# THE HETEROGENEITY OF TOURISTS' REACTIONS TO TERRORISM

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# THE HETEROGENEITY OF TOURISTS' REACTIONS TO TERRORISM

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### ABSTRACT

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## ÇİĞDEM ÜNAL

#### M.A. Thesis, July 2017

### Thesis Supervisor: Asst. Prof. Kerim Can Kavaklı

Keywords: Terrorism, tourism sector, political violence, political economy, civil war.

In this thesis, I argue that tourists' reactions to terrorism depend on how much terrorism they are exposed to in their home countries. I propose that if a country is more likely to suffer from terrorist threats, then its citizens will be more likely to ignore terrorism risk in their potential destinations, and they will not change their travel plans. To test this prediction, I conduct linear regression analysis on how tourist arrivals change according to different characteristics of 168 destination and 178 origin countries between 1995 and 2014. I provide support for my hypothesis by showing that if terrorism in both destination and origin countries together increase, the negative effect of terrorism on tourism decreases. Furthermore, I find that tourists from richer countries are more sensitive to terrorist attacks and terrorism creates more damage for tourism sector when it is surrounded by civil war. The main insight of this research is that tourists of different nationalities are not homogenous in terms of their reactions to terrorism.

### ÖZET

## TURİSTLERİN TERÖRİZME KARŞI TEPKİLERİNİN HETEROJENLİĞİ

## ÇİĞDEM ÜNAL

### Yüksek Lisans Tezi, Temmuz 2017

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#### Anahtar Kelimeler: Terörizm, turizm sektörü, siyasal şiddet, siyasal iktisat, iç savaş.

Bu tezde, turistlerin terörizme karşı tepkilerinin kendi ülkelerinde ne kadar teröre maruz kaldıklarına bağlı olduğu savunulmaktadır. Eğer bir ülke terör tehditinden zarar görmekteyse o ülke vatandaşlarının gittikleri yerlerde terör riskini göz ardı edecekleri ve seyehat planlarını değiştirmeyecekleri ileri sürülmektedir. Bu tahmini test etmek için, 1995 ile 2014 yılları arasında turistlerin gittikleri 168 ve geldikleri 178 ülkenin farklı özelliklerine göre turist sayılarının nasıl değiştiği üzerine doğrusal regresyon analizi yapılmıştır. Terörizmin turistlerin hem seyehat ettikleri ülkede hem de kendi ülkelerinde aynı anda artmasının turizm sektöründeki olumsuz etkiyi azalttığı gösterilerek bu hipotez desteklenmiştir. Buna ek olarak, daha zengin ülkelerden gelen turistlerin terör saldırılarına karşı daha fazla hassasiyet gösterdikleri ve bir ülkede terörizmle beraber iç savaş da olmasının turizm sektörü için daha fazla hasara neden olduğu bulunmuştur. Bu tezin temel anlayışı farklı milliyetlere sahip turistlerin teröre karşı gösterdikleri tepki açısından homojen olmadıklarıdır.

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## 1

#### INTRODUCTION

Tourism sector is highly sensitive to extreme political events such as outbreak of war, terrorist attacks, and civil disobedience because tourists mostly seek for relaxation, comfort, and fun although some tourists might be keen on adventurous activities. Therefore, political violence damages tourism industry. For example, the 11 September 2001 terrorist attack led to sharp decline in the number of international tourist arrivals in the US, and American tourism sector could not bounce back to the pre-2001 level until 2007 (Korstanje & Clayton, 2012). Political conflicts in the Middle East and North Africa region in 2011 also reduced the international tourism volume of the region (Saha & Yap, 2013). In some cases, tourists become direct victims of terrorism. Recently, European countries experienced several terrorist attacks which left many casualties from around the world. A concert hall, a stadium, restaurants and bars in Paris were simultaneously attacked by suicide bombers in 2015<sup>1</sup>. In 2016, Brussel's international airport and metro station were targeted by coordinated bombings.<sup>2</sup> Last but not the least, in the first hours of 2017, mass shootings took place in one of the most popular night clubs of Istanbul while both foreigners and locals were celebrating the New Year's Eve<sup>3</sup>.

Potential tourists hesitate to travel to conflict regions even when tourists are not directly targeted in previous acts of violence in those destinations (Sönmez & Graefe,

<sup>&</sup>lt;sup>1</sup> http://www.bbc.com/news/world-europe-34818994

<sup>&</sup>lt;sup>2</sup> http://www.bbc.com/news/world-europe-35869985

<sup>&</sup>lt;sup>3</sup> http://edition.cnn.com/2017/01/01/europe/turkey-nightclub-attack/index.html

1998). However, some countries' tourism sector stays resilient even after terrorist attacks, and tourists continue to visit those terrorism-affected destinations (Korstanje & Clayton, 2012). As countries' vulnerability to terrorism differs, reactions of tourists from different countries to terrorism differ as well (Fielding & Shortland, 2008, 2011; Reisinger & Mavondo, 2006; Tremblay, 1989).

Which characteristics of countries do make their citizens more sensitive to forms of political violence compared to others? Previous research has revealed that tourists from countries with lower levels of economic development and higher crime rates are less likely to cancel their travel plans to violent destinations (Fielding & Shortland, 2008). In addition to these socio-economic factors, motivations behind the travel plan also affects the likelihood of hesitating to visit risky destinations. Tourists who choose a specific destination for its cultural attractions are less likely to deter from their decisions than tourists who are in search of snow-capped mountains or sunny beaches (Neumayer, 2004). Moreover, media coverage is effective in manipulating tourists' decision-making process (Korstanje & Clayton, 2012). The extent of terrorism-related media reports might have an impact on potential tourists' perceptions of specific destinations. Lastly, being accustomed to the presence of armed security forces on streets and lax gun laws make individuals less risk averse (Fielding & Shortland, 2008, 2011). In a nutshell, a high level of exposure to violence, or the threat of violence, leads to a reduced response to violence.

In this thesis, I argue that reactions of tourists to terrorism vary depending on their levels of exposure to terrorist attacks in their home countries. Based on this insight, I propose that if a country is more likely to suffer from terrorist threats, then its citizens will be more likely to ignore terrorism risk of their potential destinations, and they will not change or cancel their travel plans. I also investigate, when they are analyzed together, which other factors can change the negative effect of terrorism such as economic growth, the uniqueness of a destination, and the intensity level of civil war. Previous studies on the reactions of tourists of different nationalities towards terrorism do not go beyond comparing American and European tourists or studying with specific cases rather than cross-country sample. In this thesis, to test my hypotheses, I conduct a series of analysis on how tourist arrivals change according to different characteristics of 168 destination and 178 origin countries between 1995 and 2014.

My main finding is that, consistent with the previous literature, terrorism in a destination country negatively affects inbound tourist flows. Moreover, I present some evidence which shows that being exposed to terrorism in an origin country decreases potential tourists' sensitivity to terrorism. Surprisingly, I find that the terrorist incidents that happened one or two years ago in a destination country do not have a negative effect on contemporary tourist arrivals. Furthermore, I find that tourists from richer countries are more sensitive to terrorist attacks and terrorism creates more damage for tourism sector when it is surrounded by civil wars.

