

This file was downloaded from the institutional repository BI Brage -
<http://brage.bibsys.no/bi> (Open Access)

***The impact of the economic costs of conflict on
individuals' political attitudes***

**Avi Ben-Bassat
The Hebrew University of Jerusalem**

**Momi Dahan
The Hebrew University of Jerusalem**

**Benny Geys
BI Norwegian Business School**

**Esteban F. Klor
The Hebrew University of Jerusalem**

This is the authors' final, accepted and refereed manuscript to the
article published in

***Peace Economics, Peace Science and Public Policy,*
18(2012)2:**

DOI: <http://dx.doi.org/10.1515/1554-8597.1256>

The publisher, de Gruyter, allows the author to retain rights to
“deposit an Author-created version of the Article on Author's/Editor's
funder's or funder's designated repository at the funder's request
or as a result of a legal obligation, provided it is not made
publicly available until 12 months after official
publication.”(Publisher’s policy 2013)

The Impact of the Economic Costs of Conflict on Individuals' Political Attitudes*

Avi Ben-Bassat

The Hebrew University of Jerusalem, Department of Economics and IDI

Momi Dahan

The Hebrew University of Jerusalem, Federmann School of Public Policy & Government and IDI

Benny Geys

Norwegian Business School BI, Department of Economics, N-0442 Oslo, Norway

Esteban F. Klor

The Hebrew University of Jerusalem, Department of Economics, IDI and CEPR

Abstract

A large number of studies show that war and terrorism have a significant effect on individuals' political attitudes. Yet, this extensive literature does not inspect the mechanisms behind this effect. This paper concentrates on one possible mechanism, by differentiating between the human toll of terror and war and the economic costs they cause. For these purposes we focus on the Israeli-Palestinian conflict, and use variation in the level of violence across time and space together with localities' different exposure to the tourism sector to estimate their respective effects on political attitudes. Our results suggest that whereas fatalities from the conflict make Israelis more willing to grant territorial concessions to the Palestinians, the associated economic costs of conflict do not have a consistent significant effect on individuals' political attitudes.

Keywords: Israeli-Palestinian Conflict, Political Attitudes, Economic Costs of Conflict, Tourism.

* We are grateful to Dror Walter and to the Guttman Institute for providing us the data on the political attitudes of the Israeli population. We also thank Kfir Batz, Eli Berglas and Rotem Horowitz for excellent research assistance. The usual caveat applies.

1. Introduction

Military conflicts and terror campaigns usually result in a substantial human toll in terms of civilian and military casualties. In addition to these devastating effects, war and terrorism also tend to have important economic effects on the targeted societies. A rapidly expanding literature indeed illustrates that wars and periods of increased terrorist activity often cause, for example, trade disruptions, forgone foreign direct investment, declining tourist activity and/or the destruction of industrial capacity and loss of human capital (see Arunatilake et al., 2001; Abadie and Gardeazabal, 2003 and 2008; Fielding, 2003a and 2003b; Koubi, 2005; Zussman and Zussman, 2006; Sandler and Enders, 2008; and Blomberg and Rose, 2009; among many others).¹

Although there exists a vast literature linking the number of casualties in armed conflicts to voters' political attitudes, this literature does not address the effects of the economic cost of conflict on voters' political attitudes. The seminal work of Mueller (1973), for example, extensively analyzed the effect that fatalities in the Korean and Vietnam Wars had on public opinion in the United States. He showed that mounting casualty rates not only caused a decrease in the support for the war itself, but also had a dramatic effect on the share of U.S. citizens' approval rating of the incumbent president.

Today, there is a broad consensus that "casualties ultimately drag down [incumbent] job approval" (Eichenberg and Stoll, 2006, 802). Most of the evidence comes from the U.S. This evidence shows that, whether casualties are measured cumulatively or marginally (Gartner and Segura, 1998; Welsch, 2008; Geys, 2010), such negative relation between casualties and U.S. leaders' approval ratings exists for the Korean and Vietnam Wars (e.g., Gartner and Segura, 1998; 2000), World War II (e.g., Kriner, 2006) and the current conflicts in Iraq and Afghanistan (e.g., Eichenberg and Stoll, 2006; Voeten and Brewer, 2006; Geys, 2010; Karol and Miguel, 2007).

This regularity holds outside the U.S. as well. For example, Gassebner et al. (2008, 2011) show that the severity of terrorist attacks increases the probability of government failure and decreases cabinet duration in a sample of over 150 countries over the period 1968-2002. Montalvo (2011) and Gardeazabal (2010) suggest the same effect in a case study of Spain focusing, respectively, on the 2004 Madrid bombings and the Basque conflict. Directly related to this article's conflict of interest, Berrebi and Klor (2006, 2008) and Gould and Klor (2010) similarly found that rising casualty counts have a significant effect on Israeli public opinion.

¹ That said, some scholars have argued that wars may have at least some positive economic effects. Increased military expenditures may act as a Keynesian expansionary policy that stimulates aggregate demand (Monroe, 1978), and military research may lead to technological innovations that stimulate long-term growth and exports (Ruttan, 2006; Berrebi and Klor, 2010).

Despite the large literature on the political effects of fatalities there aren't, to the best of our knowledge, similar studies on the impact of the economic costs of conflict on individuals' political attitudes. This article attempts to start filling this void by exploring whether the economic costs associated with conflict have important political repercussions, much like the human cost of conflicts. Since peace and prosperity constitute "two indisputable goals" in the minds of voters when evaluating their leaders and their actions (Nickelsburg and Norpoth, 2000, pp. 314), we expect that the economic costs of conflict should also affect voters' political attitudes. This proposition follows from an extensive literature on economic voting, which has shown that the state of the economy has a considerable influence on electoral outcomes (for a review, see Lewis-Beck and Stegmaier, 2007). However, unlike this literature, our prime concern does not lie in the political repercussions of a country's overall economic situation, but rather centers on the particular effects of the economic costs associated with armed conflicts. Hence, we take the substantial economic costs of armed conflicts as a starting point to ask whether, and how, they affect voters' political preferences separately from the conflict's toll in terms of the number of casualties.

This article focuses on the effects of the political and economic consequences of the Israeli-Palestinian conflict on Israelis' political attitudes between 1996 and 2009. This period includes the second Lebanon War in July 2006, the Israeli military incursion in the Gaza Strip in December 2008 (known as Operation Cast Lead), as well as the second Intifada and numerous individual acts of aggression. Hence, the period covered provides us with substantial temporal and geographic variation in the human and economic costs of the conflict, which we use in our econometric analysis.

In particular, we measure individuals' political attitudes with the help of very detailed surveys that provide us with micro-level data on individuals' political attitudes and their demographic characteristics. We merge this information with a comprehensive dataset on Israeli military and civilian fatalities in wars and terror attacks during the same time period. Finally, we measure the economic costs of conflict using the number of Jewish workers in the tourism sector (as a share of the total number of employees) in a given sub-district. We focus on this variable as our main variable of interest because it is highly correlated with the incidence of wars or terrorists attacks, and it has a great deal of local variation that is not correlated with the political attitudes of the sub-districts' residents. Hence, our identification rests upon the fact that the deviations from each district's temporal trend capture mostly the effect of violent political conflict on economic activity and is mostly unaffected by other economic shocks.

As mentioned, we use a panel regression analysis based on the substantial temporal and geographic variation in terms of fatalities and economic cost over this period to identify each cost's independent effects on the political preferences of the Israeli population (proxied through voters' willingness to grant territorial concessions to Palestinians, and their position

on a left-right ideological axis). Our main results suggest that Israelis' willingness to grant territorial concessions is significantly affected by the number of Israeli fatalities, but remains largely unaffected by the conflict's economic costs.

The article extends the literature on wars and public opinion initiated by Mueller (1973) by moving beyond casualty counts as the primary – and usually only – indicator of the cost of conflicts.² This allows us not only to evaluate the existence and relevance of an alternative transmission channel between armed conflicts and public opinion (thus painting a more complete picture of this relation), but also to test for potential omitted variable bias in earlier work. While we did not find a significant effect of the economic costs of conflict in the Israeli electorate, this result may well be different for other countries. Indeed, to the extent that casualties and the economic costs of conflict are correlated (via, say, losses in human capital; e.g., Arunatilake et al., 2001), exclusive focus on casualties may lead to incorrect inferences when ignoring either variable.

The article proceeds as follows. The next section provides an exhaustive description of the datasets. Section 3 explains the chosen empirical design. The results are presented in Section 4. The last section concludes.

