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The Impact of Political Violence on Tourism

– Dynamic Econometric Estimation in a Cross-National Panel

REVISED VERSION

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The Impact of Political Violence on Tourism

– Dynamic Econometric Estimation in a Cross-National Panel[1]

The hypothesis that political violence deters tourism is mainly based on case study evidence and a few quantitative studies confined to a small sample of countries. This is the first comprehensive, general quantitative test of the impact of various forms of political violence on tourist arrivals. We employ two estimation techniques: a fixed-effects panel estimator with contemporaneous effects only and a dynamic generalized method of moments estimator, which allows for lagged effects of political violence on tourism. In both model specifications, we find strong evidence that human rights violations, conflict and other politically motivated violent events negatively impact upon tourist arrivals. In a dynamic model, autocratic regimes, even if they do not resort to violence, have lower numbers of tourist arrivals than more democratic regimes. We also find evidence for intra-regional negative spill-over and cross-regional substitution effects.

> ‘Perceptions of political instability and safety are a prerequisite for tourist visitation. Violent protests, social unrest, civil war, terrorist actions, the perceived violations of human rights, or even the mere threat of these activities can all serve to cause tourists to alter their travel behavior.’
>
> – Hall and O’Sullivan (1996, 117)

Tourists are often regarded as longing for relaxing and unconcerned holiday making and therefore as sensitive towards events of violence in holiday destinations. Ironically, for the most part of human history, travelling has been associated with risk and fear for the physical integrity and the belongings of the traveler. As Hall (1994, 92) points out ‘the origin of the word “travel”, to travail, to overcome adversity and hardship, gives evidence of the difficulties which the many travellers faced.’ Modern mass tourism is entirely different, however. No doubt, there are those adventure tourists who are not put off by conflict, war, terrorist threats, riots and other events of violence. Yet tourists are only willing to travel to foreign places in mass numbers if their journey and their stay are safe and shielded from events threatening a joyous holiday experience. Faced with violent events in a country, potential tourists might fear for their lives or physical integrity or might simply anticipate becoming involved in stressful situations and that they might be unable to visit the places they wanted to visit according to schedule. Tourists might therefore choose an alternative destination with similar characteristics, but in a more stable condition. If the violence becomes more widespread and prolonged, official authorities in the countries where tourists originate will start issuing advice against travelling to the destination. Tourist operators will start taking tours to the country out of their program due to insufficient bookings, fear of liability suits and the like and promote other destinations instead. For these and similar reasons one expects political violence to have detrimental impacts upon tourism. But can this

effect be demonstrated empirically and how large is the effect? This is the first comprehensive, general quantitative estimation of the negative impact of political violence on tourism. Existing evidence is either confined to qualitative case studies or small sample quantitative studies. These studies have their merit and they can analyze the impact of political violence in much more detail and complexity than large-N studies. However, such large-N studies have a complementary role to play as they can generate results that are not confined to a small number of countries. We start with some theoretical considerations on the impact of violence on tourism. After a review of the existing literature, we set out our research design, report and discuss our results and conclude.

First of all, however, we need to clarify what we mean by political violence. Violence itself means the exercise of physical force with the intention to harm the welfare or physical integrity of the victim. Political violence is the exercise of such force that is politically motivated and can be exercised by either governmental or anti-governmental groups. Depending on its exact definition, political violence is regarded as an essential ingredient of the somewhat broader notion of political instability. Cook (1990, 14 as cited in Sönmez 1998, 420) defines instability as a situation where a government 'has been toppled, or is controlled by factions following a coup, or where basic functional pre-requisites for social-order control and maintenance are unstable and periodically disrupted'. Wilson (1996, 25 as cited in Poirier 1997, 677) similarly regards a country as stable 'if the regime is durable, violence and turmoil are limited, and the leaders stay in office for several years'. The link between political violence and instability is less clear in Hall and O'Sullivan's (1996, 106) definition of political instability as 'a situation in which conditions and mechanisms of governance and rule are challenged as to their political legitimacy by elements operating from outside of the normal operations of the political system. When challenge occurs from within a political system and the system is able to adapt and change to meet demands on it, it can be said to be

stable.' Even then, however, the challenge of governance and rule from outside the political system is often associated with events of violence. Political instability will therefore normally go hand in hand with political violence and in the following we will use the two terms at times interchangeably. It is also clear, however, that not only can authoritarian countries be stable, but also relatively free of events of violence if they do not need to resort to violence to uphold their authoritarian rule and to dissuade opposition groups from undertaking violent acts on their part. We will test the hypothesis that autocracy as such does not have negative impacts upon tourism.

THE IMPACT OF POLITICAL VIOLENCE ON TOURISM

With tourism generating receipts of US$ 476 billion in 2000 and growth rates above five per cent per annum (WTO 2002), tourist destinations have a lot to lose if they lose their attraction to tourists. Whilst Europe and Northern America are still by far the main tourist destinations, the developing regions in the world increase their market share rapidly. Many developing countries also derive a much higher share of their GDP from tourism receipts than developed countries.[2] Developing country regions, in which tourism is growing fastest, have much to benefit from providing low-skilled and labor-intensive tourism services that can provide an income stream, which is more steady than the volatile receipts from natural resource extraction (Levantis and Gani 2000). Tourism represents an important contribution to economic development in many developing countries – see Sinclair's (1998) comprehensive survey. Unfortunately, developing country regions are also more vulnerable as they represent the main locations of violence.

Economic theory in the tradition of Lancaster (1971) predicts that tourists consume certain characteristics of a tourist destination rather than one single good. Unless these characteristics

are very specific to the country and highly valued, tourists will easily switch to another destination if faced with violence. For example, a country whose main attractions are a warm, sunny climate with nice beaches will find itself vulnerable to events of violence as tourists can easily enjoy similar attractions in other countries without the risk of encountering violence. This is the reason why it does not matter that the likelihood of being seriously affected by an event of violence is perhaps smaller than being struck by lightning, for example, as even the smallest likelihood can be sufficient to prompt tourists to choose a different destination. As Richter and Waugh (1986, 231) put it: 'Tourism is frequently an early casualty of internecine warfare, revolution, or even prolonged labor disputes. Even if the tourist areas are secure (…) tourism may decline precipitously when political conditions appear unsettled. Tourists simply choose alternative destinations.' Even where a country's characteristics are highly valued and not easily substitutable can attacks on tourists substantially hurt a country's tourism industry as Egypt had to experience in the 1990s.

