/fs/5902.htm

Basic hypothesis to be tested

1)   Concession and Assistance will mitigate the problem of terrorism vs.

Fighting the terrorist groups and countries will slow down their activity (through punishment level and probability increase).

2)   Modern mass media global coverage provides terrorist groups with incentives to attack civilians instead of combatants.

The theory of "crime and punishment" argues that putting strong pressure on leaders of terrorist groups reduces probability of their aggressive behavior as long as punishment is serious and inevitable (i.e. high possibility and rigidity of sanctions). Then according to Becker the supply of crimes (for example, terrorist attacks) will be expressed as follows:

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[6] Compare with Bolshevik party founder - V.Lenins' idea about "class moral": moral and good is everything that good for working class. What is good or bad for workers decides "new type political party" leaders only, because workers themselves are uneducated, doesn't knows Marxism and could generate only wrong ideas of trade-unionism – steady workers' life improvement strategy instead of class struggle and revolution ideas and strategy. (see for ex. V.I.Lenin "Zadachi sojuzov molodeji" – "Youths union tasks", 1920 speech for III-rd Congress of Communist Union of the Youths).

$$O_j = O_j (p_j, f_j, u_j)$$ or, rewriting the equation according to derivative sign and ignoring connection u_j with p_j, f_j: $O_j = u_j / p_j f_j$

Where O_j - number of acts of terrorism in one year; u_j - utility of organizers and customers (investors) from fulfillment of an act of terrorism; p_j- probability of punishment of organizers and customers; f_j - an indication of rigidity of punishment.

Basic Assumptions

Terrorism and fight against it or another possible reactions can be interpreted as a game. Participants include political leaders of the legal democratic states, organizers and investors (customers) of acts of terrorism. All players are rational (see for example section "Competing claims for taking responsibility for murders: the sign of rational behavior" below).

Certain individuals and states by virtue of different reasons are interested in sponsoring terrorists and making "investments" into their activity. Main incentives include but not limited to thirst to power or its reinforcement, strengthening of political influence, growth of self-appraisal (extreme cases of psychological illness can be also considered).

A head of the terrorist organization seeks after certain growth of prestige and Power. The Power in a society based on supremacy of force (mentioned above "Rule of Force society") can be transformed into other resources with minimal costs. That is why the Power is more valuable resource than wealth under Rule of Force conditions. .

According to Niskanen model a leader of a democratic state can be interested in maximization of the resources under his control or in short-term positive change in moods of voters for prolongation of his mandate at next elections. In such situations Democratic Politician is interested in coming into agreement with terrorists and their leaders on release of hostages – his country's citizens - in exchange for political concessions and/or the economic aid or purchase of a third party concession[7]).

A leader in a backward "Rule of Force" society - a society based on authority of violence - has two obvious directions of investments in resources of violence. First of all, he could extract the rent from fellow countrymen with subsequent gradual transition to career of the stationary bandit. Secondly, he could prefer robbery of rich neighboring countries. According to M.Olson's definition (2000) the second option means a career of the classical "Roving Bandit" . The ancient history and the Middle Ages showed dozens of cases it was chosen to attack rich neighbors.

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[7] For example, a program of assistance for "less developed countries" or realization of a foreign policy project to support a "peace process" - as B. Klinton's administration tried to follow "Aid for Peace" approach in Middle East policy - see Saul Singer http://www.jcpa.org/jl/vp456.htm and chronicle of Barak-Clinton negotiations, 1999 http://www.arabicnews.com/ansub/Daily/Day/990720/1999072027.html

Any Citizen in any county prefers Life and freedom as most valuable goods. Many citizens has lexicographical ordering of preferences, so they ignores any marginal goods (economic aid, entrepreneurial income, salary etc) in face of probable risk theirs life or freedom.

The model for statistical analysis

The most developed statistics of terrorist acts is available in the Israel. Therefore it was used for the hypothesis testing.

For evaluation of Terror Determinants Significance a linear regression has been used .

<u>Dependent Variable</u> Number of Terror Victims – Civilian – time series (Israel, 1949[8]-2003);

<u>Independent variables</u>: Type of Governmental Strategy – set of Logical Variables; Dummy on 10 years after IDF[9] foreign full-scale operations (the IDF operation is considered here as the p_j- probability of punishment of organizers and customers and the f_j - an indication of rigidity of punishment **increase**).