2. Data

For the purposes of our analysis we combine three different data sets: (i) a dataset with information on the political preferences of the Israeli electorate; (ii) a dataset on fatalities from wars and terror attacks; and (iii) a dataset on local economic activity. While the first two datasets were used in previous studies, the main contribution of our paper is the addition to the analysis of exogenous variation in local economic activity, captured by the third dataset.

2.1 Data on Political Preferences

We use data on the political preferences as well as socio-demographic characteristics of the Israeli population from *The Israel National Election Studies* (INES) and the *Democracy Index Survey* (DIS). The INES is conducted before every parliamentary election in Israel since 1969, whereas the DIS is carried out on almost a yearly basis. There are a lot of similarities between the two surveys: i.e., both are based on a representative sample of Israeli voters and contain very similar questions on their political preferences and demographic characteristics. Importantly, the available demographic characteristics include individuals' place of residence. This is crucial for our

² See Geys (2010), however, for a recent exception. Geys (2010) evaluates how the fiscal cost of warfare affected U.S. presidential popularity over the period 1948-2006. He finds that higher fiscal costs of military interventions are detrimental to U.S. presidents' popularity – though this effect significantly weakens when unemployment rates are higher.

purposes since it allows us to use their distribution across the 19 Israeli sub-districts to test the local effects of conflict and its associated local economic costs on the political attitudes of the local population.

In this paper, we use several of the surveys' questions regarding the political preferences of each respondent with respect to the Israeli-Palestinian conflict. In particular, we focus on three types of questions. The questions we use are the ones that (i) examine the respondent's position about granting territorial concessions to the Palestinians as part of a peace agreement; (ii) ask for the party the respondent supports in the approaching elections; and (iii) ask for the respondent's self-defined political tendency on a left-right scale. All these questions appear with relatively minor changes every year since 1996 (except 1997).³

When the political landscape remains constant over time, it seems reasonable to expect that all three questions exhibit a similar pattern. However, as shown by Gould and Klor (2010), the political platforms of Israeli political parties are shifting over time. This clearly reduces the last two questions' ability to capture the political attitudes of Israeli citizens regarding a particular political issue. Therefore, while we present results for all three attitudes, our preferred measure of political preferences is the respondents' willingness to grant territorial concessions to the Palestinians.

While every survey asks each respondent to provide his or her position regarding the territorial concessions he or she is willing to grant the Palestinians, the structure of the actual question varies slightly over time. Table 1 presents the structure and exact wording of this question for all the available surveys. As can be seen from this table, over the time period at issue the question's wording as well as possible answers changed across surveys. For example, in the surveys from 1996 until 2000 individuals were asked to use an 8-point scale to indicate (dis)agreement on the question: "Israel should give back territories to the Palestinians for peace," whereas in the surveys of 2001 and 2004 individuals were asked: "To what extent do you agree or disagree to a Palestinian state with 95% of Gaza Strip and West Bank, while Israel keeps settlement blocks?" Following Gould and Klor (2010), we created a dichotomous measure representing individuals' willingness to agree to territorial concessions. The exact construction of this variable also appears in Table 1. While we believe we use a sensible rule, our empirical analysis tests for the robustness of the results to alternative approaches to code these data.

Table 2 presents summary statistics for the survey data. The third column of this table shows the percentage of individuals willing to make territorial concessions. This column shows that the share of those willing to make concessions increased from 43% to 49% between 1996 and 2000. For

³ The INES and DIS questionnaires are available online at the Israel Democracy Institute's website (<http://www.idi.org.il/sites/english/Pages/homepage.aspx>). See Arian and Shamir (2011) and Arian et al. (2010) for the latest publications using INES and DIS data, respectively.

surveys using the exact same question, a similar increase took place between 2002 (41%) and 2005 (66%). In contrast, the willingness to grant territorial concessions declined between 2005 (66%) and 2009 (49%) – possibly because of the unilateral Israeli disengagement from the Gaza Strip in 2005 and the subsequent electoral victory of Hamas in the 2006 Palestinian elections. In the empirical analysis, all regressions include survey fixed effects to neutralize as much as possible the impact of changes in the structure of the questions.

Table 2 also presents summary statistics for the second political variable of interest, the one measuring the respondents' self-classification across the left-right political spectrum. We code with a value of one all respondents describing themselves as belonging to the "right" or "moderate right" camp, and a value of zero to all the rest. Table 2 indicates that there is a general upward trend over time, though with noticeable fluctuations, in the share of self-reported "right-wingers." It should be noted, however, that the stated political agenda of Likud – the largest and most important right-wing party – underwent substantial changes over the last 30 years. As this is likely to become reflected in the share of individuals perceiving themselves as right-wing, the question on territorial concessions has an important advantage in terms of having a more constant meaning over time.

Finally, our third proxy for individuals' political preferences measures the intention of an individual to vote for a party in the "right-wing bloc" (or the "National Camp") in the upcoming elections. The surveys ask every individual: "If the elections for the Knesset (Israeli parliament) were held today, for which party would you vote?" While some parties, such as the Likud and National Union, clearly belong to the right-wing bloc, there are parties that are less easily assigned to one of the blocs (e.g., some of the religious parties). In this paper, we assign parties to the right and left blocs following the classification suggested by Shamir and Arian (1999). Column 5 in Table 2 shows that fluctuations in the support for the right bloc usually follow the fluctuations in the share of right-wing individuals.

Table 1 Structure and Wording of Questions on Willingness to Grant Concessions

Surveys	Question wording	Possible answers and scale	Our coding: willingness to make territorial concessions = 1; otherwise = 0
5/1996 2/1998 1/1999 4/1999 2/2000	Should Israel return territories for peace	A rank between 1 and 7. 1 stands for "strongly disagree;" 7 stands for "strong agree."	5 to 7 = 1; 1 to 4 = 0.
1/2001 2/2004	Palestinian state with 95% of Gaza Strip and West Bank, Israel will keep settlement blocks	1-strongly oppose 2- oppose 3- support 4-strongly support	3 and 4 = 1; 1 and 2 = 0.
7/2002 1/2003 9/2005 3/2006	Territories should be exchanged for peace	1- Definitely agree 2- Agree 3- Disagree 4- Strongly disagree	1 and 2 = 1; 3 and 4 = 0.
4/2003	In your opinion should Israel return to 67 borders in exchange for peace	1- definitely yes 2- yes 3- no 4- definitely no).	1 and 2 = 1; 3 and 4 = 0.
7/2005 1/2008 2/2009 3/2009	Settlements evacuation as part of a permanent agreement	1-not to evacuate at all 2-only small settlements 3-evacuate all settlements	2 and 3 = 1; 1 = 0.
2/2007	With regard to the territories occupied by Israel after 1967, what is the greatest concession Israel should make in order to achieve peace?	1- Return all 2- Return the most 3- Return part 4- Return small part 5- Return nothing	1 to 4 = 1; 5 = 0.

Notes: The surveys of 5/1996, 4/1999, 1/2001, 1/2003, 3/2006, 2/2009 were conducted before elections by the INES. The rest of the surveys were conducted by DIS.

Table 2 - Summary Statistics on Political Preferences, Economic Indicator and Fatalities, By Survey

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Survey Date	Number of observations	Willingness to make territorial concessions	Right-wing political tendency	Vote for right-bloc parties	Share of workers in the tourism sector	Number of fatalities per capita during previous year (per 1,000 individuals)
5/1996	1,161	0.427 (0.495)	0.471 (0.499)	0.438 (0.496)	0.04 (0.018)	0.036
2/1998	1,197	0.442 (0.497)	0.533 (0.499)	0.452 (0.498)	0.036 (0.015)	0.044
1/1999	1,114	0.447 (0.497)	0.523 (0.500)	0.467 (0.499)	0.038 (0.017)	0.024
4/1999	910	0.489 (0.500)	0.444 (0.497)	0.404 (0.491)	0.037 (0.014)	0.023
2/2000	1,084	0.49 (0.500)	0.439 (0.496)	0.362 (0.481)	0.036 (0.011)	0.018
1/2001	1,197	0.38 (0.486)	0.549 (0.498)	0.463 (0.499)	0.044 (0.024)	0.027
7/2002	985	0.406 (0.491)		0.409 (0.492)	0.037 (0.015)	0.084
1/2003	1,081	0.541 (0.499)	0.579 (0.494)	0.479 (0.500)	0.043 (0.019)	0.081
4/2003	1,064	0.381 (0.486)	0.575 (0.495)	0.457 (0.498)	0.044 (0.018)	0.065
2/2004	1,088	0.306 (0.461)	0.59 (0.492)	0.456 (0.498)	0.037 (0.014)	0.044
3/2004	964		0.547 (0.498)	0.392 (0.488)	0.038 (0.014)	0.045
7/2005	1,603	0.664 (0.473)	0.497 (0.500)	0.393 (0.489)	0.043 (0.016)	0.024
9/2005	731	0.589 (0.492)	0.467 (0.499)	0.374 (0.484)	0.045 (0.017)	0.024
2/2006	1,008		0.544 (0.498)	0.367 (0.482)	0.046 (0.018)	0.018
3/2006	1,586	0.543 (0.498)	0.539 (0.499)	0.356 (0.479)	0.045 (0.018)	0.018
2/2007	1,020	0.473 (0.500)	0.619 (0.486)	0.36 (0.480)	0.047 (0.017)	0.038