The remainder of this thesis is organized as follows. The next section presents a brief review of the relevant literature and positionality of this thesis within it. Thereafter, I outline my theoretical argumentation and my key predictions. Chapter four describes the data sources, measurements, and my statistical model. The subsequent chapter introduces the main results of my analysis. The final chapter discusses some implications for further studies and concludes.

#### PREVIOUS LITERATURE ON TERRORISM

This thesis contributes to the literature on the aftermath of terrorism and the literature on the political economy of conflict by standing at the intersection of these two fields.

Terrorism is defined as the deliberate use or threat to use violence by a subnational or a non-state entity with the purpose of challenging the political authority (Hoffman, 2006; Ruby, 2002b; Sandler & Enders, 2008). Terrorists intend to create as many casualties as possible to threaten the stability and peace and to evoke a state of fear, anger and despair among society beyond their immediate victims (Arce & Sandler, 2005; Fiala, 2002; Hoffman, 2006; Korstanje & Clayton, 2012; Kydd & Walter, 2006; Sandler, 2014; Sandler & Lapan, 1988). Although various definitions of terrorism exist in the literature, the definition above is important in several ways. First, governments' any act of violence is excluded from the scope of this definition because it emphasizes that terrorist attacks need to be carried out by sub-national or non-state groups. Secondly, the definition requires that an attack must have political objectives to be labeled as a terrorist incident. Lastly, although terrorists' ultimate target is a political authority, they victimize and terrorize a wider population.

In the literature, scholars have underlined various factors which motivate individuals to carry out acts of terrorism. Psychological approach focuses on personal characteristics which lead individuals to take part in terrorist activities. Early studies in line with this approach treat terrorists as mentally ill individuals (Kaplan, 1981; Post, 1984, 1990; Ruby, 2002a; Victoroff, 2005). These studies are based on individual levels of analysis and they are far from providing comprehensive explanations for political, ideological, economic, and social motivations behind terrorist acts.

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Rational choice theory proposes that individuals take their decisions based on the assessment of expected benefits and costs of each action and they seek to maximize their utility (Verba, 1961). Rational explanations of terrorism assume that terrorists are well-functioning people rather than deranged or fanatic people who use violence for the sake of violence (Crenshaw, 1981; Sandler & Enders, 2004; Sandler & Lapan, 1988; Wilson, 2000). Therefore, terrorist acts are rooted from calculated and conscious decisions among non-violent and violent options.

The goal of terrorist attacks is crucial for every terrorism study because the success of any terrorist activity or organization is defined according to their initial goal. Based on rational calculation, by considering potential costs, terrorists resort to violence to achieve social or political benefits. Terrorists might aim at various ends but it is useful to categorize their objectives as short term and long term objectives (Neumayer & Plümper, 2016). Terrorists intend to reach political ends such as regime change, territorial change, policy change, social control, or status quo maintenance in the long run (Kydd & Walter, 2006) but they rarely reach their ultimate goals (Abrahms, 2008; Neumayer & Plümper, 2016). Even when they are aware of the fact that the government will not concede their demands easily, terrorists keep operating to reach their main short term objectives: to increase their power by recruiting new terrorists, training their members, gaining financial support, and attracting media attention and to decrease their opponents' power by killing or taking hostage well-known representatives from the government or the military, damaging infrastructural investments, and reducing the financial capabilities of the government (Neumayer & Plümper, 2016). These short term objectives are essential for the survival of organization and to keep its supporters loyal while deterring its rivals.

Moreover, terrorists keep operating although the chance of reaching their ultimate goals is low, because terrorist attacks provide them an environment to disseminate their ideologies, political messages and demands among wider audience (Arce & Sandler, 2005; Kydd & Walter, 2006; Sandler & Lapan, 1988). By doing this, terrorists also show the people the inadequacy of governments to protect its citizens. In other words, terrorists use political violence as a tool for political communication with wider public and ultimately, with political authority. By terrorizing individuals, they aim to create a social and political

atmosphere in which they can force governments to make concessions to their demands (Arce & Sandler, 2005; Korstanje & Clayton, 2012).

An extensive literature exists on the aftermath of terrorism. Terrorism creates serious political, social or economic consequences for both individuals and countries and these consequences are highly related to each other. Political consequences, for instance, are not independent from economic consequences. Terrorism can cause economic costs for a targeted country through various ways (S. Brock Blomberg, Hess, & Orphanides, 2004; Llorca-Vivero, 2008). With the theory of Complex Interdependence, Keohane and Nye (1987) assert that in the era of interdependence, the nature of international relations has been changed and world has become more interdependent in all respects particularly in economic activities. In their theory, the existence of transnational relations and societal interdependence make countries more "sensitive" and "vulnerable" to one another. Terrorist incidents lead to economic consequences in macroeconomic level by reducing foreign direct investment, destroying infrastructural investments, shifting public investment funds to security-related areas, or decreasing the level of international trade volume (Sandler & Enders, 2008). Even in countries which protect their overall economic growth against terrorist attacks, microeconomic costs might be indispensable for some specific sectors such as tourism, international trade, and financial sectors (Llorca-Vivero, 2008; Sandler & Enders, 2004, 2008).

Literature on the relationship between terrorism and tourism sector is expanding because tourists are often targeted by terrorists. Neumayer and Plümper (2016) differentiate hard targets and soft targets of terrorist acts. Attacking hard targets such as government buildings or military officials can create greater influence on both supporters and rivals of the terrorist organization, because attacking them requires well-planned strategies and high capability. However, attacking soft targets such as tourist hotels or tourist attractions are possible without onerous preparation or resource. Beyond being an easy target, tourists are attacked by terrorists because terrorism and tourism represent two conflicting world views. Tourism requires freedom to travel, mobility and consumption while terrorists often perceive these aspects as corrupt and immoral (Korstanje & Clayton, 2012). Tourist flows

also lead to the interaction and exchange of foreign cultures which are not welcomed by terrorists.

The study of the relationship between political violence and tourism has drawn attention of scholars from different disciplines such as travel scholars, economists, psychologists, and also political scientists. Political science focuses on the positive relation of tourism and peace. In the literature two groups of study exist. One group emphasizes that tourism plays a mediator role for peace by opening communication channels between countries and abating negative perceptions of tourists towards the host country by looking at particular cases (Anson, 1999; Chen, 2010; Cho, 2007). Contrary to those scholars who show tourism as a ground for peace, Litvin (1998) gives an important contribution to empirical studies on the link between terrorism and tourism by questioning whether a causal link between tourism and peace exists or not. Many studies, in line with Litvin (1998), have speculated that tourism is a beneficiary of peace rather than its driver, so scholars heavily agreed on a unidirectional relationship from terrorism to tourism (Llorca-Vivero, 2008; Pratt & Liu, 2016; Raza & Jawaid, 2013).

Previous literature has extensively covered the negative impact of terrorist activities on tourist flows to travel destinations suffering from political violence or terrorist incidents (for reviews see Voltes-Dorta et al., 2015) except Wolff and Larsen (2014) who focus on the 2011 Oslo/Utøya mass killings. In one of the early studies on this subject, Enders and Sandler (1991) find a significant negative effect of terrorism on tourism in Spain between 1970 and 1988 by using monthly data. Moreover, Enders et al. (1992), employ a larger sample consisting of Western European countries for the period of 1974-1988, and show that tourists tend to eliminate their risk of being exposed to any terrorist attack and be flexible in their destination choices.