For a number of reasons, events of violence are likely to impact upon tourism both contemporaneously and with lagged effects. Tourists might be locked into bookings already made and it takes time to realize the full extent of the instability. Enders and Sandler's (1991) and Enders, Sandler and Parise's (1992) time-series analysis of the impact of terrorism on tourism in Spain and other Western countries suggests that often three to nine months pass by until tourist arrivals go drastically down. As tourists are sensitive towards the negative image of a tourist destination, events of violence can affect a tourist destination long after the event has passed and stability has, in effect, been restored. Tourism will only bounce back to what it was before if the negative image is eradicated from the tourists' mind. Depending on how sustained the period of violent events and negative media coverage have been, this might take years. Countries with a negative image due to past events of violence often attempt to improve their image with aggressive advertising campaigns trying to portray themselves as

entirely safe destinations (Sönmez, Apostolopoulos and Tarlow 1999). Scott (1988) shows how concerted action by tourist authorities targeting travel agents and the travel media helped to contain the negative impact of two military coups on tourism in Fiji in 1987.

It is not quite clear how violence in one country affects other countries in the same region. Some argue that the detrimental effects on tourism are likely to spill over into other countries (Teye 1986; Richter and Waugh 1986). Sometimes this can be the consequence of the coupling of tourist destinations. For example, tourism in the Maldives and Zanzibar can be affected by violence in Sri Lanka and Kenya if only because the Maldives and Zanzibar are a popular add-on holiday for travelers to Sri Lanka and Kenya, respectively. Others suggest that neighboring countries can actually benefit from a substitution effect as long as they are not themselves seen as directly affected by the events of violence. Hall and O'Sullivan (1996, 199) report that both the Solomon Islands and North Queensland advertised themselves as safe regional alternatives in the face of a military coup in Fiji. Mansfeld (1996) suggests that Cyprus, Greece and Turkey have benefited from conflict in Egypt, Israel, Jordan, Lebanon and Syria as tourists in search of Middle Eastern flair and ancient sights resort to the destinations perceived as safe within the region. Drakos and Kutan (forthcoming) demonstrate, however, that terrorism in either Greece, Israel and Turkey has negative spill-over effects on the other countries. The only one potentially benefiting is Western European Italy, which is likely to be perceived as a safe destination outside the Middle Eastern region, but offering similar characteristics.

LITERATURE REVIEW

Despite its substantive importance for tourism, the impact of violence has only recently been given greater scholarly attention (Sönmez 1998). Indeed, there still does not exist any

quantitative study that would comprehensively address the impact of political violence on tourism, which is what this paper attempts to do. What has been examined most in past studies is the influence of terrorism on tourism, where terrorism is often defined as 'politically motivated violence perpetrated against civilians and unarmed military personnel by subnational groups' (US Department of State definition, cited in Sönmez 1998, 417).[3] One of the reasons why scholars have focused on terrorism is that tourists have frequently been the incidental victims of terrorist attacks or have even been singled out as targets. Terrorists often benefit from attacking tourists and have frequently done so, for example, in such diverse countries as Colombia, Egypt and the Philippines. As Sönmez (1998, p426f.) has put it: 'Tourism can inspire terrorist violence by fueling political, religious, socioeconomic, or cultural resentment and be used as a cost effective instrument to deliver a broader message of ideological/political opposition. (…) For terrorists, the symbolism, high profile, and news value of international tourists are too valuable not to exploit.' Where countries are dependent on tourism receipts, groups who want to destabilize the government will find it attractive to cut off some of the government's finance by seeking to reduce tourism. Some insurgent groups such as the Kurdish Workers' Party Partiya Karkeren Kurdistan (PKK) in Turkey have frequently warned tourists against travelling to the country as otherwise they stand the risk of becoming harmed. Even where tourists are not concerned about their personal safety, they might be repelled by the heavy armed police and army forces needed to protect them from terrorist attacks (Richter and Waugh 1986). There is substantial qualitative case study evidence from Ireland (Wall 1996), Cyprus (Mansfeld and Kliot 1996), Egypt (Wahab 1996) and other destinations (Hall 1994) demonstrating the negative impact of terrorism on tourism. Pizam and Smith (2000) have traced drops in tourism demand to terrorist events as compiled from a qualitative analysis of newspaper articles. More rigorous quantitative time-series analysis demonstrating such an impact include Drakos and Kutan (forthcoming) for Greece,

Israel and Turkey, Bar-On (1996) for Israel, Spain and Turkey, Enders and Sandler (1991) for Spain and Enders, Sandler and Parise (1992) for Austria, Italy and Greece as well as the aggregate of twelve Western developed countries. With respect to violent conflicts such as civil and other wars, there are very few studies. Pitts (1996) provides a case study analysis of the impact of the uprising in Chiapas on Mexican tourism, whilst Mihalič (1996) provides a quantitative analysis of the effect warfare in Slovenia had on the country's and the region's tourism.

The existing empirical literature suffers from two gaps: First, political violence other than that due to terrorism has hardly been analyzed. Second, most studies focus on specific countries or at best a region. No study with a global coverage has been undertaken. This paper provides a number of novel contributions to the existing literature. We will analyze how various political instability events ranging from terrorist acts to revolutions affect tourism. We will examine whether armed violent conflict deters tourism. We will assess whether the violation of personal integrity rights impacts upon tourism. Finally, going beyond political violence, we look at the suppression of civil and political rights, which as already mentioned can take place in an otherwise very stable country without major events of violence.

ESTIMATION METHOD

We will distinguish between a theoretical model and the model we actually estimate. One can model the demand for tourism in any one destination theoretically with the help of the following function:

$$D = f\left(\underset{(+)}{I}, \underset{(+)}{P}, \underset{(-)}{C}, \underset{(-)}{F}, \underset{(+)}{A}, \underset{(-)}{V} \right) \qquad (1)$$

where D represents demand, I is the income of tourists, P are relevant characteristics of the tourism population such as size, education, amount of leisure time etc., C is the relative cost of tourism in the destination, F are the fare costs to reach the destination, A is the destination's general attractiveness to tourists and V is the extent of political violence. The sign below a variable signals its expected effect on tourism demand. Such a formulation is in line with the general economic literature on tourism demand (see Crouch 1994), the only novelty being to add violence as another factor.