Table 2 – (continued)

1/2008	971	0.445 (0.497)	0.582 (0.494)	0.344 (0.475)	0.043 (0.013)	0.007
2/2009	318	0.578 (0.495)	0.538 (0.499)	0.415 (0.494)	0.045 (0.017)	0.014
3/2009	1,229	0.49 (0.500)	0.586 (0.493)	0.448 (0.498)	0.043 (0.016)	0.014

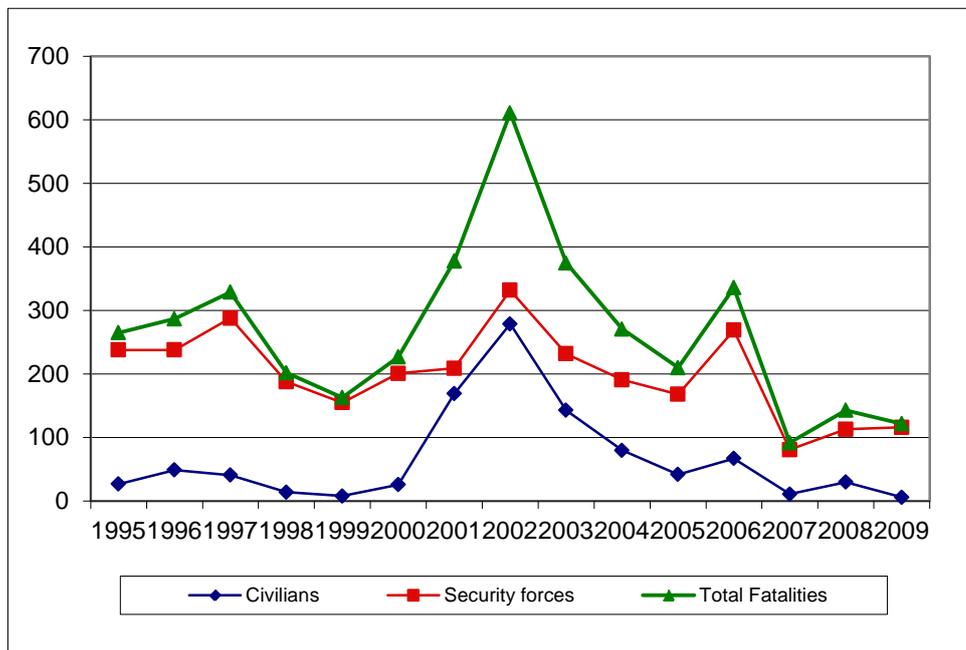
Entries in the political attitudes represent the average of the respective variable for each survey. Standard deviations appear in parenthesis. The numbers of observations refer to the total number of Israeli Jewish individuals interviewed in each survey. The exact number of observations for each variable varies slightly because not all respondents answered all questions. Sources: Israeli National Elections Study (INES) and Democratic Index. Column (6) uses data from the Labor Force Survey (LFS). The last column reports the number of fatalities per capita (per 1,000 individuals) from war and terrorism. Sources: "Laad" and "Izkor".

2.2 Data on Israeli Fatalities

Like many other empirical studies on the Israeli-Palestinian conflict, we also use the total number of Israeli fatalities during wars and terror attacks as our proxy for the severity of the conflict.⁴ Note that most of the fatalities from wars are soldiers whereas the overwhelming majority of fatalities in terror attacks are civilians. The information on total fatalities comes from two main sources. The first source is *Laad*, a website of the Israeli National Insurance Institute (Israeli Social Security; <http://laad.btl.gov.il>) that provides information on every Israeli civilian fatality of war or terrorism. The information includes the individuals' place of residence and exact date of the incident. The second source is *Izkor*, a website of the Defense Ministry of Israel (<http://www.izkor.gov.il>) that provides information on Israeli security forces' fatalities. As with the data on civilian casualties, we use their information regarding the date of the incident and these fatalities' place of residence. Figure 1 and Column (7) of Table 2 show the fluctuation of this variable over time. The figure and table show a substantial increase on the number of fatalities during 2002 and 2003, the bloodiest years of the Second Intifada. We see afterwards a gradual decrease on the number of fatalities, with 2008 and 2009 being the two years with the lowest number of Israeli fatalities since the beginning of the second Intifada.

Figure 1: Number of Israeli Fatalities Over Time

⁴ Some studies use both Israeli and Palestinian fatalities as their main variable of interest (Jaeger and Paserman, 2008 and 2009), while others focus exclusively on Israeli fatalities (Becker and Rubinstein, 2011; Benmelech et al., 2010; Gould and Stecklov, 2009; Stecklov and Goldstein, 2006) or Palestinian fatalities (Jaeger et al. 2010 and 2012).



Data Sources: Israeli National Insurance Institute and Israeli Defense Ministry.

2.3 Data on Local Economic Activity

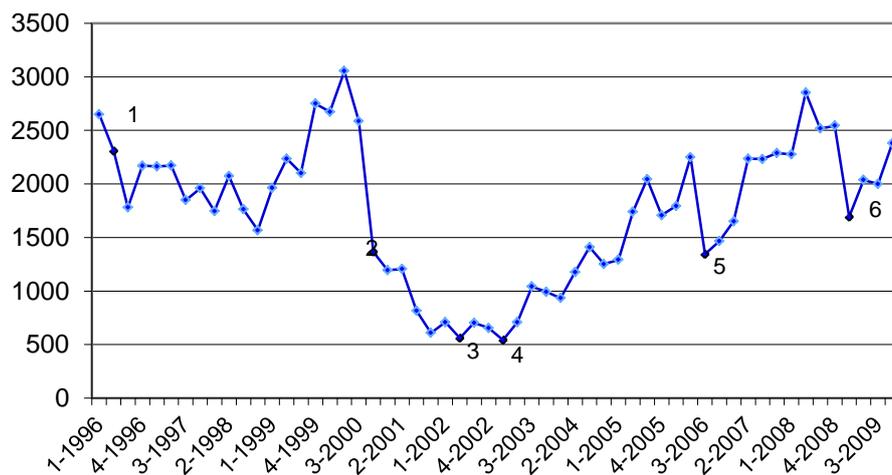
This study places special emphasis on the effect of economic conditions (as affected by violent political conflict) on the political attitudes of the Israeli population. A major challenge associated with our econometric estimation thereby lies in the ability to separate the effect of violent political conflict on economic activity from other economic shocks. For example, a general economic indicator such as GDP is affected by many factors other than violent political conflict. Hence, while such a general indicator is affected by political violence, it is also affected by other shocks. This makes it less suitable for the purposes of this paper.

In our estimations, we particularly focus on the number of Jewish workers in the tourism sector as a share of the total number of employees in a given sub-district as our main variable of interest. We believe that this variable provides a very good proxy to the economic consequences of war and terror attacks for two main reasons. First, it is highly correlated to the incidence of wars or terrorists attacks (e.g., Enders et al., 1992; Drakos and Kutan, 2003). Second, it displays a great deal of local variation that is not correlated with the political attitudes of the sub-districts' residents. This variation results in different effects on the local economy of each district.

In support of our first claim above, we follow Eckstein and Tsiddon (2004) by looking at the number of nights that foreign tourists spend in Israeli hotels. Eckstein and Tsiddon (2004) claim that security events and their

number of fatalities explain most of this index's short-term fluctuations. More specifically, they find that whereas the number of tourists visiting Israel is unaffected by Israel's general economic conditions, this index is significantly negatively affected by war and terrorism. Figure 2 shows the fluctuation in the number of nights in Israeli hotels of foreign tourists over the time period at issue. The figure corroborates that short-term fluctuations on this index are closely related to security events. We see, for example, a sharp decrease in the number of foreign tourists' visits to Israel right at the beginning of the Second Intifada. The number of foreign visitors remained low throughout 2002 and 2003, the two most violent years of the Intifada, and recovered slowly afterwards, reaching its pre-Intifada levels only in 2007, a couple of years after the end of the Second Intifada.