Government strategy can be defined as "Tit for Tat". All contacts with Terrorists are prohibited by law on penalty of criminal prosecution (u_j - utility of organizers and customers of acts of terrorism restricted). This ban on any contacts with terrorist organizations, including PLO (Palestine Liberation Organization) was in force in Israel till January 1993. Till the Rabin's Labor party won the election with not revealed publicly intention to violate the ban, "Tit-for-Tat Israel Government Strategy & contacts with Terrorists prohibited by Law" variable value was "1". Therefore it was I.Rabin-Sh.Peres Government who first tested the strategy of decreasing terrorist activity by means of concessions and economic assistance in 1993-1996 (or, in terms of "Crime and Punishment approach" they tried increase u_j - utility of organizers and customers of acts of terrorism - to prevent theirs frustration and incentives for terrorist activity). The variable "Tit-for-Tat Israel Government Strategy & contacts with Terrorists prohibited by Law" value changes on "0" in 1992 and "-1" in 1993-1996 and variable "Government strategy: policy of appeasement of Terrorists by concessions and aid" becomes = 1 (see table in Annex 1). B.Netanjahu Government returned to "Tit-for-Tat" strategy in some aspects, but the ban on the negotiations with leading terrorist organization was not restored – government and even Netanjahu himself negotiated with terrorist Arafat (The "Tit-for-Tat" variables' value for 1997-1999 = 0). Y.Barak's and A.Sharon's Governments continued the Rabin-Peres policy of concessions (The variable's value = -1). The formal indicator is readiness of Sharon's Cabinet to accept and even encourage a creation of terrorist stronghold with the sovereign state rights. The

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[8] 1948 was the year of war in the Israel; part of the country territory was temporarily occupied and by 5 Arabian armies, therefore this year is incomparable with others and was excluded from the time-series.
[9] Israel Defense Forces

Israel Government voted for the "Road Map Plan" on 25th of May 2003[10] and continued to negotiate with terrorists' leaders, ignoring Sharons' pre-election promise never negotiate under the fire.

For the hypothesis testing times series were used prepared under ICT academic project. The ICT project has been accumulating the data since 1970 and has smaller resources than Bituah Leumi project. Therefore my calculations were based on the official statistics starting from 1949 . Essential amendments (apart from a decrease in number of victims from101 to 12) were made only for 1991. The analysis of newspapers demonstrated that splash in terrorist activity in January of 1991 was not noticed while the records of insurance companies reflected it. Apparently, as a result of "a chain of pressure» - the USA government pressed down on the government of Israel, which, in its turn, put a pressure on "Bituah Leumi» - compensations were paid out for the very wide range of cases, including even indirect victims of Iraq "Squads"attacks, happened just in January of 1991 year.

Table 1.

Results of three linear regressions

#	Dependent Variable	Independent Variables	R^2	T-statistics
1	Number of civilian victims as a result of Terrorist Attacks in Israel	Government strategy: "Tit for Tat" AND contacts with Terrorists are prohibited by Law	0,299	-4,901
2	The same	Government strategy: policy of rewarding[11] of terrorists by concessions and aid	0,337	5,330
3	The same	10 years after IDF foreign operation OR 1 year after Terrorists' Deployment Country pushed them out by force (Jordan Kingdom, 1970)	0,169 (0,157 – without Jordan 1970 case)	-3,464 (-3,323 – without Jordan 1970 case)

Preliminary conclusion is:

All (three) variables in equitation $O_j = u_j / $**pjfj**   **looks significant.**

Expected utility growth could increase acts of terrorism supply (test #2); Expected utility restriction could restrict acts of terrorism supply (test #1). Fighting terrorism (**pj**   **and fj** increase) could restrict terrorist activity and acts of terror supply (##1, 3).

As independent variables used for test is logical, additional test is necessary.

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[10] http://www.sedmoycanal.com/news.php3?id=41798