There is a group of studies which concerns differences among countries in terms of consequences of terrorist incidents on tourism. Saha and Yap (2013) come up with an interesting finding by comparing countries those have low to moderate and high level of political risk, and show that terrorist attacks increase tourism demand in low to moderate political risk countries while it has negative effect in high-risk countries. Socio-economic factors also affect the scope of vulnerability of countries toward terrorism. According to

Pratt and Liu (2015), peace is more important to tourism in medium income destinations. Developed countries are more likely to minimize the negative effect of terrorist attacks and recover their economies than developing countries (S. Brock Blomberg et al., 2004; Sandler & Enders, 2008; Tavares, 2004). Countries with diversified economic activities are capable to redistribute their resources and divert their focus from vulnerable sectors to safer sectors (Sandler & Enders, 2008). Moreover, Drakos and Kutan (2003) posit that tourist arrivals in Turkey and Israel are more sensitive to terrorism than Greece. The extent of countries' vulnerability against negative economic consequences of terrorism depends not only on their economic structure and potential, but also their institutional structure and the level of democracy. The economic damage of terrorism on less democratic countries are more severe (Tavares, 2004). On the other hand, the level of democracy is also associated with the number of terrorist attacks. Some studies claim that the more democratic a country is, the fewer terrorist attacks it experiences (S Brock Blomberg & Rosendorff, 2006; Li, 2005; Rodrik, 1997) while according to Abadie (2006), if a country is in a transitional period between democratic and authoritarian regimes it is more vulnerable to terrorism.

Although recent studies have accepted heterogeneity of countries regarding the extent they are affected from terrorist attacks, a common limitation of these studies is the fact that they assume international tourists as a homogeneous group in terms of their choices and behaviors. Moreover, most studies present country-specific analysis rather than cross-country. It could be argued that Tremblay (1989) and Fielding and Shortland (2011) are among rare studies which differentiate aggregated tourist flows; they compare American and European tourists. Contrary to the findings of Tremblay (1989) which show that Americans are more sensitive to terrorism than Europeans, Fielding and Shortland (2011) find that American tourists showed less sensitivity to political violence in Egypt during 1990s than their European counterparts. Tourists of different nationalities are not homogenous in terms of their reactions to terrorism. Fielding and Shortland (2008) examine cross-sectional asymmetries in terms of reactions of tourists of different nationalities to violence in one destination which is Israel after the outbreak of Palestinian uprising *Intifada* in 2000. Additionally, Reisinger and Mavondo (2006) gathered data from 830 participants with their structured questionnaire and conclude that tourists from the United States, Hong

Kong and Australia feel more threatened and vulnerable and hesitate more to travel than tourists from the United Kingdom, Canada and Greece. Because of the given limitation in the literature, this research will explore to what extent tourists' attitudes toward terrorist incidents vary depending on their country of origin with a more comprehensive dataset.

#### THEORETICAL LINKAGE BETWEEN TERRORISM AND TOURISM

Choice is characterized by conflict, uncertainty, risk, and decision-making process. In tourism context, travelers decide to travel to a specific destination among a set of available alternatives and the consequences of their travel decisions involve uncertainty. Potential tourists might associate perceived risk with some destinations and their decisions might include risky alternatives (Sönmez & Graefe, 1998).

Tourists' perceptions of risk and their attitudes toward risky destinations are highly affected by variety of external and internal factors (Baker, 2014; Sönmez & Graefe, 1998). The number of terrorist attacks, the level of casualty resulting from these attacks, media coverage about terrorist threat, the reports of government issued travel advisories, and recovery campaigns of government or tourism organizations influence the image of touristic destinations. In addition, internal factors such as individuals' levels of risk aversion, levels of knowledge about different types of risk, and demographic characteristics including age, social status, nationality, gender, income and the level of education as well as their international tourism experiences are related to tourists' travel decisions. Higher perceived risk and negative images about a destination might lead tourists to change or cancel their travel plans, or to neither return to the destination nor recommend the destination to other people (George, 2003). The recovery of tourism demand is only possible when the negative image is removed from people's minds (Neumayer, 2004). This is because the typical modern tourist seeks relaxation and will try to eliminate all factors which could undermine their pleasure of the travel (Fielding & Shortland, 2011).

Because of given external and internal factors, people may perceive the same risk in different ways. Similarly, in international tourism, tourists' risk and safety perceptions are

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highly related to their cultural, religious and political backgrounds so "travelers of different nationalities may perceive the same risk differently" (Reisinger & Mavondo, 2006:16). Moreover, the levels of risk aversion of tourists vary significantly across countries depending on whether they are exposed to terrorism in their home countries (Yaya, 2009). Target groups of sustained terrorist attacks in travel destination or the type of attacks employed by terrorists also influence the perceived terrorism risk (Baker, 2014). Fielding and Shortland (2011) indicate that Americans are less sensitive to political violence and terrorism compared to European tourists and this might be because they are exposed to intercommunity tension, high crime rate, and intensive media coverage of terrorism and gun laws more often. As a result, they become more confident about being able to avoid potentially dangerous situations. In the light of these arguments, I reached the following hypothesis:

*Hypothesis 1:* Tourists from countries which are exposed to terrorist attacks are less sensitive to terrorist attacks in their destination countries.

Nevertheless, the discussion about how tourists reshape their travel choices in the same region revolve around two main arguments. Firstly, the argument of generalization effect or spill-over effect proposes that tourists generalize the risk of terrorism to the whole region; therefore, they hesitate to travel to any country in that region (Sönmez, 1998; Drakos & Kutan, 2003; Neumayer, 2004). Generalization effect is not only valid for countries which have geographical proximity but also for all sufficiently similar countries where tourists have been targeted by terrorists. Moreover, it does not have to be that only tourists of the same nationalities with the groups that has been targeted by terrorist attacks hesitate to travel but tourists who have sufficiently similar nationalities in terms of countries' political regimes, ideologies or religions also hesitate to travel to terrorism affected destinations (Neumayer & Plümper, 2016). In other words, countries within conflicts region might suffer from negative externality of political violence.

Secondly, the argument of substitutability effect claims that if any terrorist activity occurs in a travel destination, tourists look for a substitution of that destination with another one perceived as safer (Drakos & Kutan, 2003; Fielding & Shortland, 2011; Neumayer, 2004). Some countries might have benefitted from the positive externality of political violence by presenting themselves as a safer destination than other alternatives in the

region. Being in the same geographical region does not necessarily mean being a substitute country; each country might have its unique attractions that are more difficult to be substituted. Although Neumayer (2004) indicates that even when a destination country hosts highly unique and popular attractions, attacks on tourists can substantially hurt a country's tourism industry as Egypt experienced in the 1990s, countries' unique cultural or historical attractions are also an important factor for tourists' destination choices (Fielding & Shortland, 2011). Therefore, I reach my first hypothesis:

*Hypothesis 2:* Tourists are less sensitive to terrorist attacks in their destination countries if the level of cultural, historical or natural uniqueness is high in those countries.