Figure 2: Number of nights foreign tourists stay in Israeli Hotels and Major Security Events

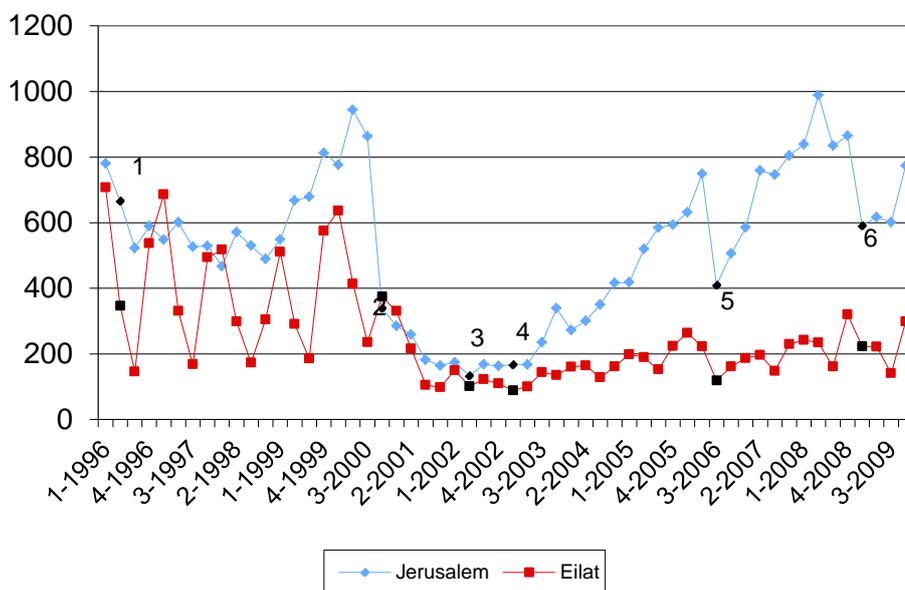


1. Operation "The Grapes of Wrath" (48 fatalities).
2. "Al-aqsa" Intifada (81 fatalities).
3. Operation "Defensive Shield" (179 fatalities).
4. Iraq war (103 fatalities).
5. Second Lebanon war (194 fatalities).
6. Gaza War (24 fatalities).

* The average number of fatalities between the years 1996-2009 is 55 per quarter.

Our second claim is that the large fluctuations on foreign visitors at the national level, affect sub-districts differently. Figure 3 shows the fluctuation of foreign tourists nights in Israeli hotels but differentiating between Jerusalem and Eilat, two of the most touristic destinations in Israel. The figure clearly shows that local terror events have a local effect on the number of foreign tourists.

Figure 3: Number of Nights Tourists Stay in Hotels in Jerusalem and Eilat and Major Security Events



1. Operation "The Grapes of Wrath" (48 fatalities).
2. "Al-aqsa" Intifada (81 fatalities).
3. Operation "Defensive Shield" (179 fatalities).
4. Iraq war (103 fatalities).
5. Second Lebanon war (194 fatalities).
6. Gaza War (24 fatalities).

* The average number of fatalities between the years 1996-2009 is 55 per quarter.

We observe that the number of visitors to Jerusalem and Eilat significantly decreased on the wake of the Second Intifada. That said, whereas the number of tourists visiting Jerusalem gradually increased to its previous level together with the decrease on terror attacks in Jerusalem, the number of foreign visitors

to Eilat remained at low levels of roughly a third of its pre-Intifada number of visitors.⁵

The different geographic impact of fluctuations in tourism is crucial for our identification strategy. It allows us to focus on the number of Jewish workers in tourism as a share of the total number of employees in a given sub-district as our main variable of interest. We believe that this variable provides a very good proxy to the economic consequences of war and terror attacks because it is highly correlated, both at the national and sub-district level, with the number of nights that foreign tourists spend at Israeli hotels.⁶ The data come from the Israeli Labor Force Survey (ILFS), which is carried out every quarter by the Israeli Central Bureau of Statistics. This database includes information on the economic sector of work for each individual as well as his or her place of residence. These two variables allow us to compute the share of workers in the tourism sector for each of the 19 sub-districts in every quarter since 1995.

Beside the share of the local population working in the tourism industry, we also looked at alternative economic indicators. In particular, we collected from the ILFS data on the sub-district unemployment rate for each quarter during the time period at issue. In addition, we calculated total expenditures per household using the Household Expenditure Survey (carried out annually since 1997), and net income per adult from the Current Income Survey (carried out annually since 1955). All the surveys used contain information on the residence of every individual/household, which enables us to compute the sub-district averages of net income and expenditure per household for all 19 sub-districts on a yearly basis.

We tested the effect of local fatalities from conflict on each of these variables. The results, available from the authors upon request, confirm our previous expectations. In particular, they show that local fatalities per capita have a significant and negative effect on the share of workers in the tourism sector (the coefficient equals -0.042 and the standard error equals 0.022). On the contrary, local fatalities per capita are correlated with a decrease in unemployment and an increase in a subdistrict's income. These unexpected results may reflect the predominance of the effects of other shocks to these more general measures of economic activity. As mentioned, this is the reason

⁵ Eilat is a city at the South of Israel with sunny beaches facing the red sea. Before the Second Intifada, there were over 45 weekly flights bringing Scandinavian and Dutch tourists to Eilat in search of sunny beaches during their harsh winter. The Intifada caused a sharp decrease in the number of foreign tourists visiting Eilat, to the point that there were less than three weekly flights from those locations to Eilat in 2004 (Ernst & Young, 2006). As of 2011, over five years after the end of the Second Intifada, the number of tourists visiting Eilat is still significantly lower than that observed during the late 1990s (Zaletz, 2011).

⁶ We are interested in measuring the local economic impact of terror and war. Unfortunately, we do not have data on hotel workers' sub-district of residence. We focus exclusively on Jewish workers because those that work in the tourism industry tend to reside in the same district where they work. This is not necessarily the case for the Arab workers in this industry.

that renders these measures less appropriate to our goal of capturing mostly the economic effects of armed violence.

Table 3 depicts the geographic variation of the variables of interest across sub-districts. The table shows that there is a great deal of variation in terms of sub-district populations' political attitudes, share of workers in the tourism industry and number of fatalities from conflict. Of course, some of the variation in political attitudes may be due to differences in unobservable characteristics of the sub-districts' populations. In our econometric estimation, which we describe below, we control for sub-district fixed effects and test whether the variation in political preferences across sub-districts is correlated with the observed local variation in the number of fatalities and the economic costs of conflict.

Table 3 - Summary Statistics on Political Preferences, Economic Indicator and Fatalities, By Sub-District

Sub-district	Willingness to make territorial concessions	Right-wing political tendency	Vote for right-bloc parties	Share of workers in tourism sector	Number of fatalities per capita within a year of surveys (per 1,000 individuals)
Akko	0.4554 (0.499)	0.5340 (0.499)	0.3976 (0.490)	0.0375 (0.009)	0.0268 (0.019)
Ashkelon	0.357 (0.479)	0.6254 (0.484)	0.4948 (0.500)	0.0334 (0.005)	0.0317 (0.016)
Be'er Sheva	0.4392 (0.479)	0.5732 (0.495)	0.4459 (0.497)	0.0844 (0.009)	0.0292 (0.013)
Golan Heights	0.4324 (0.502)	0.5500 (0.504)	0.325 (0.474)	0.0864 (0.040)	0.0267 (0.042)
Hadera	0.5312 (0.500)	0.5255 (0.500)	0.4165 (0.494)	0.0404 (0.009)	0.0354 (0.035)
Haifa	0.5511 (0.498)	0.4481 (0.497)	0.3385 (0.473)	0.0323 (0.005)	0.0382 (0.034)
Holon	0.4592 (0.499)	0.5398 (0.499)	0.4221 (0.494)	0.0363 (0.004)	0.0263 (0.025)
Jerusalem	0.3432 (0.475)	0.6644 (0.472)	0.535 (0.499)	0.0354 (0.005)	0.0436 (0.040)

Table 3 – (continued)