[11] Providing positive pay-off for terrorist
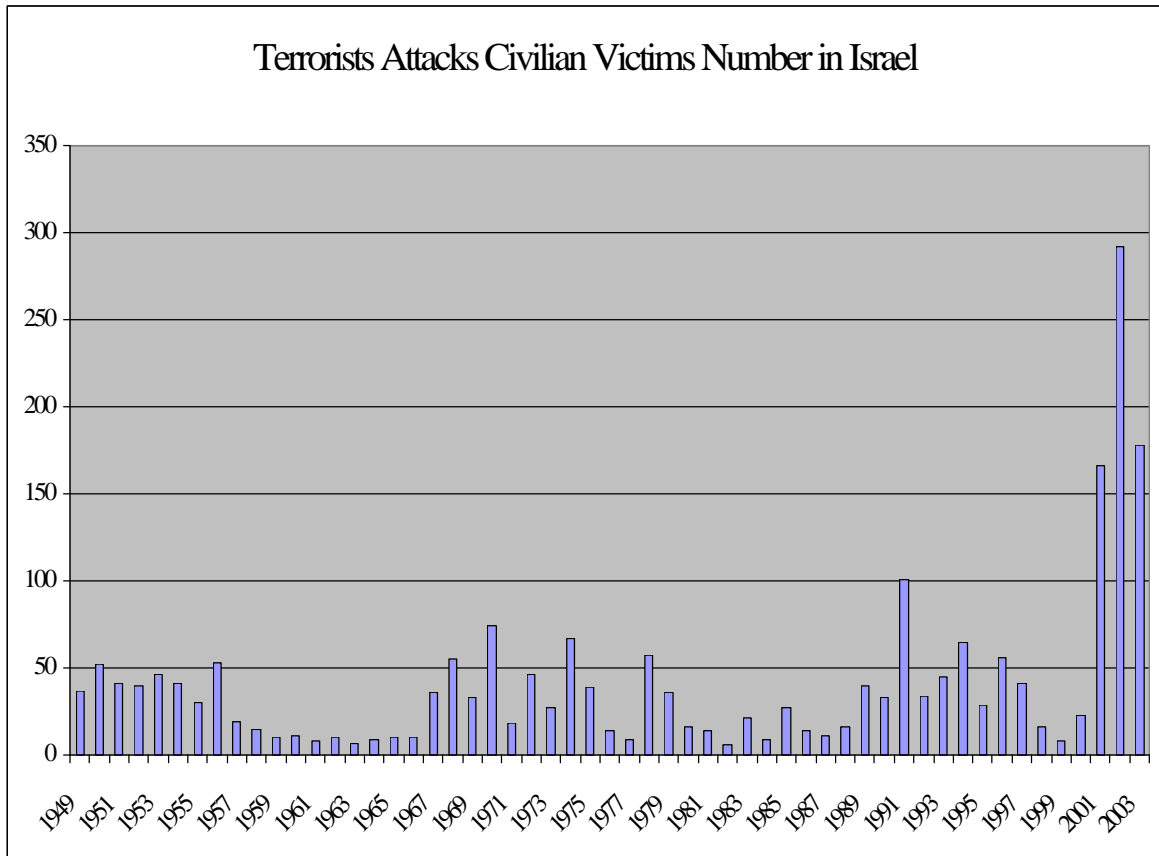
Pict. 1. Histogram of civilian victims as a result of terrorist attacks in the Israel. Source: Bituah Leumi.

International Terrorism since WWII: trend to maximization of civilian victims' number

To test "The Gresham's Theorem" the terrorist attacks with the number of victims more than 5 were analyzed. The parameter "more than 5 victims" was chosen for Table 2 since "up to 5 victims" incidents are very common in local conflicts. It is not possible to create database containing all relatively small incidents because it is hard to draw a distinction between a terrorist attack and small battle. I excluded from my analysis all murders of state officials because focusing on such incidents as assassination of prime minister Rabin would create a significant ideological shift in the research[12], not to mention moral problems of such selection.

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[12] Because taking in consideration VIP-cases and ignoring Shalevet Pas of 10 months (murdered by means of gun presented to terrorists by Prime Minister Rabin) assassination and similar cases would cause left-wing bias in analysis.

Table 2

Large scale Terroristic Attacks 1945-2001

	Number of Militants' victims	Number of Terrorist-type-1 victims	Number of Terrorist-type-2 victims
1945	8	0	0
1946	0	0	0
1947	0	40	20
1948	0	0	13
1949	0	0	0
1950	0	0	0
1951	14	0	0
1952	0	0	0
1953	0	0	0
1954	0	0	0
1955	0	13	30
1956	0	0	0
1957	0	0	0
1958	0	0	0
1959	0	0	0
1960	0	12	0
1961	0	0	0
1962	0	0	0
1963	0	0	0
1964	0	0	0
1965	0	0	0
1966	0	0	28
1967	6	0	0
1968	0	0	12
1969	0	0	22
1970	0	0	62
1971	0	0	0
1972	7	0	52
1973	0	12	60
1974	0	0	83
1975	0	0	73
1976	0	0	510
1977	0	0	38
1978	0	0	0
1979	18	0	250
1980	6	0	98
1981	0	0	0
1982	0	107	500
1983	0	403	23
1984	0	101	130
1985	9	19	16
1986	6	0	32
1987	14	0	4259
1988	11	0	129
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	12
1993	0	0	42
1994	0	0	227