How to estimate such a model? In principle, if one had data available for all the variables contained in (1) one would simply estimate this model. However, this is not the case. Fortunately, in a panel data context we can estimate a simplified model that controls for many of the variables contained in (1) indirectly. This is facilitated by the fact that we are not interested in estimating any coefficients of variables other than V. We start with an estimation method that allows only for a contemporaneous effect of violence on tourism, but no lagged effect. In our panel data context the model to be estimated can be written and interpreted as follows:

$$y_{it} = \alpha + \beta_1 x_{it} + \gamma_t T_t + \varepsilon_{it}\,, \text{ where } \varepsilon_{it} = u_i + v_{it}. \qquad (2)$$

The subscript i represents each tourist destination in year t, y is a suitable variable of tourism demand and x is the vector containing our variables measuring events of violence. The T_t are important as they are supposed to capture any year specific period effects not included in the regressors that affect all tourist destinations equally. In particular, they capture the trend in international tourism to grow over time with incomes in countries of tourist origin rising, population size, education and leisure time growing and general transportation costs falling. The period effects thus cover our variables I, P, and F from equation (1).[4] In addition,

they also capture other temporal changes that affect all potential tourist destinations. For example, conspicuous events such as the Gulf War in 1991 or the terrorist attacks on the United States on 11 September 2001 can put a number of potential tourists off from travelling to any foreign country. If, however, these events affect certain tourist destinations more than others, then this differential effect is not captured by the time dummies, but we have no way to account for such differences. The u_i are supposed to capture any country specific effects that do not change over time and are not included in the explanatory variables, such as the general attractiveness of a destination for tourists (weather, beaches, cultural and historical attractions etc.). It thus captures the variable *A* in equation (1). The remaining variables *C* and *V* are estimated directly rather than controlled for (see below).

We estimate model (2) with a fixed effects (FE) estimator, which is a natural estimator to use given that our countries in the sample are fixed. We employ standard errors that are fully robust and adjusted for the clustering of observations, i.e. observations are merely assumed to be independent across countries, but not necessarily within countries. The FE estimator subtracts from the equation to be estimated the over time average of the equation for each country. Because of this so-called within transformation the individual country effects u_i are wiped out and the coefficients are estimated based on the time variation within each cross-sectional unit only. Any correlation of the fixed effects with the explanatory variables is therefore rendered unproblematic.

As a next step, we will allow for a lagged effect of violence on tourism as well. It might be preferable to estimate the impact of violence on tourism in a dynamic framework given that it is likely to impact upon tourism not only in the year the event of violence occurs, but also in following years. There are two basic ways to account for such lagged effects of the explanatory variable, namely via finite distributed lag (FDL) or infinite distributed lag (IDL) models. The FDL model assumes that the explanatory variable impacts upon the dependent

variable over a finite time period. The simplest way to account for this is to include the explanatory variable both contemporaneously and lagged a finite times. The problem with this approach is the high multicollinearity amongst the lagged variables and the need to choose how many lags are included. Imposing a polynomial structure on the lagged variables such that the effect is declining linearly (polynom of order one) or non-linearly (polynom of second order or higher) circumvents the multicollinearity problem (Hill, Griffiths and Judge 1997). It does leave the researcher with the problem of choosing the correct lag length, however.

In the IDL model no lag length needs to be chosen as by definition an infinite number of lags is included. The IDL model can be written as:

$$y_t = \alpha + \sum_{i=0}^{\infty} \beta_i x_{t-i} + e_t \qquad (3)$$

Note that for simplicity and for the time being we ignore the fact that we have panel data and we look at a pure time-series problem. Later on, we will revert back to our panel data context. Clearly, in its general form, equation (3) cannot be estimated as it implies an infinite number of coefficients to be estimated. It turns out, however, that similar to the FDL model, the problem can be circumvented if some structure is imposed on the lags. The geometric lag is a very simple and popular structure. It assumes that the lag weights decline geometrically such that

$$\beta_i = \beta\delta^i, \text{ with } |\delta| < 1 \qquad (4)$$

Such an assumption is in accordance with an adaptive expectations model (Harvey 1990), which fits nicely our situation. An event of violence is likely to deter tourism strongest in the

year of occurrence and less and less so over time as the media report less and less about it and tourists start to forget. Substituting (4) into (3) leads us to:

$$y_t = \alpha + \beta \sum_{i=0}^{\infty} (\delta^i x_{t-i}) + e_t \quad (5)$$

At first, not much seems to have been gained by imposing the geometric lag structure as (5) still has an infinite number of coefficients to be estimated. However, Koyck (1954) showed that (5) can be transformed into a much more parsimonious model (see appendix 1):

$$y_t = \lambda + \beta_1 y_{t-1} + \beta_2 x_t + \varepsilon_t \quad (6)$$

If we put equation (6) into a panel data context suitable for our topic, then it is written more generally as follows:

$$y_{it} = \lambda + \beta_1 y_{it-1} + \beta_2 x_{it} + \gamma_t T_t + \varepsilon_{it}\text{, where } \varepsilon_{it} = u_i + v_{it}. \quad (7)$$

The short-run effect of an event of violence on tourism is simply given by β_2, whereas the long-run effect can be computed as $\beta_2/(1-\beta_1)$.

Estimation of equation (7) with either ordinary least squares (OLS) or a fixed-effects or a first-differenced panel estimator is problematic. This is because of the inclusion of the lagged dependent variable as a regressor. Since y_{it} is a function of u_i, so is y_{it-1}. The correlation of a regressor with the error term renders the OLS estimator both biased and inconsistent. The same is true for the fixed-effects or first-differenced estimator. Whilst in the process of estimation the u_i are wiped out, biasedness and inconsistency is a consequence of the correlation between y_{it-1} and v_{it-1} (Baltagi 1995, 126).