Jezreel Valley	0.4825 (0.500)	0.5357 (0.499)	0.4421 (0.497)	0.0292 (0.008)	0.0449 (0.035)
Nazareth	0.4275 (0.497)	0.5263 (0.501)	0.3885 (0.489)	0.0264 (0.013)	0.0101 (0.008)
Petah Tiqwa	0.4886 (0.500)	0.4778 (0.500)	0.3469 (0.476)	0.0295 (0.004)	0.0299 (0.017)
Ramat Gan	0.4848 (0.500)	0.5805 (0.494)	0.4507 (0.498)	0.0336 (0.004)	0.0135 (0.013)
Ramla	0.4345 (0.496)	0.6705 (0.470)	0.5082 (0.500)	0.0321 (0.006)	0.0292 (0.024)
Rehovot	0.4969 (0.500)	0.5165 (0.500)	0.3986 (0.490)	0.0323 (0.004)	0.0331 (0.021)
Sea of Galilee	0.3915 (0.489)	0.5510 (0.498)	0.4475 (0.498)	0.0845 (0.020)	0.0454 (0.037)
Sharon	0.4829 (0.500)	0.5350 (0.499)	0.4164 (0.493)	0.0461 (0.008)	0.036 (0.029)
Tel-Aviv	0.6067 (0.489)	0.4009 (0.490)	0.2934 (0.455)	0.056 (0.009)	0.0269 (0.017)
Total Settlements	0.2284 (0.420)	0.8167 (0.387)	0.6481 (0.478)	0.0245 (0.008)	0.1102 (0.128)
Zefat	0.4098 (0.493)	0.6089 (0.489)	0.4807 (0.501)	0.0656 (0.014)	0.0386 (0.028)

3. Empirical Specifications

The main goal of our empirical model is to test whether the number of recent fatalities and the associated economic costs of war and terrorism affect individuals' political preferences. To this end, we estimate the following econometric model using the individual as our unit of observation:

$$PRE_{ijs} = \alpha_0 + \alpha_1 CA_{js} + \alpha_2 CA_{js}^2 + \alpha_3 ECO_{js} + \gamma X_{ijs} + \delta_j + \mu_s + \varepsilon_{ijs} \quad (1)$$

where PRE_{ijs} is a dummy variable equal to one if individual i , which resides in sub-district j at the time of survey s (note that a survey might take place more than once a year), holds an accommodating position towards territorial concessions, and zero otherwise; CA_{js} is the number of war and terror fatalities per capita in sub-district j within the year prior to survey s . Following Gould and Klor (2010), we allow for a non-linear effect by including a quadratic term. To the extent that terrorist activities induce a more compromising stance of Israelis towards the Palestinians, this quadratic term intends to capture the idea that terrorist activity may become ‘counter-productive’ when casualty counts surpass a certain threshold (Gould and Klor, 2010). Reversely, however, it might also be that limited terrorist activity hardens Israelis’ stance, but that (very) high casualty numbers change their evaluation of the costs of standing firm. In both cases, a non-linear effect would materialize, though its nature and interpretation would, of course, differ substantially. Note that, in certain specifications, we also include the aggregate number of fatalities in Israel in addition to the number of sub-district fatalities.⁷

We denote by ECO_{js} the variable measuring economic activity in district j at time of survey s . As mentioned above, we focus on the number of (Jewish) workers in tourism as a share of total employees in sub-district j within four quarters prior to survey s as our main proxy to the economic consequences of war and terror attacks. X_{ijs} is a vector of individual-level characteristics included in every survey. This contains information on individuals’ gender, age, schooling, ethnicity, religiosity, income and place of birth. We use δ_j to denote sub-district fixed-effects and μ_s to denote survey fixed effects. While the latter controls for aggregate trends in political preferences (and may also capture changes over time in the wording of the question), the former controls for unobserved characteristics of the sub-districts. The error term ε_{ijs} captures unobserved determinants of the individual’s political preferences. All regressions below cluster their standard errors at the sub-district level to accommodate the (possible) non-independence of observations on individuals in the same district.

The aim of the econometric specification is to estimate α_3 , which captures the impact of the economic costs of war and terrorism on individuals’ political views. Identification of α_3 is based on the idea that economic costs of war may differentially affect the political views of individuals because the extent of war or terror attacks, as measured by their number of local fatalities, may inflict larger or smaller economic costs on certain locations relative to others based on the pre-existing size and characteristics of each sub-district

⁷Note that the specifications including this variable do not include surveys’ fixed effects.

tourism sector [for a similar approach, see Gould and Klor (2010) and Berrebi and Klor (2008)].

We should note at this point that even though the level of tourism is likely to be largely driven by the extent of overall violence in the region (see above), we cannot completely exclude that variations in touristic activity across sub-districts and time are influenced by other factors besides armed violence. To isolate the effect of armed violence on our tourism measure, we turn to an alternative two-stage approach. Specifically, we run the following first-stage model to estimate the economic costs associated with war and terror attacks:

$$ECO_{js} = a_0 + a_1 CA_{js} + \delta_j + \mu_s + \varepsilon_{js} \quad (2)$$

where ECO_{js} , CA_{js} , δ_j and μ_s are all defined above. We then replace the actual values of ECO in model (1) by its predicted values obtained from model (2).⁸ This procedure yields the following second-stage model:

$$PRE_{ijs} = \beta_0 + \beta_1 \widehat{ECO}_{js} + \beta_2 X_{ijs} + \delta_j + e_{ijs} \quad (3)$$

Accordingly, in model (3), β_1 captures the impact of fluctuations in economic activity due to war and terrorism. This indirect approach allows us to obtain a more accurate estimate of the effect of the economic costs of the conflict on public opinion. The section below presents the results of these estimations.

4. Results

This section presents the results on the effects that the economic costs of war and terrorism have on individuals' willingness to make territorial concessions to the Palestinians (while controlling for the number of fatalities from war and terrorism).

Table 4 shows the main results, based on the estimation of model (1), which focuses on the effect that the actual share of workers in the tourism sector at the sub-district level has on individuals' political preferences. In the first column of the table we focus exclusively on sub-district variation. Columns (2) and (3) add also aggregate variation in fatalities and economic conditions, which forces us to eliminate survey fixed effects from these specifications.

⁸ In alternative specifications we added lagged values of ECO and CA as explanatory variables in model (2). This accounts for the possibility that there is some persistence on the level of employment on the tourism sector and that it may take time for conflict to affect this variable. Importantly, the results of equation (3) are basically the same whether or not these lagged variables are included in model (2).

Table 4 - The Effects of the Economic Costs of Conflict on Individuals' Willingness to Grant Concessions

Variable	(1)	(2)	(3)
Fatalities per Capita:			
Linear Effect	-0.884** (0.412)	-1.677** (0.719)	-1.525** (0.7)
Quadratic Effect	2.246*** (0.902)	4.328*** (1.523)	3.834 (1.515)
Total Israeli fatalities per capita		0.019 (0.686)	0.787 (0.682)
Share of Workers in the Tourism Sector by Subdistrict	0.07 (0.776)	0.985 (0.887)	0.609 (0.823)
Total Share of Workers in the Tourism Sector			11.617*** (2.396)
Personal characteristics:			
Age	0.0115*** (0.0017)	0.0115*** (0.0017)	0.0115*** (0.0017)
Age Square	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)
Male	-0.0034 (0.0082)	-0.0031 (0.0083)	-0.0026 (0.0083)
Years of Schooling	0.0224*** (0.0048)	0.0245*** (0.0049)	0.0243*** (0.005)
Years of Schooling * Age	-0.0003*** (0.0001)	-0.0003*** (0.0001)	-0.0003*** (0.0001)
Immigrant	-0.0285** (0.0124)	-0.0342*** (0.0127)	-0.0308** (0.0126)
African-Asian ethnicity	-0.0687*** (0.0091)	-0.0709*** (0.0093)	-0.067 (0.0092)
From former Soviet bloc	-0.1353*** (0.017)	-0.1288*** (0.0179)	-0.1341*** (0.0178)
Religiously observant	-0.2275*** (0.0108)	-0.2202*** (0.0107)	-0.2243*** (0.0106)
Average expenditures	-0.0353*** (0.0096)	-0.0321*** (0.0102)	-0.0309*** (0.0101)
Below Average Expenditures	-0.0688*** (0.0103)	-0.0699*** (0.0108)	-0.0685*** (0.0108)
Survey fixed effects	Yes	No	No
Number of Observations	15,504	15,504	15,504
R-squared	0.157	0.1332	0.1357
P-value on effect of fatalities	0.0448	0.0133	0.0391

Notes: The dependent variable is the individuals' willingness to grant concessions. All regressions are estimated using a linear probability model. All regressions include sub-district fixed effects. Robust standard errors, adjusted for clustering at the sub-district-survey level, appear in parentheses. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

The results in the first two columns show that the impact of the share of workers in tourism at the sub-district level is positive but not statistically

significant. This implies that the local economic costs of war and terrorism do not appear to have an independent effect on individuals' willingness to make territorial concessions to the Palestinians.⁹

In contrast, both columns show a consistent and significant effect of fatalities on the political preferences of Israelis. The coefficient estimates suggest that the number of fatalities reduces an individual's willingness to grant concessions at low levels of fatalities, but that fatalities work in the opposite direction once the death toll becomes very high. The magnitudes of the coefficients in column (1) imply that the total effect of fatalities is negative up until 0.1968 local fatalities per capita. Fatalities beyond that point make Israelis adopt a more compromising stance towards the Palestinians. That said, the turning point is reached only for very high levels of fatalities. In fact, our data contain only three cells with a number of fatalities higher than that threshold, and all occurred during the Second Palestinian uprising in the sub-district composed by all the settlements located beyond the "Green Line" (July 2002, January 2003 and April 2003).