The vulnerability of countries towards terrorist attacks varies based on their economic structures and performances as it is discussed above. There may also be a connection between tourists' attitudes to risk and the level of economic development of their origin country because international travel requires spare time and enough financial resource for individuals. It might be even more expensive since travel costs change by the fluctuations in countries' exchange rates (Saha & Yap, 2013). Therefore, tourists of poorer countries are considerably rich compared to their fellow citizens. Because of their relative wealth, they may have more experience of being a potential criminal target and may be familiar with dealing with security challenges (Fielding & Shortland, 2008). In order to test given argument, I expect to find support for the following hypothesis:

*Hypothesis 3:* Tourists from countries with lower GDP per capita are less sensitive to terrorist attacks in their destination countries.

Terrorism and civil war are overlapping concepts to some extent although it is not possible to claim that all terrorist incidents are related to civil wars or vice versa (Findley & Young, 2012). They both damage tourism sector by creating uncertainity and threat of violence (Sönmez, 1998). The literature on political violence is mostly based on studies which examine one forms of violence rather than the joint effect of different political violence forms (Findley & Young, 2012). However, different forms of violence cause different levels of damage for countries' well-being. For example, the negative effect of wars and coups on tourism are greater than the effect of one-off terrorist incidents (Saha & Yap, 2013; Spilerman & Stecklov, 2009). Also, according to the WTTC press release (2015), countries' tourism sector recovers in 13 months, on average, after terrorist attacks while an average recovery time after political turmoils is 26.7 months.<sup>4</sup> Terrorist attacks surrounded by sustained civil wars might create worse consequences for tourism industry. Since the level of civil war intensity is a significant factor both for terrorism and tourism, it is important to examine the interaction between civil war and terrorism on tourism demand. Therefore, I form these two hypotheses:

*Hypothesis 4:* Tourists are more sensitive to terrorist attacks if the level of civil war intensity is high in their destination countries.

 $<sup>^{4} \</sup>quad http://www.telegraph.co.uk/travel/destinations/europe/france/paris/articles/13-months-how-long-it-will-take-Paris-to-recover/$ 

#### **RESEARCH DESIGN**

In this chapter, I describe the operationalization and the sources of my variables. My unit of analysis is a dyad-year between 1995 and 2014. Each dyad consists of a destination country and a country of origin for tourists. Overall, my sample includes 14630 dyads made up of 168 destination countries and 178 countries of origin.

My dependent variable is the annual number of tourist arrivals in a country, broken down by tourists' country of origin. The data on international inbound tourists comes from the United Nations World Tourism Organisation (UNWTO) (2015). UNWTO excludes seasonal and other short-term workers, and also long-term students from its *Arrivals* data. This strengthens our analysis because people who are forced to arrive in a destination because of their occupation or education rather than their pure pursuit of pleasure are not taken into account. UNWTO collects data from different sources of countries: border statisticts, border surveys and registration at accomodation establishments.<sup>5</sup> Not every country measures the total number of inbound tourists in the same way, therefore, the dataset lacks one consistent measurement method for tourist arrivals for all countries. UNWTO divides the ways that countries provide their tourism records into 12 different categories. It is worth to note that UNWTO differentiates "tourists" from "visitors". Being a "tourist" requires overnight stay in a destination while "same-day visitor" means excursionists.

Table 1 explains how different types of measurement of tourist arrivals are operationalized, whereas Table 2 shows their frequency in the whole dataset. Throughout the analysis in this thesis, I used Arrival 1 to Arrival 4 as my main dependent variables because they include more than the half of the observations in the dataset. In addition, I believe these 4

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<sup>&</sup>lt;sup>5</sup> World Tourism Organization (2015), Methodological Notes to the Tourism Statistics Database, 2015 Edition, UNWTO, Madrid. Retrieved from http://statistics.unwto.org/content/compendium-tourism-statistics (accessed May 26, 2017).

types of arrival measurement are more powerful in terms of representativeness and diversity of observations. Figure 1 presents how many geographical regions are included in each type of arrival measurement and shows that Arrival 1-4 represent not only the highest number of observations but also observations from the highest number of regions. I used the classification of regions of the Global Terrorism Database (GTD) where my data on terrorism is based on. GTD codes 12 different geographical regions.

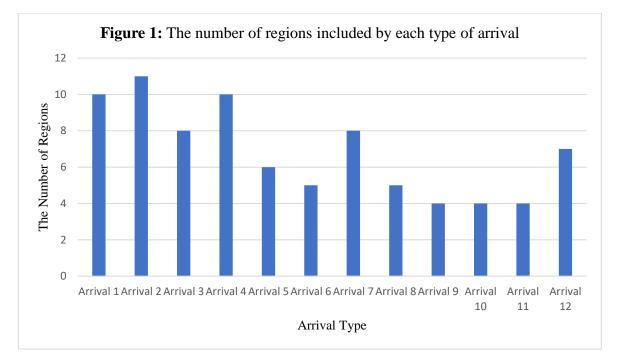
Since tourists' destination choices are based on their perceptions of the image of country and their travel experiences, the volume of inbound tourism would be an outcome of the factors from previous years. I control for the lagged versions of my socio-economic explanatory variables. Most tourism activities are arranged by early booking so the lag effect is important when the dependent variable is tourist arrivals (Yaya, 2009). Furthermore, my dependent variable *Tourist Arrivals* is highly affected by tourism demand in the previous year (Garín Muñoz, 2007). It assumed that, by including the lag of dependent variable as well, the effect of previous year's tourism demand on current tourist flows is captured. I also include *Year* and *Region* dummy variables to minimize the possible effect of some specific years and regions on the analysis.

Variable	Operationalization
Arrival 1	Arrivals of non-resident tourists at national borders, by nationality
Arrival 2	Arrivals of non-resident tourists at national borders, by country of residence
Arrival 3	Arrivals of non-resident visitors at national borders, by nationality
Arrival 4	Arrivals of non-resident visitors at national borders, by country of residence
Arrival 5	Arrivals of non-resident tourists in hotels and similar establishments, by nationality
Arrival 6	Arrivals of non-resident tourists in hotels and similar establishments, by country of residence
Arrival 7	Overnight stays of non-resident tourists in hotels and similar establishments, by nationality
Arrival 8	Overnight stays of non-resident tourists in hotels and similar establishments, by country of residence
Arrival 9	Arrivals of non-resident tourists in all types of accommodation establishments, by nationality
Arrival 10	Arrivals of non-resident tourists in all types of accommodation establishments, by country of residence
Arrival 11	Overnight stays of non-resident tourists in all types of accommodation establishments,
	by nationality
Arrival 12	Overnight stays of non-resident tourists in all types of accommodation establishments,
	by country of residence

 Table 1: Operationalization of dependent variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
Arrival 1	50555	6.688701	3.235796	.6931472	16.97901
Arrival 2	59656	6.873695	3.223952	.6931472	16.97901
Arrival 3	43548	7.510087	3.1792	.6931472	17.80056
Arrival 4	39322	7.042038	3.135012	.6931472	17.61392
Arrival 5	10559	9.499986	2.320945	.6931472	15.78012
Arrival 6	20088	8.881903	3.1188	.6931472	16.02034
Arrival 7	13686	10.55435	2.416668	.6931472	17.36906
Arrival 8	21275	9.60873	3.200435	.6931472	17.77378
Arrival 9	8829	9.54519	2.289352	1.791759	16.16988
Arrival 10	22365	8.267845	3.254667	.6931472	16.30042
Arrival 11	8905	10.6433	2.415381	1.94591	17.79868
Arrival 12	27492	9.472901	3.638098	.6931472	18.54689