1995	0	30	227
1996	19	0	442
1997	0	0	549
1998	0	0	340
1999	0	0	235
2000	0	0	7
2001	11	0	5061
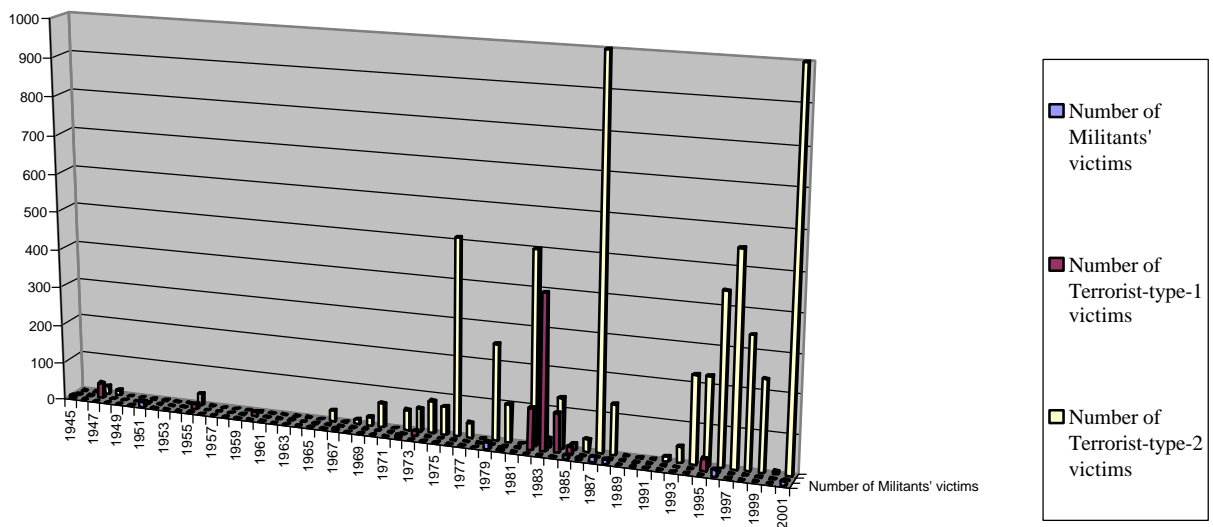
Pict. 2 Number of international terrorism victims 1945-2001

The Table 2 and the picture 2 shows that the Terrorism type 2 grows simultaneously with overall number of causalities. At the same time if one attribute the massacre of the Iraqi kurds by chemical weapon in 1987 to internal terrorism and pay special attention to 1982-84 peak of causalities from Terrorism type 1 it becomes clear that military pressure of democratic countries on the terrorists could lead to the substitution of civilian causalities by the military ones. Without this 1982-84 peak the tendency to full prevalence of Terrorism-type 2 looks obvious. The same trends appears in the Israel case, where terrorists' activity since 60-ties shifted to almost 100% "Terrorism Type 2" but the periods of anti-terrorist operations. During the operations Hisballa, Arafat's gangs, Islamic Jihad and Hamas forced to target military personal from time to time.

1980-90-ties "Pro-peace" political campaign in the Israel for the troops withdrawal from Lebanon ignored statistics of substitution the civilian losses by military personal causalities – see Table 3.

Table 3

Israeli Civilians Killed/Wounded
On the Lebanese Border
(1985-1999)

Year	Killed	Wounded
1985-88	-	45
1989	-	*
1990	-	*
1991	-	*
1992	2	18
1993	2	31
1994	-	3
1995	2	35
1996	-	34
1997	-	2
1998	1	40
1999	2	40
Total	**9**	**248**

* No data available

Source: IDF (http://www.idf.il/english/statistics/civilian.stm)

An explanation of this phenomena is based on a simple cost – efficiency analysis.

Economic efficiency of terror is growing. Since marginal cost of each additional murder has been decreasing, especially for civilians, by means of mass massacres of civil persons for intimidation of local population and authorities.

There is a tendency to replacement of "old-fashioned" insurgents (terrorists type 1) such as the Kurdish Working Party or Tigers of Liberation Tamil Ilam, IRA early versions, Corsican separatists or other militants attacking specifically policemen and state officials, though not restrained by "concurrent" – civilian victims too .by the "Arafat-type" groups, terrorizing mainly civilians, because it is easier to draw public attention and, hence, money. Different gangs tend to compete for taking responsibility for the same crying acts of violence. Incentives for politicians and journalists to cooperate with the most severe and cynical terrorists are also easily explained by maximization of utility in the short-term period. .

There are also the additional factors explaining rationally behavior of all players. Modern telecommunication facilities reduce costs of interaction between executors of terroristic attacks and organizers. Prevalence of civil victims in this context reflects the obvious fact - cost of "reporting" on a killed civilian incomparably lower than the reporting on killed soldiers. The cost of armed soldier elimination is far higher than the cost of bus passenger elimination or assassination of visitors in a cafe.

The Damur and Sabra-Shatila Cases: example of biased coverage

Some comments to history of Lebanese Civil War and IDF invasion presented in Annex 2. Lebanese Christian blames Egypt for Palestine terrorist (Type 2 in accordance to proposed in this paper classification).