This pattern, found in almost every estimated specification, contrasts with results reported in Gould and Klor (2010). This reversal is probably driven by important differences between our dataset and the one used by Gould and Klor (2010). First, our data on fatalities include civilians and soldiers while Gould and Klor (2010) focus exclusively on non-combatant fatalities. In addition, we include in the analysis individuals living in settlements beyond the green line. While the number of individuals in this sub-district is relatively small, the number of fatalities per capita in the settlements is much higher compared to fatalities inside the green line (see summary statistics in Table 3). Finally, by combining the INES and DIS surveys we are able to include in the analysis every year between 1996 to 2009, while Gould and Klor (2010) only use the INES survey and focus exclusively on election years between 1988-2006. Importantly, when we constrain the analysis to election years we obtain results in line with those reported by Gould and Klor (2010), regardless of the other differences mentioned above.¹⁰

The third column of this table adds to the estimated models the share of employees in the tourism sector at the national level. This variable has a positive and significant effect on the individuals' political preferences, which may suggest that Israeli citizens adopt less accommodating views towards territorial concessions to the Palestinians as a result of bad economic shocks

⁹ The effects of local fluctuations of workers in the tourism sector remain insignificant also when we exclude the number of fatalities from war and terrorism from the specifications or when we include only the linear effect of this variable.

¹⁰ The general results in Table 4 remain the same when we estimate model (1) only for the subsample of surveys that use the same wording for the question on individuals' willingness to grant concessions. These surveys are the ones from 1996, 1998, 1999, 2000, 2002, 1/2003, 2005, and 3/2006.

due to a more violent environment. Reversely, when a relatively peaceful period induces a rise in the share of individuals employed in the tourism sector, Israelis' support for territorial concessions increases. For obvious reasons, we cannot include year fixed-effects in this regression. Therefore, we cannot exclude the possibility that general factors other than the economic costs of war are at work here to generate the significant coefficient. For example, the timing of the Second Intifada coincided with Al-Qaeda's attack to the twin towers, the beginning of the wars in Iraq and Afghanistan, and a slowdown of the world economy. All these factors certainly have an effect on the Israeli economy and the views of Israeli citizens.

The rest of the control variables included in the three specifications show very robust results, which are in line with those reported by Gould and Klor (2010), Berrebi and Klor (2008), and Shamir and Arian (1999), among many others. Specifically, individuals' willingness to grant concessions increases with income, education and age (up to a certain point). In addition, native Israelis tend to hold more accommodating views than immigrants, and the same holds for secular individuals compared to religious ones. In contrast, immigrants from the former Soviet Union and individuals with an Asia-Africa ethnic background tend to have a harder stance on average.¹¹

Table 5 reports the results of estimating model (3), whereby the predicted share of workers in the tourism sector is estimated according to equation (2). As this predicted share is estimated using the number of fatalities as the main explanatory variable, we are not able to include the number of fatalities directly as an explanatory variable in the second stage due to perfect multicollinearity. The results of this estimation show that the expected share of workers in the tourism industry at the sub-district level has a positive and significant effect on the willingness of individuals to grant territorial concessions to the Palestinians. This result seems to suggest that, in addition to their direct effect on political views through body counts, conflicts have also an important indirect effect on individuals' attitudes through their economic costs. We take this result with caution, however, because the estimated coefficient on local economic costs may be affected by the omission of local fatalities from the regression. In addition, as seen in the second column of the same table which includes local fatalities, the effect of the predicted level of total workers in the tourism sector, while positive, is not statistically significant.

¹¹ The overwhelming support for the right wing block of parties and hawkish attitudes of immigrants from the former Soviet Union is well documented in the related literature (see, e.g., Goldstein and Gitelman, 2004). Halperin et al. (2009) use a survey to show that the political views of immigrants from the former Soviet Union are amplified during violent periods due to their relatively higher sensitivity to terrorism and political violence compared to that of the native population.

Table 5 - The Effects of the Economic Costs of Conflict on Individuals' Willingness to Grant Concessions

Variable	1	2
Fatalities per Capita:		
Linear Effect		-1.509** (0.694)
Quadratic Effect		3.859** (1.519)
Total Israeli fatalities per capita	-0.275 (0.423)	
Predicted Share of Workers in the Tourism Sector by Subdistrict	17.008*** (2.528)	
Total Share of Workers in the Tourism Sector		
Predicted Total Share of Workers in the Tourism Sector		1.734 (8.056)
Personal characteristics:		
Age	0.0117*** (0.0017)	0.0115*** (0.0017)
Age Square	-0.0001*** (0.000)	-0.0001*** (0.000)
Male	-0.0021 (0.0083)	-0.0025 (0.0082)
Years of Schooling	0.024*** (0.005)	0.0242*** (0.005)
Years of Schooling * Age	-0.0003*** (0.0001)	-0.0003*** (0.0001)
Immigrant	-0.0292** (0.0124)	-0.0308** (0.0126)
African-Asian ethnicity	-0.0671*** (0.0093)	-0.0669*** (0.0092)
From former Soviet bloc	-0.1364*** (0.0173)	-0.1341*** (0.0178)
Religiously observant	-0.2289*** (0.0108)	-0.2244*** (0.0106)
Average expenditures	-0.032*** (0.0101)	-0.031*** (0.0102)
Below Average Expenditures	-0.0675*** (0.0109)	-0.0687*** (0.0107)
Survey fixed effects	Yes	No
Number of Observations	15,504	15,504
R-squared	0.1405	0.1356
P-value on effect of fatalities		0.0373
Notes: The dependent variable is the individuals' willingness to grant concessions. All regressions are estimated using a linear probability model. All regressions include sub-district fixed effects. Robust standard errors, adjusted for clustering at the sub-district-survey level, appear in parentheses. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.		

Tables 6 and 7 explore the sensitivity of our results to two alternative measures of political preferences: self-reported political orientation and the support for parties in the right-wing bloc in upcoming elections. The overall picture from Tables 6 and 7 is very similar to that of Tables 4 and 5. As with our results on willingness to grant territorial concessions, we do not find a consistently significant effect of the sub-district share of workers in the tourism sector on individuals' self-reported political tendency. Although most specifications suggest that the economic costs of war, as measured by the actual share of workers in tourism, cause Israelis to adopt more left-leaning views, the estimated coefficients are not statistically significant when we include survey fixed effects (Column 1) or variables aggregated at the national level (Column 3). In addition, the results in Table 7 suggest that an increase in the share of workers in the tourism sector tends to reduce the respondent's intentions to vote for the right bloc of political parties in the upcoming elections. Although this is consistent with results in Table 4, this effect is, once again, not significant across all specifications.

The coefficients on fatalities and the control variables tend to preserve their signs and significance as in the previous estimations. One interesting change we observe in Table 7 concerns the insignificance of sub-district fatalities (both when using a linear and quadratic specification). This goes against findings reported in Berrebi and Klor (2008), who find that local attacks turned voters towards right-wing parties. The difference might reflect different (reported) political behavior in years of elections and years between elections: the latter are included in our models, but not in Berrebi and Klor (2008).