There are two ways to estimate equation (7) without bias and consistently. One is to follow Anderson and Hsiao (1981) and to use a two-stage least squares (2SLS) first-differenced estimator, that is, a first differenced estimator with instrumental variables. First differencing wipes out the u_i and using either y_{it-2} or Δy_{it-2} (that is, y_{it-2}-y_{it-3}) as an instrument for y_{it-1} solves the problem since neither instrument is correlated with Δy_{it}. In addition, further lags can be included. Alternatively, one can use the so-called Arellano and Bond (1991) Generalized Method of Moments (GMM) estimator. The basic idea of this estimator is to use all prior dependent variables that are valid instruments, not just y_{it-2}. We will use the Arellano and Bond dynamic panel estimator as it is more efficient than the 2SLS first-differenced estimator with heteroscedasticity-robust standard errors. Note that in using Arellano and Bond's (1991) GMM estimator, we lose the first two years of data as the lagged dependent variable is one of the explanatory variables and needs to be instrumented for with a further lag.

THE DEPENDENT AND INDEPENDENT VARIABLES

Tourism demand can be measured by number of tourists or receipts from tourism. We focus on the annual number of tourists (overnight visitors) arriving in a country. Conceptually, we are interested in the impact of political violence on travel to afflicted countries, which is better captured by arrivals. In practical terms, tourist arrivals also has the advantage of being measured with greater precision for the simple reason that it is easier to count tourism numbers than to estimate the expenditures of tourists in the destination country. Tourism receipt data, which are typically taken from the balance of payments statistics suffer from well-known problems of inaccuracy (Sinclair 1998). At the same time, we note that arrivals and receipts are highly correlated with a bivariate correlation coefficient of .91 (n = 3116).

Data for tourist arrivals are taken from WTO (various years) and cover the period 1977 to 2000 with missing data for some years for some countries. For most countries, data are only available from 1980 onwards. For all estimations we take the natural log of the dependent variable in order to render its distribution less skewed and to mitigate problems with heteroscedasticity. Our sample consists of all countries for which data are available. In sensitivity analysis, we ran the same models for a sample consisting of developing countries only. The results reported further below are practically identical.

The only variables from the theoretical model not captured by either time- or year-specific dummy variables are *C*, the relative cost of tourism in the destination, and *V*, the extent of political violence. As concerns *C*, we use the real effective exchange rate as a proxy, taken from IMF (2002) and Easterly and Sewadeh (2002). Ideally, one would employ a variable that captures relative prices for tourist goods and services more directly, but no such variable exists. Another disadvantage is that the real effective exchange rate is not available for all countries in our sample, for which our other variables are available. We therefore include it only in additional estimations.

We use a range of independent variables to estimate the effect of various aspects of political instability and political violence. First, we use terrorist event count data from the Protocol for the Assessment of Nonviolent Direct Action (PANDA) data set. These data are generated by a fully-automated 'sparse-parsing' machine coding system from the headline segments of Reuters News Wire Reports. We use a summary measure of events of lethal, sub-lethal and other terrorist assaults and clashes as well as torture and disappearances. These data are available only for the years 1984 to 1995. They were collected as part of the US State Failure Task Force Project and have been published by King and Zeng (2001). We would have liked to use as well, if only for comparative purposes, data from the ITERATE (International Terrorism Attributes of Terrorist Events) database, which also codes events

from news reports albeit by humans. However, these data are commercially marketed and only available for a substantial fee.[5] Next, we use more general violent event count data from Arthur Banks' Cross-National Time-Series Data Archive, which are also published by King and Zeng (2001) for the period 1977 to 1995. We use the sum of various events of violence (assassinations, acts of guerrilla warfare, purges, riots and revolutions) as defined in Appendix 2.

The major disadvantage of the PANDA terrorist events and Banks' violent events count data is that they do not measure the intensity of violence other than by the number of instability events occurring. Our other independent variables do not share this disadvantage. One of the variables we use is from the International Country Risk Guide (ICRG). Whilst data from this private company, which provides information to international business, are normally prohibitively expensive to get for researchers, data were made available free of charge courtesy of the company. Our variable is the aggregate of two sub-variables. The first sub-variable refers to internal conflict, which is defined by the ICRG as 'an assessment of political violence in the country and its actual or potential impact on governance' (ICRG 2002). Coding is on a zero to four scale for three sub-components (civil war, terrorism/political violence and civil disorder) with the scores added up to create an overall score such that zero represents full stability and twelve complete instability. The second sub-variable refers to external conflict and is defined as 'an assessment both of the risk to the incumbent government from foreign action, ranging from non-violent external pressure (diplomatic pressures, withholding of aid, trade restrictions, territorial disputes, sanctions, etc) to violent external pressure (cross-border conflict to all-out war)' (ibid.). Similar to internal conflict, the overall score is the sum of three scores ranging from zero to four scores referring to the subcomponents war, cross-border conflict and foreign pressures. Our aggregate variable is the

simple average of the two sub-variables and we reversed the scale such that a higher value represents greater conflict. Data are available for the period 1984 to 2000 only.

The main disadvantage of the ICRG data is their subjectiveness as data are assessed and coded by experts into an ordinal scale of instability magnitude. Next, we therefore also constructed a variable measuring the extent of armed conflict (both internal and external) based on data from the Uppsala Conflict Data Project (Gleditsch et al. 2002), which is available for the full time period 1977 to 2000. We prefer this data set to the well known Correlates of War data set (Singer 2003) as it has a lower minimum threshold of 25 casualties for coding an event as violent conflict as opposed to the 1000 casualties threshold of the Correlates of War project. The variable was coded as zero if there was either no armed conflict on the territory of a country or armed conflict below the minimum threshold of 25 casualties. It was coded as one if there was a minor armed conflict, defined as any type of armed conflict resulting in more than 25 but less than 1000 casualties in any one year. The variable was coded as two, if the conflict was of intermediate nature, defined as at least 25 but less than 1000 casualties in any one year in addition to an accumulated total of at least 1000 deaths. Three is the code for large conflicts, which require more than 1,000 battle deaths in a single year to qualify. Note that the reference point for coding is whether the conflict takes place on the territory of a country, whereas a conflict is not coded for a country participating in a conflict outside its own territory. Thus, for example, the NATO war against Yugoslavia is coded as a conflict for Yugoslavia, but not the NATO countries.