Table 2: Frequency of dependent variables



My data on terrorist attacks in destination and origin countries comes from the Global Terrorism Database (GTD). The GTD conceptualizes a terrorist attack as "the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation".<sup>6</sup> My two main variables of terrorism are the annual number of terrorist attacks and the annual number of people killed because of terrorist attacks. In addition, I create two additional sets of ordinal measures to

<sup>&</sup>lt;sup>6</sup> National Consortium for the Study of Terrorism and Responses to Terrorism (START). (2016). Global Terrorism Database [Data file]. Retrieved from https://www.start.umd.edu/gtd (accessed May 26, 2017).

depict the relative severity level of terrorist attacks in a given year: *Target Severity* and *Attack Severity*. GTD identifies 22 different categories for the type of target that terrorists attack and 9 different categories for the method of attack that terrorists use. Following Conrad and Greene (2015), I collapse the nominal scale into an ordinal scale in which a value of "1" indicates the lowest level of severity while a value of "3" indicates the highest level of severity. <sup>7</sup> Since each country might experience multiple terrorist attacks in a year and these attacks might have different levels of severity, I code the highest level of severity that a state experienced in a given year. If a country does not experience any attack in a given year, these two variables are coded as "0".

I include a number of destination country- and country of origin-specific control variables that may influence the total number of tourist arrivals and the likelihood of terrorist attacks. I control for the level of attractiveness of a destination country to capture its uniqueness for potential tourists. I operationalize attractiveness of a country by coding its total number of both cultural and natural sites which are placed in the UNESCO's World Heritage List because "world heritage in a country increases demand for travel to the destination" (Saha & Yap, 2013, p.6). Geographical proximity is highly related to the interaction among states such as trade by providing opportunities or reducing costs (Gleditsch & Ward, 2001). My variable on geographical proximity is based on Gleditsch and Ward's Distance between Capital Cities Data.

To account for potential economic determinants of tourism sector, political violence, and the dyadic flow of goods and services, I incorporate the natural log of the GDP per capita in constant USD and the population size of both destination and sender country in each year, taken from World Bank. I also control for the natural log of the real exchange rate which measures national currency units per US dollar that are adjusted by purchasing power parity (PPP) over GDP and it is obtained from Penn World (Feenstra, Inklaar, & Timmer, 2015). It is a proxy for tourism prices which captures the relative prices between destination country and country of origin (Saha and Yap, 2013, p.5).

<sup>&</sup>lt;sup>7</sup> The *Target Severity* variable equals '1' if the attack is against telecommunications, transportation, airports, maritime infrastructure, food or water sources, and utilities. I code an attack as a '2' if it is against police, military, government personnel, other terrorists or violent political parties. At the highest level of severity, '3,' I include attacks against all civilians. All attacks listed as "Other" in the GTD data are coded as missing. Two other categories were also coded as missing, "religious" and "abortion," because the categorization of these two was less straightforward. The *Attack Severity* variable equals '1' if the attack is against infrastructure and unarmed assaults. Attacks are coded as '2' if they involve hostage takings or hijackings. Final category, coded as a '3,' includes armed assaults and bombings.

I include both destination and sender country's overall level of democracy using the Polity2 variable from the Polity IV dataset (Marshall et al., 2002) because countries with a higher level of political and economic freedom are expected to have a higher number of tourist arrivals. People whose personel freedom is violated in their origin country might seek for more personal freedom through travelling. On the other hand, tourists coming from countries which respect personal freedom are more likely to wait same attitude in the countries they travel (Saha, Su, & Campbell, 2016). In addition, more economic freedom increases the competitiveness of tourism sector in a country which might lead to higher quality service for tourists (Das & DiRienzo, 2008). The ordinal measure of democracy ranges from -10 to 10 where higher value indicates more democratic state institutions. For this study, dichotomous variable, *Democracy*, is coded as 1 if a country's Polity2 score is higher than 5 and 0 otherwise.

In order to isolate my measures of terrorism from any effect from armed civil conflicts, I include an *Civil War Intensity* variable which measures the ordinal intensity of armed conflict in a country based on the UCDP/PRIO Armed Conflict Dataset. The variable ranges from 0 to 2 where "1" represents "minor conflicts" with 25 to 999 battle-related deaths and "2" represents "wars" with at least at least 1,000 battle-related deaths in a given year.<sup>8</sup>

To identify dyads that includes countries which have poor relations with each other, I use the measure of UN General Assembly voting similarity from Voeten et al. In the given dataset, ideal point is the mean estimate of a country ideal point. *Political Proximity* variable represents absolute distance between two countries posterior mean ideal point estimates.

To examine my hypotheses, this thesis uses the linear regression model and the interaction effect technique to determine the combined effect of terrorism in destination and origin countries and also the combined effect of terrorism and some socio-economic and political characteristics of countries. Interaction effects measure the joint effects of independent variables on a dependent variable rather than focusing on the effects of a single independent variable, and the effect of one variable is interpreted depending on the effect of another variable. (Aiken, West, & Reno, 1991; Braumoeller, 2004; McClelland & Judd, 1993; Saha & Yap, 2013). While most empirical studies confirm that terrorism in a destination country itself reduce tourism demand, the joint effect of terrorism with some specific

<sup>&</sup>lt;sup>8</sup> UCDP/PRIO Armed Conflict Dataset Codebook. Version 4-2016.

characteristics of tourists' origin countries are overlooked by scholars. Therefore, in this thesis, I examine the combined effects of terrorism with some control variables as well as their individual effects.

#### RESULTS

All models include region and year dummies and the full list of destination countryand country of origin-specific control variables. Standard errors are clustered at the dyadlevel. In all tables below, Models 1 through 4 include the same set of control variables, but the key dependent variable differs in each case (*Arrival 1* through *Arrival 4*). Logarithmic transformations of my main independent (the number of terrorist attacks and terrorismrelated deaths) and dependent variables (tourist arrivals) and also socio-economic control variables (population, GDP per capita and cuurency exchange rate) are used to ensure that the variables are approximately symmetrically distributed.

Table 3 shows the regression results that were conducted to analyze the relationships between the logged number of tourist arrivals in a destination country and the logged number of terrorist attacks in both destination and origin countries. When we consider all 4 models, unsurprisingly, the number of terrorist attacks in a destination country is negatively related to the number of tourist arrivals in all statistically significant specifications. Coefficient for the number of terrorist attacks in an origin country is also negative in all models, but not consistently significant. This suggests that the number of terrorist attacks in tourists' country of origin by itself does not affect the level of tourist arrivals in a destination country. In models which my main independent variable is the number of terrorist attacks, Hypothesis 1 is not supported.