Table 6 - The Effects of the Economic Costs of Conflict on Individuals' Political Tendencies

Variable	Estimation of Model 1			Estimation of Model 3	
	(1)	(2)	(3)	(4)	(5)
Fatalities per Capita:					
Linear Effect	0.754** (0.364)	0.584** (0.417)	0.765* (0.415)		0.744* (0.418)
Quadratic Effect	-2.219** (0.902)	-1.537*** (1.146)	-2.124* (1.105)		-2.158* (1.106)
Total Israeli fatalities per capita		0.616 (0.416)	1.493*** (0.447)	1.076*** (0.298)	
Share of Workers in the Tourism Sector by Subdistrict	0.582 (0.664)	2.584*** (0.866)	0.83 (0.801)	4.925** (2.039)	
Total Share of Workers in the Tourism Sector			12.948*** (2.322)		-4.771 (4.809)
Personal characteristics:					
Age	0.0085*** (0.0017)	0.0085*** (0.0017)	0.0085*** (0.0017)	0.0085*** (0.0017)	0.0085*** (0.0017)
Age Square	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)

Male	0.049*** (0.0077)	0.0485*** (0.0077)	0.0489*** (0.0077)	0.0484*** (0.0077)	0.0487*** (0.0078)
Years of Schooling	-0.034*** (0.0048)	-0.035*** (0.0048)	-0.035*** (0.0078)	-0.035*** (0.0048)	-0.035*** (0.0048)
Years of Schooling * Age	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)
Immigrant	0.0278** (0.0111)	0.022** (0.0111)	0.0256** (0.0112)	0.0225** (0.0112)	0.0257** (0.0112)
African-Asian ethnicity	0.1028*** (0.0101)	0.0956*** (0.01)	0.0996*** (0.0102)	0.0966*** (0.0102)	0.0995*** (0.0102)
From former Soviet bloc	0.1398*** (0.0168)	0.147*** (0.0165)	0.1412*** (0.0165)	0.1463*** (0.0164)	0.1411*** (0.0165)
Religiously observant	0.3016*** (0.0104)	0.3028*** (0.0101)	0.2983*** (0.0102)	0.3017*** (0.0102)	0.2984*** (0.0102)
Average expenditures	0.0563*** (0.009)	0.0513*** (0.009)	0.0525*** (0.009)	0.0507*** (0.009)	0.0527*** (0.009)
Below Average Expenditures	0.0779*** (0.0102)	0.0766*** (0.0103)	0.078*** (0.0102)	0.0767*** (0.0102)	0.0783*** (0.0102)
Survey fixed effects	Yes	No	No	Yes	No
Number of Observations	16,194	16,194	16,194	16,194	16,194
R-squared	0.174	0.1653	0.1681	0.1652	0.168
P-value on effect of fatalities	0.0574	0.3484	0.1379		0.1405

Notes: The dependent variable is the individuals' identification with a right wing political tendency. All regressions are estimated using a linear probability model. All regressions include sub-district fixed effects. Robust standard errors, adjusted for clustering at the sub-district-survey level, appear in parentheses. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

Table 7 - The Effects of the Economic Costs of Conflict on Individuals' Political Tendencies

Variable	Estimation of Model 1			Estimation of Model 3	
	(1)	(2)	(3)	(4)	(5)
Fatalities per Capita:					
Linear Effect	0.495 (0.406)	0.486 (0.474)	0.4 (0.465)		0.4 (0.464)
Quadratic Effect	-1.53 (0.952)	-1.509 (1.084)	-1.23 (1.083)		-1.231 (1.083)
Total Israeli fatalities per capita		1.01*** (0.387)	0.599 (0.447)	1.0725*** (0.2464)	
Share of Workers in the Tourism Sector by Subdistrict	0.021 (0.596)	-0.811 (0.549)	0.026 (0.626)	-5.34*** (2.044)	
Total Share of Workers in the Tourism Sector			-6.059** (2.415)		13.327*** (4.669)
Personal characteristics:					
Age	0.0082*** (0.0016)	0.0082*** (0.0016)	0.0082*** (0.0016)	0.0082*** (0.0016)	0.0082*** (0.0016)
Age Square	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)	0 (0.000)
Male	0.0453*** (0.0074)	0.0455*** (0.0074)	0.0452*** (0.0074)	0.0453*** (0.0074)	0.0452*** (0.0074)

Years of Schooling	0.0293*** (0.0048)	0.0294*** (0.0048)	0.0293*** (0.0048)	0.0293*** (0.0048)	0.0293*** (0.0048)
Years of Schooling * Age	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0005*** (0.0001)
Immigrant	0.0136 (0.0102)	0.0207** (0.001)	0.019* (0.01)	0.0196* (0.01)	0.019* (0.01)
African-Asian ethnicity	0.0998*** (0.0105)	0.1001*** (0.0104)	0.0982*** (0.0105)	0.0991*** (0.0105)	0.0982*** (0.0105)
From former Soviet bloc	0.1604*** (0.017)	0.1547*** (0.0166)	0.1577*** (0.0167)	0.1567*** (0.0167)	0.1577*** (0.0167)
Religiously observant	0.287*** (0.0109)	0.2835*** (0.0109)	0.2856*** (0.0109)	0.2858 (0.0109)	0.2856*** (0.0109)
Average expenditures	0.0494*** (0.0089)	0.0482*** (0.0089)	0.0478*** (0.0088)	0.0482*** (0.0089)	0.0478*** (0.0088)
Below Average Expenditures	0.0661*** (0.0104)	0.0678*** (0.0103)	0.0672*** (0.0103)	0.0671*** (0.0103)	0.0672*** (0.0103)
Survey fixed effects	Yes	No	No	Yes	No
Number of Observations	16,469	16,469	16,469	16,469	16,469
R-squared	0.1505	0.1466	0.1472	0.1471	0.1472
P-value on effect of fatalities	0.2661	0.3553	0.5123		0.5115

Notes: The dependent variable is the individuals' intention to vote for a party in the right bloc of parties in the upcoming elections. All regressions are estimated using a linear probability model. All regressions include sub-district fixed effects. Robust standard errors, adjusted for clustering at the sub-district-survey level, appear in parentheses. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

5. Conclusions

There is widespread consensus in the political economy literature that the human toll associated with war and terrorism has a significant effect on individuals' political attitudes. Particularly, a higher death toll from a long-lasting violent political conflict has recurrently been shown to undermine the public's support for both the conflict and the country's political leaders. This paper analyzes a possible transmission mechanism connecting violent conflicts and individuals' political opinions: namely, the economy. Given growing evidence that wars and periods of increased terrorist activity often have substantial economic impacts (see Arunatilake et al., 2001; Abadie and Gardeazabal, 2003 and 2008; Fielding, 2003a and 2003b; Koubi, 2005; Zussman and Zussman, 2006; Sandler and Enders, 2008; and Blomberg and Rose, 2009; among many others) and that the economic situation of a country affects individuals' political opinions and behavior (Lewis-Beck and Stegmayer, 2007), the intuition underlying the potential importance of such economic mechanism is straightforward. That is, "if the casualty estimates mount to the thousands, if oil prices skyrocket, if a war pushes the economy into recession or requires a large tax increase (...), then decision-makers in the

White House and the Congress might not post so expeditiously to battle” (Nordhaus, 2002, 51).

In our empirical analysis, we exploited variation in the level of violence across time and space in the Israeli-Palestinian conflict, together with Israeli localities’ different exposure to the tourism sector (and, therefore, their varying exposure to the economic costs of the conflict), to differentiate between the human toll of terror and war and the economic costs they cause. We focused on the (local) tourism industry because this is often directly and immediately affected by (local) acts of aggression. Therefore, this industry exhibits variation both across time and space that makes it an ideal sector for the purpose of our study. Income growth or unemployment rates arguably represent more general measures of economic activity, but these are predominantly driven by numerous factors besides the conflict, and are therefore much less informative for the purpose at hand.

Our results confirm that fatalities significantly affect Israelis’ willingness to grant territorial concessions to the Palestinians (our central political variable). Yet, they do not show a consistent significant effect from the economic costs of violent conflict (measured through the share of Israelis employed in the tourism sector) on individuals’ political attitudes. The absence of economic effects in the Israel-Palestine conflict does not imply that such economic effects may not play a more substantial role in other conflicts. Moreover, given the close connection between the human and economics costs of violent conflicts (e.g., due to the destruction of human capital), evaluating the presence of both mechanisms may be critical to avoid incorrect inferences on the causal effect of either.

References

- ABADIE A., GARDEAZABAL J., (2003), The Economic Cost of Conflict: A Case Study of the Basque Country, *American Economic Review*, vol. 93, n .1, pp. 113-132.
- ABADIE A., GARDEAZABAL J., (2008), Terrorism and the World Economy, *European Economic Review* , vol. 52, n.1, pp. 1-27.
- ARIAN A., SHAMIR M., (2011), *The Elections in Israel –2009*, Transaction Publishers, New Brunswick, New Jersey.
- ARIAN A., HERMAN T., LEBEL Y., PHILIPPOV M., ZABAN H., KNAFELMAN A., (2010), *Israeli Democracy Examined*, The Israel Democracy Institute: Jerusalem, Israel.
- ARUNATILAKE N., JAYASURIYA S., KELEGAMA S., (2001), The Economic Cost of the War in Sri Lanka, *World Development*, vol. 29, n. 9, pp. 1483-1500.
- BECKER G.S., RUBINSTEIN Y., (2011), *Fear and the Response to Terrorism: An Economic Analysis*, Mimeo, Brown University.