Next, to assess the impact of the violation of personal integrity rights upon tourism, we constructed a variable with data from the two Purdue Political Terror Scales (PTS), which are available for the period 1980 to 2000. One of the two PTS is based upon a codification of country information from Amnesty International's annual human rights reports to a scale from 1 (best) to 5 (worst). Analogously, the other scale is based upon information from the United

States Department of State's Country Reports on Human Rights Practices. Codification is according to rules as follows:

> 1. Countries … under a secure rule of law, people are not imprisoned for their views, and torture is rare or exceptional… Political murders are extraordinarily rare.
>
> 2. There is a limited amount of imprisonment for non-violent political activity. However, few are affected, torture and beatings are exceptional… Political murder is rare.
>
> 3. There is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without trial, for political views is accepted…
>
> 4. The practices of Level 3 are expanded to larger numbers. Murders, disappearances, and torture are a common part of life... In spite of its generality, on this level violence affects primarily those who interest themselves in politics or ideas.
>
> 5. The violence of Level 4 has been extended to the whole population… The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals.

The simple average of the two scales was used for the present study. If one index was unavailable for a particular year, the other one available was taken over for the aggregate index. Data are taken from Gibney (2002).

This completes our variables of instability and political violence. In addition, we would have also liked to test for the effect of foreign travel advice on tourism. However, the British Foreign and Commonwealth Office was not able to produce historic records of its travel advice.

Lastly, we also want to test whether repressive political regimes, stable or not, also negatively affect tourism. We therefore constructed a further variable as the unweighted sum of the political rights and civil liberties index published by Freedom House (2001). Our data cover the period 1979 to 2000. Political rights refer to, for example, the freedom to organize in political parties or groupings, the existence of party competition and an effective opposition as well as the existence and fairness of elections including the possibility to take over power via those elections. Civil liberties refer to, for example, the freedom of the media, the right to open and free discussions, the freedom of assembly, the freedom of religious expression, the protection from political terror and the prevalence of the rule of law. The two indices are based on surveys among experts assessing the extent to which a country effectively respects political rights and civil liberties, both measured on a 1 (best) to 7 (worst) scale. A combined freedom index was constructed by adding the two indices. Using Freedom House data over a period of time is not unproblematic since the scale, with which countries are judged, changes slightly over time and it is not designed as a series. Indeed, some cases (for example, Mexico and Uruguay) rise and fall along the scale in association with global changes in the number of countries that are democratic in years in which these countries exhibited no institutional change. This is particularly problematic in the middle parts of the Freedom House scale. However, Freedom House data are available for many more countries than, for example, the so-called Polity data (Gurr and Jaggers 2000), which do not suffer from this problem, and are therefore used here. In sensitivity analysis we used Polity data instead, which hardly affected the results.

Table 1 provides summary descriptive variable statistics. In pre-testing we included squared terms of the dependent variables to search for non-linear effects, but failed to find evidence for them. For the same reason, we divided the sample into two sub-samples, one with countries characterized by high violence, the other by low violence. The impact of violence on tourism was not systematically different across the sub-samples.

< Insert Table 1 about here >

RESULTS

We start with the fixed-effects model with contemporaneous effects only, for which table 2 provides estimation results. Due to stark differences in data availability both across time and countries, we begin with estimating each of our main explanatory variables of violent political conflict in isolation. The PANDA count of terrorist events, the Banks' count of violent events, the Uppsala and ICRG conflict variables and the human rights violation variable are all statistically significant with the expected negative sign (columns I to V). Next, we combine variables with each other and add the other control variables autocracy and the real effective exchange rate in separate estimations. In column VI, the PANDA count of terrorist events variable is combined with human rights violation and autocracy. As before, human rights violations and the terrorist events count are statistically significant, but autocracy is not. Analogous results obtain if the PANDA variable is replaced with the Banks' violent events count variable in column VII, the Uppsala conflict variable in column VIII or with the ICRG variable in column IX. Next we also add the real effective exchange rate, which reduces the sample size further. Results reported in columns X to XIII are very similar and the coefficient of the exchange rate variable is negative and statistically significant as expected. Finally, in column XIV results from the most general model are reported, where we only exclude the real

effective exchange rate variable and use the Uppsala conflict variable rather than the conceptually similar ICRG variable in order to prevent a further reduction in sample size. The PANDA variable is the only one to become statistically insignificant. The Ramsey RESET tests cannot always reject the hypothesis of no omitted variables. One variable that is likely to be omitted is of course the lagged dependent variable.

< Insert Table 2 about here >

Table 3 therefore repeats the estimations of Table 2, but with Arellano and Bond's GMM panel estimator and a lagged dependent variable, allowing for a lagged effect of the explanatory variables on tourist arrivals. The PANDA count of terrorist events and the Banks' count of violent events variables, the Uppsala and ICRG conflict variables and the human rights violation variable are all statistically significant with the expected negative sign as before. Combining variables and adding the autocracy variable does not change much for our variables of violent political conflict and human rights violations, but the autocracy variable itself now becomes highly significant in some model estimations. This suggests that a change in a country towards a more repressive political regime might impact upon tourist arrivals with lag rather than contemporaneously. Further adding the real effective exchange rate to the estimations does not change results much. However, the exchange rate variable itself is highly insignificant in the dynamic model. The last column reports the most general model results, which are very similar in terms of statistical significance to the estimations from the more restricted model specification.

< Insert Table 3 about here >

One might wonder whether the impact of political violence on tourism depends on the size of the country. Large and diverse countries are likely to have some unique characteristics that cannot be easily substituted for in travelling to another country. Similarly, some tourism is combined with business travel, which might not be deterred as much as tourism for recreational purposes only. Unfortunately, many countries do not report the share of travel that falls into the category business travel and we have no direct measure of a destination country's diversity either. In their absence, we assume that richer countries attract more business travel and that population size or, alternatively, land area proxy the size and diversity of countries. We have tested for an interaction effect of these three variables with our variables of political violence. The interaction effects generally do not assume statistical significance, however. The only exception is that a large population size reduces the negative impact of conflict intensity as measured by the Uppsala data.

We have also divided the sample into those countries, which are heavily dependent on tourism receipts, and those, which are only mildly dependent. To do so, we have taken the median of the average tourism receipt to exports ratio as the criterion to split the sample. For simplicity and to maximize sample size, we concentrate on fixed-effects estimation with the variables entered in isolation, but the main results are the same if other control variables are entered or the dynamic GMM estimator is used. Table 4 shows the coefficients of the political violence variables for both samples.[6] Interestingly, the coefficients of the political violence variables sometimes do not assume statistical significance in the sample of countries that are heavily dependent on tourism receipts. Even where they are significant, the coefficient size is always smaller than the respective coefficient size for the sample of countries that are only mildly dependent on tourism receipts. The explanation for this difference is probably that countries, which earn much of their exports from tourism receipts, are very attractive countries with characteristics that are not easily substituted for. Events of political violence

therefore have a lower impact than on less attractive countries with more easily substitutable characteristics.