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	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Terrorist Attacks (destination)	-0.00877**	-0.00146	$-0.0105^{**}$	0.00504
	(0.00263)	(0.00219)	(0.00238)	(0.00486)
Terrorist Attacks (origin)	-0.00235	-0.00238	-0.000148	-0.00424*
,	(0.00246)	(0.00217)	(0.00206)	(0.00242)
Attacks(dest.) x Attacks (origin)	0.000885	-0.000360	0.000462	-0.00153
	(0.000755)	(0.000804)	(0.000863)	(0.00180)
N	41168	47707	34663	30370
C.1	0.966	0.970	0.977	0.966

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Table 3: Impact of the Number of Terrorist Attacks on Tourist Arrivals
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Table 4 presents the regression results of models which my main independent variable is the logged number of terrorism-related killings in a given year. As expected, terrorism-related killings in both destination and origin countries has a negative effect on tourist flows in all models. Consistent with my hypothesis, the interaction between the number of terrorism-related killings in destination and origin countries has a positive and significant effect on the number of tourist arrivals in Model 1. It is important to note that these results are more robust if the total numbers of terrorism-related death are considered as a proxy to measure the effect of terrorism rather than the total numbers of terrorist attacks.

My estimation results which main independent variables are attack severity and target severity are presented in Table 5 and 6. In all models, my estimates suggest that higher levels of both target and attack severities in an origin country is associated with lower level of tourist arrivals in a destination while severity levels do not provide consistent results. Similar to the results which are shown in Table 4, only in models which tourist arrival is calculated as the total number of non-resident tourists at national borders by their nationality (*Arrival 1*), the interaction between target severity in destination and origin countries and also the interaction between attack severity in destination and origin countries are positively and significantly related to the tourist arrivals. This provides support for *Hypothesis 1* by showing that when the severity levels of terrorism in both destination and origin are consistent for both *Attack Severity* and *Target Severity* independent variables.

Table 4: Impact of the Deadliness of Terrorist Attacks on Tourist Arrivals	ttacks on Tourist A	Arrivals		
	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Number of Killings (destination)	$-0.00677^{**}$	-0.00293	$-0.0112^{**}$	0.000917
	(0.00211)	(0.00184)	(0.00209)	(0.00472)
Number of Killings (origin)	-0.00436**	-0.00432**	-0.00132	-0.00600**
	(0.00213)	(0.00184)	(0.00173)	(0.00204)
Killings (dest.) x Killings (origin)	$0.00161^{**}$	0.000400	0.000876	
	(0.000602)	(0.000686)	(0.000658)	(0.00186)
N	41168	47707	34663	
r2	0.966	0.970	0.977	
Dyad-clustered standard errors in parentheses. * p<0.1, ** p<0.05 Control variables are included in analysis but omitted from tables.	* p<0.05 n tables.			

Table 5: Impact of Attack Severity Levels of Terrorist Attacks on Tourist Arrivals	orist Attacks on T	ourist Arrivals		
	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Attack Severity (destination)	$-0.0125^{**}$	$0.0142^{**}$	-0.00198	$0.00954^{**}$
	(0.00361)	(0.00296)	(0.00304)	(0.00398)
Attack Severity (origin)	-0.0113**	-0.00603**	-0.00259	-0.00814**
	(0.00322)	(0.00263)	(0.00266)	(0.00304)
Attack Sev. (dest.) x Attack Sev. (origin)	$0.00371^{**}$	0.00129	0.000851	0.00180
	(0.00131)	(0.00111)	(0.00110)	(0.00160)
N	41121	47666	34585	30336
r2	0.966	0.970	0.977	0.966
Dyad-clustered standard errors in parentheses. * $p < 0.1$ , ** $p < 0.05$	<0.05			

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Table 6: Impact of Target Severity Levels of Terrorist Attacks on Tourist Arrivals	rrorist Attacks on	<b>Tourist Arrivals</b>		
	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Target Severity (destination)	$-0.00947^{**}$	$0.0145^{**}$	-0.00226	0.00133
	(0.00370)	(0.00327)	(0.00325)	(0.00398)
Target Severity (origin)	-0.0102**	-0.00284	-0.00273	-0.00737**
	(0.00325)	(0.00269)	(0.00276)	(0.00308)
Target Sev. (dest.) x Target Sev. (origin)	$0.00336^{**}$	0.000303	0.000819	0.00178
	(0.00135)	(0.00119)	(0.00116)	(0.00164)
N	40537	47134	34117	29770
r2	0.967	0.969	0.977	0.965
Dyad-clustered standard errors in parentheses. * p<0.1, ** p<0.05 Control variables are included in analysis but omitted from tables.	* p<0.05 n tables.			

My previous series of analysis assumes that tourist arrivals in a year are affected by terrorist incidents and their casualities which take place in the same year. I further test my hypothesis by looking at the effect of terrorist activities happened in last 2 years on current tourist arrivals. Table 7 shows the results which my main independent variable is the number of annual terrorist attacks, whereas Table 8 shows the results of the analysis which test the impact of the deadliness of terrorism. As it is shown on the results in Table 7 and 8, I find that terrorist attacks which took place in the previous year or two years ago does not negatively affect tourist arrivals in a current year and the direction of the relationship between terrorism and tourist changes compared to the model which contemporaneous variables are considered. While terrorism in a current year reduces tourist arrivals, incidents from past years encourage more tourists to visit attacked destinations. This positive effect conflicting with the literature might be because of the inquisitiveness of potential tourists (Saha & Yap, 2013).

Table 7. Independent variable Lagged	i by i and Z i	ears. Numbe	I OI TEHOIISI	Allacks
	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Terrorist Attacks (destination)	-0.0177**	-0.0332**	-0.0203**	-0.0123*
	(0.00545)	(0.00439)	(0.00459)	(0.00644)
L. Terrorist Attacks (destination)	-0.00194	0.0243**	0.0241**	0.0205**
	(0.00669)	(0.00599)	(0.00595)	(0.00711)
L2.Terrorist Attacks (destination)	$0.0178^{**}$	0.0162**	-0.00939**	0.0258**
	(0.00520)	(0.00534)	(0.00468)	(0.00648)
Terrorist Attacks (origin)	-0.0133**	0.00101	-0.00344	-0.00256
	(0.00497)	(0.00467)	(0.00412)	(0.00491)
L.Terrorist Attacks (origin)	0.00917	0.00170	0.00332	-0.00240
-	(0.00643)	(0.00614)	(0.00548)	(0.00665)
L2.Terrorist Attacks (origin)	0.00412	-0.00551	0.000252	0.00140
	(0.00558)	(0.00494)	(0.00447)	(0.00536)
Attacks(dest.) x Attacks (origin)	0.00294**	0.00144	0.00135	0.00192
	(0.00144)	(0.00135)	(0.00155)	(0.00216)
L.Attacks (dest.) x L.Attacks (origin)	-0.000466	-0.00106	-0.00334*	-0.00340
	(0.00194)	(0.00183)	(0.00193)	(0.00279)
L2.Attacks (dest.) x L2.Attacks (origin)	-0.00207	-0.00183	0.00318**	-0.00174
	(0.00162)	(0.00156)	(0.00156)	(0.00240)
N	39865	46323	33328	29454
r2	0.966	0.970	0.978	0.965

Table 7: Independent Variable Lagged by 1 and 2 Years: Number of Terrorist Attacks

Dyad-clustered standard errors in parentheses. \* p<0.1, \*\* p<0.05. Control variables are included in analysis but omitted from tables.