- BENMELECH E., BERREBI C., KLOR, E. F. (2010), The Economic Cost of Harboring Terrorism, *Journal of Conflict Resolution*, vol. 54, n. 2, pp.331-353.
- BERREBI C., KLOR E. F., (2006), On Terrorism and Electoral Outcomes: Theory and Evidence from the Israeli-Palestinian Conflict, *Journal of Conflict Resolution*, vol. 50, n. 6, pp. 899-925.
- BERREBI C., KLOR E. F., (2008), Are Voters Sensitive to Terrorism? Direct Evidence from the Israeli Electorate, *American Political Science Review*, vol. 102, n. 3, pp. 279-301.
- BERREBI C., KLOR E. F., (2010), The Impact of Terrorism on the Defence Industry, *Economica*, vol.77, n. 307, pp. 518-543.
- BLOMBERG S. B., ROSE A. Z., (2009), Editor's Introduction to the Economic Impacts of the September 11, 2001, Terrorist Attacks, *Peace Economics, Peace Science and Public Policy*, vol.15, n. 2, Article 1.
- DRAKOS K., KUTAN A. M., (2003), Regional Effects of Terrorism on Tourism in Three Mediterranean Countries, *Journal of Conflict Resolution*, vol. 47, n.5, pp. 621-641.
- ECKSTEIN Z., TSIDDON D., (2004), Macroeconomic Consequences of Terror: Theory and the Case of Israel, *Journal of Monetary Economics*, vol. 51, n. 5, pp. 971-1002.
- EICHENBERG R. C., STOLL R. J., (2006), War President: The Approval Ratings of George W. Bush, *Journal of Conflict Resolution*, vol. 50, n. 6, pp. 783-808.
- ENDERS W., SANDLER T., PARISE G. F., (1992), An Econometric Analysis of the Impact of Terrorism on Tourism, *Kyklos*, vol 45, n. 4, pp. 531-554.
- ERNST & YOUNG, (2006), Report on the Tourism Sector in Israel. Report submitted to the Israeli Ministry of Tourism, (in Hebrew).
- FIELDING D., (2003a), Modeling Political Instability and Economic Performance: Israeli Investment during the *Intifada*, *Economica*, vol. 70 n. 277, pp. 159-186.
- FIELDING D., (2003b), Counting the Cost of the *Intifada*: Consumption, Saving and Political Instability in Israel, *Public Choice*, vol. 116, n. 3-4, pp. 297-312.
- GARCIA-MONTALVO J., (2011), Voting After the Bombings: A Natural Experiment on the Effect of Terrorist Attacks on Democratic Elections, *The Review of Economics and Statistics*, forthcoming.
- GARDEAZABAL J., (2010), Vote Shares in Spanish General Elections as a Fractional Response to the Economy and Conflict, Economics of Security Working Paper 33.
- GARTNER S. S., SEGURAG. M., (1998), War, Casualties and Public Opinion, *Journal of Conflict Resolution*, vol. 42, n. 3, pp. 278-300.
- GARTNER S. S., SEGURA G. M., (2000), Race, Casualties and Opinion in the Vietnam War, *The Journal of Politics*, vol. 62, n. 1, pp. 115-146.

- GASSEBNER M., JONG-A-PIN R., MIERAU J.O., (2008), Terrorism and Electoral Accountability: One Strike, You're Out, *Economics Letters* vol. 100, n. 1, pp. 126-129.
- GASSEBNER M., JONG-A-PIN R., MIERAU J. O., (2011), Terrorism and Cabinet Duration, *International Economic Review*, forthcoming.
- GEYS B., (2010), Wars, Presidents and Popularity: Political Costs of War Re-examined, *Public Opinion Quarterly*, vol. 74, n. 2, pp. 357-374.
- GOLDSTEIN K., GITELMAN Z., (2005), From 'Russians' to 'Israelis'? in A. Arian and M. Shamir (Eds) *The Elections in Israel, 2003*, Transaction Publishers, New Jersey, pp. 245-260.
- GOULD E. D., KLOR E. F., (2010), Does Terrorism Work?, *Quarterly Journal of Economics*, vol. 125, n. 4, pp. 1459-1510.
- GOULD E. D., STECKLOV G., (2009), Terror and the Costs of Crime, *Journal of Public Economics*, vol. 93, n.11-12, pp.1175-1188.
- HALPERIN, E., CANETTI D., HOBFOLLS. E., JOHNSON R. J., (2009), Terror, Resource Gains and Exclusionist Political Attitudes among New Immigrants and Veteran Israelis, *Journal of Ethnic and Migration Studies*, vol. 35, n.6, pp. 997-1014.
- JAEGER D. A., PASERMAN M. D., (2008), The Cycle of Violence? An Empirical Analysis of Fatalities in the Palestinian-Israeli Conflict," *American Economic Review*, vol. 98, n. 3, pp.1591-1604.
- JAEGER, D. A., PASERMAN M. D., (2009), The Shape of Things to Come? On the Dynamics of Suicide Attacks and Targeted Killings, *Quarterly Journal of Political Science*, vol. 4, n. 4, pp. 315-342.
- JAEGER D. A., KLOR E. F., MIAARI S. H., PASERMAN M. D., (2010) Can Militants Use Violence to Win Public Support? Evidence from the Second Intifada, NBER Working Paper 16475.
- JAEGER D. A., KLOR E. F., MIAARI S.H., PASERMAN M. D., (2012), The Struggle for Palestinians Hearts and Minds: Violence and Public Opinion in the Second Intifada, *Journal of Public Economics*, vol. 96 n. 3-4, pp. 354-368.
- KAROL D., MIGUEL E., (2007) ,The Electoral Cost of War: Iraq Casualties and the 2004 U.S. Presidential Election, *Journal of Politics*, vol. 69, n. 3, pp. 633-648.
- KOUBI V., (2005), War and Economic Performance, *Journal of Peace Research*, vol. 42, n. 1, pp. 67-82.
- KRINER D. L., (2006), Examining Variance in Presidential Approval: The case of FDR in World War II, *Public Opinion Quarterly*, vol.70, n. 1, pp. 23-47.
- LEWIS-BECK M. S., STEGMAYER M., (2007), Economic Models of Voting, in Russell J. Dalton and Hans-Dieter Klingemann (Eds.), *The Oxford Handbook of Political Behavior*, Oxford University Press, Oxford, pp. 518-537.
- MONROE K. R., (1978), Economic Influences on Presidential Popularity, *Public Opinion Quarterly*, vol.42, n. 3, pp. 360-369.

- MUELLER J. E., (1973), *War, Presidents and Public Opinion*, Wiley, New York.
- NICKELSBURG M., NORPOTH H., (2000), Commander-in-Chief or Chief Economist? The President in the Eye of the Public, *Electoral Studies*, vol. 19, n. 2-3, pp. 313-332.
- RUTTAN V. W., (2006), *Is War Necessary for Economic Growth?*, Oxford University Press, New York.
- SANDLER T., ENDERS W., (2008), Economic Consequences of Terrorism in Developed and Developing Countries: An Overview, In P. Keefer and N. Loayza (Eds.) *Terrorism, Economic Development, and Political Openness*, Cambridge University Press, Cambridge, UK, pp. 17-47.
- SHAMIR M., ARIAN A., (1999), Collective Identity and Electoral Competition in Israel, *American Political Science Review*, vol. 93, n. 2, pp. 265-277.
- STECKLOV G., GOLDSTEIN J. R., (2006), Terror Attacks Influence Driving Behavior in Israel, *Proceedings of the National Academy of Sciences of the United States of America*, vol.101, n. 40, pp. 14551-14556.
- VOETEN E., BREWER P. R., (2006), Public Opinion, the War in Iraq and Presidential Accountability, *Journal of Conflict Resolution*, vol. 50, n. 5, pp.809-830.
- WELSCH H., (2008), The Social Cost of Civil Conflict: Evidence from Surveys of Happiness, *Kyklos*, vol. 61, n. 2, pp. 320-340.
- ZALETZ R., (2011), Hoping for a Quiet Season, *Erev Erev be Eilat*, Issue 2521 (in Hebrew).
- ZUSSMAN A., ZUSSMAN N., (2006), Assassinations: Evaluating the Effectiveness of an Israeli Counterterrorism Policy Using Stock Market Data, *Journal of Economic Perspectives*, vol 20, n. 2, pp.193-2