< Insert Table 4 about here >

What about spillover effects of political violence on tourism in other countries of the same region? To analyze this question, we have grouped countries into 18 regions of the world following the regional classification used in WTO (various years): North America, Central America, the Caribbean, South America, Western Europe, Eastern Europe, the Balkans, Eastern Africa, Middle Africa, Northern Africa, Southern Africa, Western Africa, the Middle East, Central Asia, East Asia, South East Asia and, finally, the Pacific. We then computed regional aggregates of violence events. Obviously, such aggregation is only possible for the cardinal Banks' count of violent events and the PANDA count of terrorist event variables, but not for the other ordinal variables. In addition, we also calculated a variable measuring the difference between the average number of violent events in the region relative to the world average to look for substitution effects amongst regions. Table 5 presents the estimation results. In fixed-effects estimation, there is evidence for a spill-over effect within regions as higher political violence in the region further reduces tourism even after controlling for the extent of political violence within the country itself. There is also a substitution effect amongst regions as a higher average level of political violence within one region relative to the world average yet further reduces tourism within countries of that region. Surprisingly though, the spill-over and regional substitution effects become insignificant in the dynamic GMM model, whereas the national counts of violent events remain significant.

< Insert Table 5 about here >

DISCUSSION

We have seen so far that political violence consistently has a negative impact upon tourist arrivals. How strong is the effect of such violence on tourism? Table 6 looks at the effect of a one standard deviation increase in our variables of political violence on tourist arrivals.[7] Variables are held in different units and have different distributions, which is why the estimated coefficients cannot be compared directly with each other. However, the method of so-called (semi-)standardized coefficients allows us to compare the effect of variables held in different units with each other, with a one standard deviation increase in a variable representing a 'substantial' increase. Starting with contemporaneous effects only, we see that a substantial increase in the PANDA terrorist events count variable lowers tourist arrivals by 8.8%, a one standard deviation increase in the Banks' count of violent events variable by 5.7%. A one standard deviation increase in either of the two conflict measures decreases tourist arrivals by 22%. A substantial increase in human rights violation has the strongest effect at 32%. Interestingly, this ordering in the magnitude of importance confirms qualitative analysis of a limited number of case studies undertaken by Pizam (1999).

In a dynamic context, we see that the short-term effect is often considerably smaller than the long-term effect, suggesting that lagged effects are important. The long-term effects of human rights violation and our two conflict measures are of similar importance: a substantial increase lowers tourist arrivals by around 27% in the long run. The effect of the PANDA terrorist events and Banks' violent events count is again much lower at 14.8% and 8.4%, respectively. Note that the effects from the dynamic model are not directly comparable to the effects from the fixed-effects model with contemporaneous effects only as they derive from two different model specifications.

< Insert Table 6 about here >

With respect to autocracy, our results suggest that it might have a negative impact on tourism only if lagged effects are taken into account, not if we restrict the model to contemporaneous effects. That autocracy impacts upon tourism only if lagged effects are taken into account might have its explanation in the fact that a change in the political regime towards autocracy does not directly threaten tourists unless it is accompanied by violent events. Over the longer run, however, autocratic regimes become less attractive to tourists as they tend to restrict more the entertainment opportunities and the free movement of tourists than more democratic regimes do.

We find the expected negative effect of a higher real effective exchange rate on tourist arrivals in the model with contemporaneous effects only. It is insignificant in the dynamic model. This is to be expected, however, since changes in the exchange rate should not have any lagged effect on tourism.

CONCLUSION

Naturally, tourists are sensitive to events of political violence in their holiday destination as such events jeopardize a relaxed and unconcerned holiday. Our analysis suggests that policy makers in tourist destinations are rightly concerned about safety and stability. Substantial increases in political violence lower tourist arrivals in the long run by about one quarter in our global sample. Interestingly, however, those mildly dependent on tourism receipts are more vulnerable to the impact of political violence. The reason for this is probably that these countries have few unique characteristics and can therefore easily be replaced by other more peaceful holiday destinations with similar characteristics.

Our results confirm only partly the hypothesis that autocratic regimes are not detrimental to tourism as long as they do not resort to political violence and are regarded as stable. We estimate a negative effect of autocracy on tourist arrivals if lagged effects are taken into account. Travel is more difficult and more constrained in autocratic regimes than in democratic countries as anyone who has extensively traveled around the world will confirm.

Political violence harms and kills people that are often innocent and even though the direct costs in terms of injury and loss of life have not stood in the limelight of this article, we do not want to downplay the suffering caused by violent events. Rather, the objective of this article has been to demonstrate rigorously that such events harm affected countries also indirectly in significantly lowering tourist arrivals. There is an additional incentive for policies, which aim to contain political violence and aim to achieve stability and peace. Our results suggest that policy makers should also be concerned about the negative effects of political violence outside their own country, but within their region. Violent conflict is well known to be detrimental to economic growth in developing countries at least in the short run (Murdoch and Sandler 2002) and the negative impact on tourism is one of the ways in which violent conflict harms the economy.

Political violence is bad news for a country's tourism even if no tourist ever becomes physically harmed or killed. The good message, on the other hand, is that if the violence stops and the country manages to revert its negative image in the international media, then tourism can bounce back. Hall (1994, 94) suggests that experience 'indicates that tourism can recover rapidly following the cessation of conflict'. There is therefore a second dividend to peace-making in countries attractive to tourists, but shattered by political violence.

In terms of future research, at least three issues are worth pursuing. One is an analysis of why the spill-over effect of political violence on other countries within a region as well as substitution effects between regions appear to be prominent only in the short-run, but

disappear in a dynamic estimation framework. Second is an examination of the effect of non-political violence and crime on tourism. Qualitative evidence for such a link is provided by Teixeira (1995, 1997) for Brazil, by De Albuquerque and McElroy (1999) for the Caribbean and by Ferreira (2000) for South Africa. Levantis and Gani's (2000) study of the effect of crime on tourist arrivals in four small Caribbean and four South Pacific island states represents one of the very few quantitative studies. The challenge is to find good data for the actual or at least perceived exposure of tourists to crime. Another issue worth addressing is a better understanding of why human rights violations deter tourism so strongly as our results have shown. That violent conflict deters tourists is plausible, but the link with human rights violations is less clear. Our general model specification shows that the human rights variable is statistically significant even after controlling for all sorts of violent political events. We hope to tackle these questions in the future.