Table 8: Independent Variable Lagged by I and 2 Years: Deadliness of Terrorist Attacks					
	(1)	(2)	(3)	(4)	
	Arrival1	Arrival2	Arrival3	Arrival4	
Number of Killings (destination)	-0.0133**	-0.0177**	-0.0229**	-0.00367	
	(0.00344)	(0.00267)	(0.00297)	(0.00576)	
L.Killings (destination)	-0.00290	-0.00213	0.0177**	0.0121**	
	(0.00378)	(0.00269)	(0.00366)	(0.00603)	
L2.Killings (destination)	0.0201**	0.0246**	0.00382	0.00566	
	(0.00317)	(0.00279)	(0.00300)	(0.00555)	
Number of Killings (origin)	-0.00715*	-0.00166	-0.00177	-0.00565	
	(0.00373)	(0.00312)	(0.00293)	(0.00377)	
L.Killings (origin)	0.00328	0.000526	-0.00186	-0.00426	
	(0.00439)	(0.00365)	(0.00367)	(0.00458)	
L2.Killings (origin)	0.000958	-0.00296	0.00291	0.00475	
	(0.00385)	(0.00333)	(0.00284)	(0.00356)	
Killings (dest.) x Killings (origin)	0.00238**	0.00192**	0.00168	-0.000140	
	(0.000958)	(0.000955)	(0.00114)	(0.00220)	
L.Killings (dest.) x L.Killings (origin)	0.000796	-0.000192	-0.00210	0.00344	
	(0.00118)	(0.00104)	(0.00136)	(0.00228)	
L2.Killings (dest.) x L2.Killings (origin)	-0.00191*	-0.00302**	0.00162	-0.00436**	
	(0.00106)	(0.000999)	(0.00110)	(0.00215)	
N	39865	46323	33328	29454	
r2	0.966	0.970	0.978	0.965	

Table 8: Independent Variable Lagged by 1 and 2 Years: Deadliness of Terrorist Attacks

Dyad-clustered standard errors in parentheses. \* p<0.1, \*\* p<0.05. Control variables are included in analysis but omitted from tables. Drawing on the earlier literature, I attempt to analyze the interaction of terrorism in a destination country and several other factors such as the uniqueness of a destination, GDP per capita of an origin country, and civil war intensity levels of both destination and origin countries. Results of this investigation is shown in following Tables 9-14. The analysis of the interaction between terrorism and the level of uniqueness of destination does not provide consistent results. Some models show positive relationship between variables while others do not and this prevents us from making a strong claim about *Hypothesis 2*. However, other regression results of interaction terms present some interesting findings.

I also examine the reactions of tourists from countries that are associated with a high GDP per capita to terrorism. When an origin country has a good economic performance, its citizens show more sensitivity to terrorist threats. In other words, those tourists from countries with lower GDP per capita hesitate less to travel risky destinations. This result supports *Hypothesis 3* which claims that tourists from poor countries are less responsive to terrorism in their destinations.

In addition, interactions between *Attacks (dest.)* and *Civil War Intensity (dest.)* and also between *Killings (dest.)* and *Civil War Intensity (dest.)* show us if the level of civil war intensity and terrorism together increase, it is more likely that inbound tourist flows will decline. This result is in line with *Hypothesis 4* which assumes that terrorism creates more damage for tourism sector when it is accompanied by high level of civil conflict. Also it would be important to note that interactions between terrorism variables and the level of civil war intensity in an origin country have the opposite sign and they are rarely significant. This shows that the significant interaction between terrorism and the level of civil war intensity is specific to destination country.

	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Heritage (destination)	$0.00490^{**}$	0.000647	0.00661**	0.00345**
-	(0.000847)	(0.00105)	(0.000882)	(0.00169)
Terrorist Attacks (destination)	-0.00482*	-0.00363	-0.00567**	-0.00193
	(0.00252)	(0.00235)	(0.00284)	(0.00548)
Attack (dest.) x Heritage (dest.)	-0.000906**	0.000327	-0.000674**	0.00103**
_	(0.000326)	(0.000263)	(0.000231)	(0.000440)
N	41168	47707	34663	30370
r2	0.966	0.970	0.977	0.966

Table 9: Interaction of Attacks and the Level of Uniqueness in a Destination Country

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05 Control variables are included in analysis but omitted from tables.

Table 10: Interaction of Killings and the	Level of Uniqueness	in a	Destination Country

	(1)	(2)	(3)	(4)
	Arrival1	Arrival2	Arrival3	Arrival4
Heritage (destination)	$0.00282^{**}$	0.000611	$0.00572^{**}$	$0.00650^{**}$
	(0.000519)	(0.000694)	(0.000905)	(0.00120)
Killings (destination)	-0.00651**	-0.00646**	-0.00866**	-0.00178
	(0.00201)	(0.00211)	(0.00247)	(0.00506)
Killings (dest.) x Heritage (dest.)	0.00149**	$0.000772^{**}$	-0.000259	0.000424
	(0.000292)	(0.000173)	(0.000183)	(0.000374)
N	41168	47707	34663	30370
<u>r2</u>	0.966	0.970	0.977	0.966

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05 Control variables are included in analysis but omitted from tables.

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Table 11. Interaction of Attacks in a Destination with the ODT of an Origin Country					
	(1)	(2)	(3)	(4)	
	Arrival1	Arrival2	Arrival3	Arrival4	
GDP per capita (origin)	$0.0666^{**}$	$0.0587^{**}$	0.0366**	$0.0687^{**}$	
	(0.00413)	(0.00366)	(0.00299)	(0.00496)	
Terrorist Attacks (destination)	0.0227**	0.000356	0.0118	0.0508**	
	(0.00776)	(0.00807)	(0.00851)	(0.0177)	
Attack (dest.) x GDP (origin)	-0.00336**	-0.000304	-0.00246**	-0.00544**	
	(0.000808)	(0.000859)	(0.000917)	(0.00193)	
N	41168	47707	34663	30370	
r2	0.966	0.970	0.977	0.966	

Table 11: Interaction of Attacks in a Destination with the GDP of an Origin Country

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05 Control variables are included in analysis but omitted from tables.

Table 12: Interaction of Killings in a Destination with the GDP of an Origin Country					
	(1)	(2)	(3)	(4)	
	Arrival1	Arrival2	Arrival3	Arrival4	
GDP per capita (origin)	$0.0660^{**}$	$0.0602^{**}$	0.0362**	0.0675**	
	(0.00405)	(0.00362)	(0.00294)	(0.00490)	
Killings (destination)	0.0227**	0.0110	0.00770	0.0527**	
	(0.00681)	(0.00750)	(0.00700)	(0.0190)	
Killings(dest.) x GDP (origin)	-0.00306**	-0.00157**	-0.00204**	-0.00603**	
	(0.000709)	(0.000796)	(0.000748)	(0.00206)	
Ν	41168	47707	34663	30370	
<u>r2</u>	0.966	0.970	0.977	0.966	

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05

Control variables are included in analysis but omitted from tables.