The essence of Egyptian ambassador objection on the Daniel Nassif accusation of Egyptian support for Palestinian gangs massacred Christian population of Lebanese Damur town in 1976 is not the obvious fact of massacre denial. The essence of his statement is – Sabra and Shatila tragedy – is common knowledge. Everybody knows about the Sabra and Shatila camps tragedy. Almost nobody heard about Damur tragedy. Why Sabra and Shatila became so famous and Damur not?

Let try to find the differences. Number of murdered civilian was approximately the same in both cases. But:

1. The Damur case was massacre of Christians and Christians not looks like a members of "defended groups" (see political correctness definition), as distinct from Muslims;

2. The Damur massacre happened on the territory controlled by cruel terrorists type 2 gangs, so cost of the collection of information was incomparably higher than in Sabra and Shatila case, when foreign "liberal" correspondent could interview survivors and other witnesses of the event, who obviously not feared of Israel Defense Forces, controlled the territory. Even "conservative" journalist couldn't communicate with small costs with survivors and witnesses of Damur events "close in the tracks", January-February 1976. So they couldn't create "Memorable story" (see S.Mullainathan and A.Shliefer, 2002 explanation of the media bias possibility);

3. Political Correctness Rules broad acceptance could form the cartel, punishing for the deviation from "liberal" coverage (see D.Sutter, 2001 explanation of the media bias possibility); Terrorists could bribe the journalist with less costs comparing with Democratic leader. The media bias could appear and influence the Democratic Leader incentives and on his strategic choice.

The Rules of the Game

In this section a set of simplest prisoners' dilemma type game scenarios are described for the subsequent model developing to illustrate the Democratic Leaders' Strategy.

Cooperate or not cooperate? This is a question. Population of an underdeveloped country makes its choice, basing on the Democratic leader and the Bandits proposals and strategies.

Democratic leader chooses between "Progressive" and "Conservative" strategies.

Progressive strategy is to prevent Bandits' violence by means of permanent rewarding both Bandits and Population.

Conservative strategy is to reward underdeveloped country population for cooperation and punish them for assistance to Bandits'. At the same time government persist in trying to kill Bandits, avoiding any kind of official negotiations.

Assumption: Bandit could extract up to 100% extra rent out of economic aid provided by a democratic country. Let's assume that this extra rent equals to 10 per capita, cost of civilians assassination = 1, Bandits' revenue from cooperation with population = 10. Democratic state provides economic assistance 10 per capita.

Example of Progressive strategy

			Citizen of an underdeveloped country
		To cooperate	*To abstain*
Bandit	*To kill*	9; -100	-1; -100
	Not to kill	20; 0	Incredible

Even if Inhabitant believes He could be killed in spite of pro-cooperative choice with probability 50% his only rational strategy to cooperate with the Bandit (Expected Utility (-50) better choice than expected utility (-100)).

			Citizen of an underdeveloped country
		To cooperate	*To abstain*
Democratic State	*To help*	-10; -100	-10; 0
	To abstain	10; -100	0;0

Bandit's long-term interest is to attack. In the long run he would be invited for peaceful negotiations and rewarded both by VIP status (personal immunity) and by economic assistance (a chance to get easy money) like Yasser Arafat. So, the long run his pay-off tends to increase under this choice of Democratic Leader.

Example of Conservative strategy

If Democratic Leader chooses "Conservative" strategy payoffs will change.

		Citizen of an underdeveloped country	
		To cooperate	*To abstain*
Bandit	*To kill*	5; -100	10; -100
	Not to kill	20; -50	0; 10

Conservative strategy in this example means, the choice to cooperate with Bandit becomes too risky for local people[13], but the choice to abstain becomes quite credible because Bandit will be at risk to be killed by Democratic Leader before he could punish somebody for the lack of loyalty.

If local citizens believe that the rules of Democratic Leader's game might be "changed without notice" their rational choice would switch to cooperation with Bandit.

But if they believes that Democratic Leader will give a sanction to army invasion, and going to leave his troops in their country for an indefinite period of time and suppress any kind of hostile activity then their only rational choice is to cooperate.

In long run Bandit's ability to kill would become an incredible threat. Therefore a strategy to abstain will dominate in the first round of game and strategy to cooperate - in the second round.

The Democratic Leaders' incentives

		Bandit	
		To sign a treaty and then to attack democratic state citizens	*To sign a treaty and cancel attack against democratic state citizens*
Democratic Leader	*Progressive strategy*	$R_s - L_l - R$; $R + A$	R_s; A
	Conservative strategy	$R - MB_c$; $-P_c$	0;0

Where

R_s – Revenue in terms of gains in rating caused by quick achievement of peace; L_l – Long run losses caused by terrorist attacks; A – costs of concession or economic aid; R – revenue of achieving reputation of a strong and tough leader; MB_c – costs of an increase of military budget; P_c – Cost of hard punishment.