APPENDIX 1

The Koyck Transformation

Koyck (1954) showed how equation

$$y_t = \alpha + \beta \sum_{i=0}^{\infty} (\delta^i x_{t-i}) + e_t \qquad (5)$$

can be transformed into equation

$$y_t = \lambda + \beta_1 y_{t-1} + \beta_2 x_t + \varepsilon_t \qquad (6)$$

The transformation works in lagging (5) by one period, multiplying by a constant factor γ and subtracting this transformed equation from (5) to get:

$$y_t - \gamma y_{t-1} = [\alpha + \beta \sum_{i=0}^{\infty} (\delta^i x_{t-i}) + e_t] - \gamma[\alpha + \beta \sum_{i=1}^{\infty} (\delta^i x_{t-i}) + e_{t-1}] \qquad (A.1)$$

This can be simplified into

$$y_t - \gamma y_{t-1} = \alpha(1-\gamma) + \beta x_t + (e_t - e_{t-1}) \qquad (A.2)$$

Solving for y_t and defining $\lambda = \alpha(1-\gamma)$, $\beta_1 = \gamma$, $\beta_2 = \beta$ and $\varepsilon_t = (e_t - e_{t-1})$, we arrive at (5):

$$y_t = \lambda + \beta_1 y_{t-1} + \beta_2 x_t + \varepsilon_t \qquad (5)$$

APPENDIX 2

Types of violent conflict in Banks' violent events count variable

- Assassinations: any politically motivated murder or attempted murder of a high government official or politician.
- Acts of guerrilla warfare: any armed activity, sabotage, or bombings carried on by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime.
- Purges: any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition.
- Riots: any violent demonstration or clash of more than 100 citizens involving the use of physical force.
- Revolutions: any illegal or forced change in the top governmental elite, any attempt at such change, are any successful or unsuccessful armed rebellion whose aim is independence form the central government.

NOTES

[1] An earlier version of this paper has been presented at the workshop "Geography, Conflict, and Cooperation" of the European Conference on Political Research in Edinburgh in March 2003. I thank the participants of the workshop, particularly Neal Beck, as well as two anonymous referees for many helpful comments. The data and a do-file replicating the reported results are available at http://www.yale.edu/unsy/jcr/jcrdata.htm.

[2] In 1999, this share was above 5 per cent and sometimes even above 10 per cent for many small island countries in the Caribbean and the Pacific (GDP data in purchasing power parity from World Bank (2001), tourism receipt data from WTO (2002)).

[3] Similar definitions are offered by Ezzedin (1987, cited in Pizam and Smith 2000) and Enders and Sandler (2002).

[4] The period effects cannot capture changes in relative transportation costs. It is highly unlikely that these would change much over time, however. In any case, no data would be available to measure changes in relative transportation costs.

[5] The Israelian International Institute for Counter-Terrorism's Database for International Terrorist Attacks is not exhaustive and explicitly states that it includes only selected international terrorist attacks.

[6] Note that because the explanatory variables have different availability above and below the median of the share of tourism receipts, the two sub-samples need not include exactly the same number of countries.

[7] Figures refer to the full-sample models of tables 2 and 3 with the variables entered in isolation.

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TABLE 1.

Summary descriptive variable statistics.

	Obs	Mean	Std. Dev.	Min	Max
ln (Tourist arrivals)	3439	5.91	2.10	-.92	11.20
PANDA terrorist events count	1771	13.56	32.45	0	399
Banks' violent events count	1914	1.22	2.67	0	31
Conflict intensity (Uppsala)	3439	0.33	0.82	0	3
Conflict intensity (ICRG)	1911	9.13	2.30	1.5	12
Human rights violation	2572	2.43	1.16	1	5
Autocracy	3027	7.42	4.03	2	14
Real effective exchange rate	2262	112.51	96.70	11.86	2410.61

TABLE 2

Fixed-effects estimation of tourist arrivals.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
PANDA terrorist events count	-.003*					-.002#				-.001*				-.001
	(1.96)					(1.77)				(2.31)				(.69)
Banks' violent events count		-.02*					-.01*				-.01#			-.01#
		(2.47)					(2.02)				(1.63)			(1.77)
Conflict intensity (Uppsala)			-.28**					-.19**				-.22**		-.11*
			(4.24)					(3.82)				(4.06)		(2.33)
Conflict intensity (ICRG)				-.08**					-.07**				-.06**	
				(4.86)					(3.04)				(3.29)	
Human rights violation					-.28**	-.25**	-.25**	-.21**	-.26**	-.24**	-.23**	-.19**	-.25**	-.22**
					(5.19)	(3.63)	(3.84)	(4.21)	(4.12)	(4.49)	(4.64)	(4.77)	(3.84)	(3.21)
Autocracy						-.00	.01	.01	.02	.01	.01	.01	.01	.00
						(.17)	(.55)	(.73)	(1.00)	(.40)	(.53)	(.61)	(.35)	(.10)
Real effective exchange rate										-.0003#	-.0005**	-.0004**	-.0003**	
										(1.81)	(3.75)	(2.93)	(3.29)	
# observations	1771	1914	3439	1911	2572	1451	1721	2496	1737	1147	1380	1795	1345	1389
# countries	174	151	194	135	149	147	140	148	123	112	108	112	103	140
F-test	9.69	7.01	16.63	10.07	9.28	8.82	7.62	12.14	11.41	14.87	9.33	13.60	16.30	13.81
p-value of F-test	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Ramsey RESET test	1.07	3.15	5.40	15.53	2.79	.39	.25	2.54	5.89	2.03	4.06	6.32	5.06	1.89
p-value Ramsey test	.3612	.0241	.0010	.0000	.0389	.7607	.8581	.0546	.0005	.1086	.0069	.0003	.0017	.1295

Note: Dependent variable is ln (tourist arrivals). Coefficients of year-specific dummy variables and constant not shown. Absolute t-values in parentheses. Standard errors robust towards arbitrary autocorrelation and heteroscedasticity. Observations assumed to be independent across countries, but not within countries (clustering).

significant at .1 level * at .05 level ** at .01 level.