Table 15. Interactions of Attacks in a Destination with the Civil war intensity Level					
	(1)	(2)	(3)	(4)	
	Arrival1	Arrival2	Arrival3	Arrival4	
Terrorist Attacks (destination)	-0.00645**	$0.0282^{**}$	-0.00431	0.00715	
	(0.00311)	(0.00273)	(0.00288)	(0.00436)	
Civil War Intensity (destination)	0.0830**	0.122**	-0.0260	-0.0517*	
	(0.0151)	(0.0141)	(0.0183)	(0.0290)	
Civil War Intensity (origin)	-0.00479	-0.0254**	-0.00379	-0.00851	
	(0.00919)	(0.00808)	(0.00754)	(0.00866)	
Attack (dest.) x Civil War (dest.)	-0.0152**	-0.0522**	-0.00206	-0.00803	
	(0.00337)	(0.00383)	(0.00466)	(0.00646)	
Attack (dest.) x Civil War (origin)	0.00375	0.00499*	0.00398	-0.00224	
	(0.00294)	(0.00293)	(0.00346)	(0.00592)	
N	41168	47707	34663	30370	
r2	0.966	0.970	0.977	0.966	
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Table 13: Interactions of Attacks in a Destination with the Civil War Intensity Level

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05Control variables are included in analysis but omitted from tables.

(1)	(2)	(3)	(4)
Arrival1	Arrival2	Arrival3	Arrival4
-0.00418	$0.0304^{**}$	-0.00292	0.0104**
(0.00268)	(0.00321)	(0.00270)	(0.00459)
0.0966**	0.0330**	-0.000889	-0.0131
(0.0160)	(0.0102)	(0.0167)	(0.0264)
-0.00676	-0.0269**	-0.00358	-0.0132*
(0.00850)	(0.00749)	(0.00700)	(0.00777)
-0.0158**	-0.0310**	-0.00704**	-0.0341**
(0.00299)	(0.00270)	(0.00355)	(0.00797)
0.00495**	0.00725**	0.00378	0.00365
(0.00252)	(0.00269)	(0.00289)	(0.00640)
41168	47707	34663	30370
0.966	0.970	0.977	0.966
	(1) Arrival1 -0.00418 (0.00268) 0.0966** (0.0160) -0.00676 (0.00850) -0.0158** (0.00299) 0.00495** (0.00252) 41168	$\begin{array}{c ccccc} (1) & (2) \\ Arrival1 & Arrival2 \\ \hline -0.00418 & 0.0304^{**} \\ (0.00268) & (0.00321) \\ \hline 0.0966^{**} & 0.0330^{**} \\ (0.0160) & (0.0102) \\ \hline -0.00676 & -0.0269^{**} \\ (0.00850) & (0.00749) \\ \hline -0.0158^{**} & -0.0310^{**} \\ (0.00299) & (0.00270) \\ \hline 0.00495^{**} & 0.00725^{**} \\ (0.00252) & (0.00269) \\ \hline 41168 & 47707 \\ \end{array}$	Arrival1Arrival2Arrival3 $-0.00418$ $0.0304^{**}$ $-0.00292$ $(0.00268)$ $(0.00321)$ $(0.00270)$ $0.0966^{**}$ $0.0330^{**}$ $-0.000889$ $(0.0160)$ $(0.0102)$ $(0.0167)$ $-0.00676$ $-0.0269^{**}$ $-0.00358$ $(0.00850)$ $(0.00749)$ $(0.00700)$ $-0.0158^{**}$ $-0.0310^{**}$ $-0.00704^{**}$ $(0.00299)$ $(0.00725^{**})$ $0.00378$ $(0.00252)$ $(0.00269)$ $(0.00289)$ $41168$ $47707$ $34663$

Table 14: Interactions of Killings in a Destination with the Civil War Intensity Level

Dyad-clustered robust standard errors in parentheses. \* p<0.1, \*\* p<0.05

Control variables are included in analysis but omitted from tables.

## CONCLUSION

In this thesis, I investigate which factors make tourists more sensitive to terrorism in their potential destinations. I provide empirical evidence in support of the hypothesis which claims that being exposed to terrorism in an origin country makes tourists less sensitive to terrorism in their potential destinations. I show that when terrorism and the level of civil war intensity in a destination together increase, tourists are more likely to hesitate to travel there. I also show that tourists from richer countries are more sensitive to terrorist attacks.

I am aware the limitations of my divided dependent variable which makes the sample size of this thesis smaller. So that my results are not distorted by countries' diverse measurements of tourist arrivals, I run different regression analysis for each most common dependent variable (annual tourist arrivals). This limitation weakens the power of my analysis. Also it would be important to note that my results are not always consistent for different measurements of terrorism: the number of terrorist attacks, the number of terrorist attacks, the number of terrorist measurements, target severity or attack severity.

Another limitation of this study is the fact that some people cross borders as a tourist but they overstay even if their legal visas expire. In 2015, in the U.S. where visa requirements and controls are relatively strict, approximately 500,000 of more than 40 million visitors did not go back to their homelands.<sup>9</sup> It is estimated that 40 percent of the nearly 11 million illegal immigrants in the U.S. crossed borders legally with usually a tourist or business visa.<sup>10</sup> Moreover, according to Mosneaga's report (2013:2) "Moldovan labour migrants seek to minimize the risks of illegal migration and prefer legal methods of

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<sup>&</sup>lt;sup>9</sup> https://www.cfr.org/blog-post/visa-overstays-and-illegal-immigration-finally-some-real-numbers

<sup>&</sup>lt;sup>10</sup> http://www.politifact.com/punditfact/statements/2015/sep/08/jorge-ramos/ramos-40-undocumented-immigrants-comeair/

entry into the country of destination in the EU. Using tourism in the disguise, they provide means of legal entry into the EU for further illegal stay and illegal employment in the host country." The reactions of people who seek for immigration might be different than those who travel for enjoyment.

The policy implication of this study posits that if the contribution of tourism sector to overall economic growth of a country is high, that country needs to realize the negative effect of terrorism. Policy makers and tourism sector representatives should also take this negative effect into account while forecasting potential tourist volume and setting the agenda for next tourism seasons. Moreover, my findings reveal that tourists of different nationalities are not homogenous in terms of their decision-making process and reactions to terrorism. Therefore, after terrorist attacks, policy makers should consider their tourism volume with different countries and specify their prioritized countries as tourism partners. Then they can forecast possible tourist loss more effectively and plan recovery strategies according to the characteristics of tourist-sender countries.

Finally, with regard to future research, it would be interesting to see if tourists are more sensitive to terrorist attacks which tourists and tourist places are targeted because the literature has the lack of consensus on this relationship. Some scholars claim that tourists feel higher risk when terrorists target tourists, tourist locations, or modes of transportation (Sandler & Enders, 2008) while others assert that tourism sector is negatively affected by political violence even when tourists are not directly targeted (Sönmez, 1998). In addition, terrorist incidents in urban areas exceed those in rural areas (Drakos & Kutan, 2003). It would be an important contribution to the literature to analyze the effect of geographic location of attacks on tourists' choice on their travel destinations with a comprehensive cross-country dataset.

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