It seems that the "Progressive" strategy would be more efficient in short-run, but "Conservative" strategy would be more fruitful in long run. The choice depends on the preferences of voters and Democratic Leaders, whose personal discount rate close to 1 encourages them to choose the "Conservative" strategy. Personal discount rate $\gg 1$ makes "Progressive" strategy the better option for them.

If everything is so obvious with Democratic state long run gain why Progressive Strategy is still used even after such failures as Munich Treaty?

1. Possibility to receive immediate gains and to hand over costs to successor or to a Leader of another Democratic State.

2. Personal preferences of Leaders such as personal discount rates can not be identified for a reasonable cost. Rational ignorance could conceal this information from the voters even if the cost of measurement is reasonable for the researcher.

3. Possibility of media coverage bias (reasons – see above) could encourage the Leader and even part of rationally ignorant voters to shift their position.

It is clear that if Leaders' personal discount rate is close to 1 and the voters' preferences tend to "conservative" values, probability of choosing Conservative strategy choice increases. At the opposite situation – discount rate $\gg$ 1 and voters' preferences tend to "liberal" values, chances to choose Progressive strategy grow.

The detailed game theory analysis at this stage of the research project looks unreasonable due to lack of data for comparative analysis for verification or evaluation of theoretical conclusions. Voters' preferences in various countries (or in one country for the period of several generations) can be measured with minimal costs, but it is hard to measure without biased personal discount rate of local politicians. This measurement is equivalent to moral evaluation of politicians' actions and their personal qualities that sometimes is hard to disclose.

Provision of economic aid for acceleration of peace process just encourages disloyal behavior. Therefore the negative effect appears inevitable. The positive effect can not overcome it since the system of incentives in the Rule of Force society sets a high level of risks for the safety of a person and property that undermines incentives to invest, makes long-term and complex transactions unprofitable, excludes opportunities for effective and long-term solutions of poverty issues.

In Rule of Force society the power can be easily transformed into cash[14]. Therefore any attempts to influence the decision-makers' preferences via the financial assistance are useless, unless they aim at changing of a parity of force within Rule of Force society, e.g. changing the elite or acting high-ranking officials main incentives. For example, any resources directed to the

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[13] A citizen can be punished by Democratic State soldiers or other agents by means of violent actions or economic sanctions.

[14] It's truth even in case of Russia, sticking between Rule of Law and Rule of Force Regimes, See Institute for Economy in Transition (IET) V.Mau, K.Yanovskiy, S.Javoronkov et al. publications 2001-2003, www.iet.ru .

aid of starving will be redistributed by the local leaders who supervise a situation using military force and violence (famous Somali Case, 1992-93).

Due to the aforementioned reasons an international trade being, undoubtedly positive factor (since a proposition to trade is not equal to a willingness to provide economic assistance which can be perceived as an attribute of weakness and stimulate an escalation of violence) can not considerably change a situation. Any marginal dollar earned from manufacturing and sales of the goods and services can be taken away by local leader (bandit) at any moment without compensation. Moreover, economic success can become the reason of aggression against a person or the group that demonstrate growing prosperity.

Competing claims for taking responsibility for murders: the sign of rational behavior

June 17 2003 News Agencies informed about quite routine murder of Noam Leibovich (7 years old) by Arabian terrorist. And two gangs – "Peoples Front for Liberation of Palestine" and one of FATAH gangs - claimed responsibility disputing the "honor" of this great victory of Arabian people. The basic hypothesis the gangs tried to report to the investor that they spent the money properly.

Ilia Zatcovecky, MAOF analytical Group (Haifa, Israel) argued that similar disputes take place when some terrorist organizations are not able to report about impressive successes for a long period of time. Such failure can cut off financial support. Therefore it is vital for terrorists to avoid this situation by all means.

Table 3

Competition for taking responsibility for terroristic attacks– attempt of draft analysis

Date	Organizations claimed responsibility (competitively, not jointly)	1-st one t-1 month score of murdered	1-st one t-2 month score of murdered	2-nd one t-1 month score of murdered	2nd one t-2 month score of murdered
1991.10	PFLP & PIJ	0	0	0	0
1993.04	HAMAS & PIJ	-	-	0	0
1993.10	PFLP & PIJ	-	-	1	0
2001.01	FATAH & HAMAS	-	-	0	0
2001.05	PIJ & HAMAS	2	0	0	23
2002.05	HAMAS & PFLP	12	32	0	0
2002.06	PFLP & FATAH	0	0	11	29
2003.02	PFLP & FATAH	0	0	26	0
2003.03	HAMAS & PFLP	4	4	4	0
2003.04	PFLP & FATAH	-	4	1	0
2003.06	PFLP & FATAH	0	2	7	4
2003.09	FATAH & PIJ	2	1	0	1

Source: ICT terror Data Base and Arutz Sheva Radio Station web-site News archive

FATAH – here – all Yasser Arafat directly controlled gangs ("Group 17", Tanzim, Martyrs of al-Aqsa). PFLP – Peoples Front for Palestine Liberation. PIJ – Palestine Islamic Jihad gang.