TABLE 3

Dynamic GMM estimation of tourist arrivals.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
Lagged dependent variable	.52*	.58*	.63**	.57**	.62**	.52*	.54*	.62**	.53**	.19	.21#	.31*	.20	.51*
	(2.12)	(2.50)	(3.56)	(2.66)	(3.62)	(2.10)	(2.39)	(3.36)	(2.61)	(1.48)	(1.69)	(2.11)	(1.44)	(2.19)
PANDA terrorist events count	-.002*					-.002*				-.001#				-.001#
	(2.20)					(2.15)				(1.84)				(1.76)
Banks' violent events count		-.01**					-.01*				-.01#			-.01#
		(2.69)					(2.11)				(1.81)			(1.76)
Conflict intensity (Uppsala)			-.12**					-.09**				-.10*		-.08*
			(3.51)					(3.20)				(2.02)		(2.29)
Conflict intensity (ICRG)				-.05**					-.04**				-.03#	
				(3.69)					(3.20)				(1.75)	
Human rights violation					-.09**	-.08*	-.08*	-.06**	-.10**	-.08#	-.08#	-.06#	-.09*	-.06#
					(3.82)	(2.16)	(2.11)	(3.27)	(3.24)	(1.60)	(1.62)	(1.77)	(2.13)	(1.74)
Autocracy						-.04**	-.04**	-.04**	-.02	-.02#	-.03*	-.03*	-.01	-.04*
						(2.96)	(3.57)	(3.27)	(1.57)	(1.83)	(2.55)	(2.20)	(.76)	(2.55)
Real effective exchange rate										.0001	-.0000	.0000	.0001	
										(.53)	(.09)	(.29)	(.37)	
# observations	1514	1558	2963	1727	2200	1235	1408	2149	1560	992	1146	1549	1204	1185
# countries	169	146	194	135	149	142	135	148	122	110	106	111	102	135
Wald chi-sq test	50.6	259.9	106.7	144.3	136.7	61.0	82.4	131.8	117.2	103.9	113.8	158.4	139.3	106.1
p-value of Wald test	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Test 'no second-order autocorrelation' (p-value)	.4608	.5572	.7442	.6597	.6605	.3734	.4869	.5492	.5481	.3918	.3391	.2362	.5853	.3729

Note: Dependent variable is ln. (tourist arrivals). Coefficients of year-specific dummy variables and constant not shown. Absolute z-values in parentheses. Standard errors robust towards arbitrary autocorrelation and heteroscedasticity. * significant at .05 level ** at .01 level.

TABLE 4

Fixed-effects estimation of tourist arrivals with split samples.

Dependency on tourism receipts:	Low	High	Low	High	Low	High	Low	High	Low	High
PANDA terrorist events count	-.007**	-.001								
	(2.72)	(.81)								
Banks' violent events count			-.033*	-.007						
			(2.52)	(.83)						
Conflict intensity (Uppsala)					-.315**	-.204#				
					(5.28)	(1.84)				
Conflict intensity (ICRG)							-.114**	-.065**		
							(2.72)	(2.91)		
Human rights violation									-.317**	-.183*
									(3.10)	(2.40)
# observations	880	891	1051	863	2572	13.56	1033	878	1358	1234
# countries	86	88	83	68	87	107	73	62	80	70
F-test	2.98	13.40	12.13	8.79	9.28	8.82	8.41	8.44	77.16	7.35
p-value of F-test	.0007	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Ramsey RESET test	9.97	1.36	5.70	1.30	7.26	1.83	9.61	8.66	9.14	2.78
p-value Ramsey test	.0000	.2547	.0007	.2743	.0001	.1397	.0000	.0000	.0000	.0401

Note: Dependent variable is ln (tourist arrivals). Coefficients of year-specific dummy variables and constant not shown. Absolute t-values or z-values in parentheses. Standard errors robust towards arbitrary autocorrelation and heteroscedasticity. Observations in fixed-effects estimations assumed to be independent across countries, but not within countries (clustering).

significant at .1 level * at .05 level ** at .01 level.

TABLE 5

Spill-over and regional substitution effects

Estimation technique:	FE	FE	GMM	GMM
Lagged dependent variable			.183	.211#
			(1.43)	(1.66)
PANDA terrorist events count	-.001*		-.002*	-.007*
	(2.14)		(1.97)	(2.06)
Banks' violent events count		-.012*		
		(1.96)		
Regional sum of events	-.001**	-.020**	.000	.013
	(2.88)	(7.90)	(.18)	(.80)
Regional average relative to world average	-.001*	-.024**	-.000	.011
	(2.32)	(10.52)	(.32)	(.69)
Human rights violation	-.24**	-.23**	-.081	-.079#
	(4.50)	(4.66)	(1.60)	(1.64)
Autocracy	.01	.01	-.023#	-.032*
	(.42)	(.58)	(1.75)	(2.56)
Real effective exchange rate	-.0003#	-.0005**	.0000	.0000
	(1.82)	(3.77)	(.62)	(.01)
# observations	1159	1400	1003	1164
# countries	113	109	111	107
F-test	13.78	85.34		
p-value of F-test	.0000	.0000		
Ramsey RESET test	2.00	4.42		
p-value Ramsey test	.1121	.0042		
Wald test			109.01	1703.38
p-value of Wald test			.0000	.0000
Test 'no second-order autocorrelation' (p-value)			.3555	.3322

Note: Dependent variable is ln (tourist arrivals). Coefficients of year-specific dummy variables and constant not shown. Absolute t-values in parentheses. Standard errors robust towards arbitrary autocorrelation and heteroscedasticity. Observations assumed to be independent across countries, but not within countries (clustering).

significant at .1 level * at .05 level ** at .01 level.

TABLE 6

Percentage change in tourist arrivals

due to one standard deviation increase in explanatory variables.

	Contemporaneous	Short-term	Long-term
PANDA terrorist events count	-8.8	-7.1	-14.8
Banks' violent events count	-5.7	-3.5	-8.4
Conflict intensity (Uppsala)	-22.6	-9.6	-26.1
Conflict intensity (ICRG)	-22.2	-11.8	-27.2
Human rights violation	-32.1	-10.7	-28.6