The data presented in the Table 3[15] reflects important circumstance: one or both gangs, which competes the responsibility for murderous attack, faced the problems (no more than 2 assassinations within 2 months) to report about its "successes" during two months before the disputed murder. Only one of 12 cases of disputes (2003 Mach) wasn't caused, prima facie, by one of the gangs local or permanent decline. Therefore hypothesis formulated by I.Zatkovecky can not be neglected and need additional verifications.

The data of analytical group "MAOF" (from Ministry for Foreign Affairs of Israel and media monitoring) includes all cases of "double claims" for responsibility (including terrorist acts without fatal outcomes and cases of joined attacks).

Table 4.1.

2002

	Total acts	double R	%
Total	**123**	**5**	**4%**

Table 4.2.

2002 April - June - months of IDF antiterrorist activity

	Total acts	double R	%
Total	**27**	**3**	**11%**

Table 4.3.

2001

	Total acts	double R	%
Total	**99**	**3**	**3%**

Table 4.4.

2004

	Total acts	double R	%
Total	**2**	**1**	**50%**

Table 4.5.

2003

	Total acts	double R	%
Total	**57**	**15**	**26%**
Fatah Al-Aqsa Maryrs Brigades	19	7	37%
Fatah Jenin Maryrs Brigades	1	0	0%
Fatah Tanzim	2	2	100%
Fatah	1	1	100%
Islamic Jihad	13	8	62%
PFLP	7	5	71%
PFLP -GC	2	2	100%
Hezbullah	1	0	0%

[15] Here preliminary data set is presented. It will be added till the project finalization.

	Total acts	double R	%
Hamas	20	5	25%

<div align="right">Table 4.6.</div>

<div align="center">

2003
Suicide bombing

</div>

	Total acts	double R	%
Total	**16**	**6**	**38%**
Fatah Al-Aqsa Maryrs Brigades	3	3	100%
Fatah Tanzim	1	1	100%
PFLP	2	1	50%
Islamic Jihad	7	4	57%
Hamas	9	3	33%

Sources: MFA, Israel, MAOF analytical group. Israel

Tables 4.1. – 4.6 demonstrates that, as under conditions of intensification of IDF anti-terrorist operations gangs more often need to join their efforts or to dispute "achievements". Under hard military pressure terrorist leaders have to swindle consumer (investor) by false reporting or to join resources with competitors to reach any result.

Conclusions:

Economic approaches for analysis of the terrorist activity can be efficient and now it could be based on the statistical data for the hypothesis verification. G.Becker's "Crime and Punishment" analytical approach looks adequate for this goal as well the Strategy "To encourage loyal, to punish hostile" could help to restrict terrorist activity (Axelrod Rational Choice approach extension).

Strategy of rewarding terrorists with concessions or economic aid can not lead to a stable equilibrium and prevent an escalation of terrorism as it shows data from Israel. It's the only reliable conclusion still, founded by statistic analysis. Counter-Terroristic military operations could be efficient for terrorist activity containment in some cases.

In case Democratic Leaders choose "Progressive strategy" rational terrorists prefer to stick to a strategy of maximization of civil victims' number (Terrorist type 2 drives out Terrorist type1 and Militant, or "The Bad terrorist drives out the "good" one"). Media coverage caused by the information collection, presentation and interpretation costs obvious disparity in various cases could affects on the Democratic Leader Choice. This disparity value is partly controlled by terrorists, who could augment the information about their activities cost significantly[16].

Rule of Force society generated Incentives blocks business alternatives for terror and violence: businessman's risks to lose his life and freedom rises proportionally to the wealth and success indication growth. The only reliable strategy for everyone to reach prosperity in the Rule

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[16] Significantly greater, comparing with Democratic Armed Forces leadership.

of Force underdeveloped countries is to reach power which could be easily (with minimal cost) transformed in any goods and resources. The power based and legitimated by violence only. The situation generates instability and terror danger. To break the Rule of Force incentives system, providing personal immunity guarantees (Mau, Yanovskiy) and blocking violence danger (maybe even by external overwhelming violence credible threat) is vital condition for fighting terrorism efficiently.

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Annex 1 Raw data for statistical analysis

Year	Civilian Victims' Number	Tit-for-Tat Israel Government Strategy & contacts with Terrorists prohibited by Law	Government strategy: policy of appeasement of Terrorists by concessions and aid	10 years after IDF foreign operation or 1 year after year, Terrorists' Deployment Country pushed them out by Force (Jordan Kingdom, 1970)	Comments
1949	37	1	-1	0	
1950	52	1	-1	0	
1951	41	1	-1	0	
1952	40	1	-1	0	
1953	46	1	-1	0	
1954	41	1	-1	0	
1955	30	1	-1	0	
1956	53	1	-1	0	**Sinai Campaign**
1957	19	1	-1	1	
1958	15	1	-1	1	
1959	10	1	-1	1	
1960	11	1	-1	1	
1961	8	1	-1	1	
1962	10	1	-1	1	
1963	7	1	-1	1	
1964	9	1	-1	1	
1965	10	1	-1	1	
1966	10	1	-1	1	
1967	36	1	-1	0	
1968	55	1	-1	0	
1969	33	1	-1	0	
1970	74	1	-1	0	**Jordan "Black September"**
1971	18	1	-1	1	
1972	46	1	-1	0	
1973	27	1	-1	0	
1974	67	1	-1	0	
1975	39	1	-1	0	
1976	14	1	-1	0	
1977	9	1	-1	0	
1978	57	1	-1	0	**IDF operation "Litani" in Southern Lebanon**
1979	36	1	-1	1	
1980	16	1	-1	1	
1981	14	1	-1	1	
1982	6	1	-1	1	**IDF Operation "Peace for Galilee" in Lebanon**
1983	21	1	-1	1	
1984	9	1	-1	1	
1985	27	1	-1	1	
1986	14	1	-1	1	
1987	11	1	-1	1	
1988	16	1	-1	1	

Year	Civilian Victims' Number	Tit-for-Tat Israel Government Strategy & contacts with Terrorists prohibited by Law	Government strategy: policy of appeasement of Terrorists by concessions and aid	10 years after IDF foreign operation or 1 year after year, Terrorists' Deployment Country pushed them out by Force (Jordan Kingdom, 1970)	Comments
1989	40	1	-1	1	
1990	33	1	-1	1	
1991	12	1	-1	1	
1992	34	1	0	1	Rabin and Labor Party won Elections with non-presented intention to negotiate with PLO; the year of the Strategy Change
1993	45	**-1**	1	0	
1994	65	**-1**	1	0	
1995	29	**-1**	1	0	
1996	56	**-1**	1	0	**B.Netaniahu (Likud) won Elections**
1997	41	0	-1	0	
1998	16	0	-1	0	
1999	8	0	-1	0	**Barak (Labor) won Elections**
2000	25	-1	1	0	**Barak (Labor) lost Elections**
2001	166	-1	1	0	
2002	292	-1	1	0	
2003	178	-1	1	0	

Annex 2 The Damur case: some citations and short comment

"There is a highly trained group of Phalangist soldiers, known as the Damuri Brigade, which has been in Damur, just south of Beirut, ever since the Israelis took the town. The brigade is made up of many of the sons of Christian families massacred by Palestinians in Damur in February 1976 in retaliation for the Christian massacre of Palestinian civilians at the Tel Zaatar refugee camp."

Friedman Thomas L.,
"New York Times" correspondent
1982

It should be stressed here, Tel Zaatar events was just long-term military struggle for this famous terrorists training camp and stronghold, the siege, when civilian suffered because of presence between fighting armies. The situation aggravated for civilian because Palestine commanders objects to civilian persons evacuation from the battlefield. PLO leadership tried to prevent fighters' incentives to resist weakening (J.Becker, 1984). No massacre comparable with Damur had place in Tel Zaatar, so this reference on Tel Zaatar – just attempt to mitigate the natural readers' reaction on the fact of Damur massacre, explaining (not excusing) Christian Phalangist's cruelty in Sabra and Shatila.. M-r Friedman is rather famous "liberal" opponent of Israel, so bias in coverage in this case was quite "natural".

"Egypt too was among the many neighboring countries that had a role in this. For example, the Egyptian-sponsored 'Ayn Jalut brigade of the Palestinian Liberation Army (PLA), participated in several sectarian massacres in Lebanon, including the destruction of the coastal city of Damur in 1976, resulting in the cold-blooded murder of hundreds of innocent civilians."

Daniel Nassif
Executive Director
American Lebanese Institute, 1998

"Daniel Nassif's comments are extraneous to the determination of guilt in the Sabra and Shatilla massacre or to the central arguments in my letter to the Middle East Quarterly. The world's court of public opinion, including that in the United States, long ago had passed its verdict on this matter, as anyone can verify by re-visiting coverage by leading American newspapers of this great tragedy."

Abdelaleem El-Abyad
Press and Information Bureau
Embassy of the Arab Republic of Egypt
Washington, 1998