

## **Immigration, Terrorism, and The Economy**

### **Abstract**

In this paper, we look at the interaction of terrorism with the quality of life of immigrants (measured by the foreign-born unemployment rate and globalization level) for OECD countries, and its impact on GDP per capita and exports-to-GDP ratio. We find strong evidence that GDP per capita is adversely affected by domestic terrorism. The magnitude of this effect is also substantial: at the sample mean, a one-standard-deviation increase in the number of domestic incidents is found to decrease GDP per capita between 5.7% and 7.8% of the sample average depending on the specification used. We also find strong evidence that domestic terrorism increases the exports-to-GDP ratio, but transnational terrorism tends to decrease this ratio. These results contrast with previous research which finds that transnational terrorism primarily affects these economic indicators. We also find strong evidence that when we factor in the interaction of the foreign-born unemployment rate with either type of terrorism, an increase in the foreign-born unemployment rate decreases GDP per capita. Also, an increase in the foreign-born unemployment rate is found to increase the export-to-GDP ratio when we interact the unemployment rate with domestic terrorism.

**Keywords:** Terrorism; GDP per capita; Exports; Immigration; Globalization

## **1. Introduction**

In recent times, terrorism is one of the major areas of concern in western democracies. For example, according to a study by the Pew Research Center, “.....the share that sees defending against terrorism as a top priority has remained fairly steady: Around seven-in-ten Americans or more have cited it as a top priority in 17 surveys conducted by the Center since January 2002 (the first time the question was asked), when 83% of Americans cited it” (Gramlich 2018). Similarly, the results of a recent Eurobarometer survey indicated that “...Terrorism was ranked the number one concern in eight EU countries and was in the top two in every EU country except for Greece..” (Kroet 2016). The natural response of these countries is therefore to increase their expenditures on counterterrorism. Using data from the Office of Management and Budget, we find that the U.S. increased the share of expenditure on homeland security from 0.58% in 1990 to 1.15% in 2016. So ultimately how big is the impact of terrorism on the economy? We advance the research on this issue in this paper.

Prior research indicates that terrorism adversely affects the economy. Blomberg et al. (2004) find that terrorism hurts growth, but the magnitude of this effect is smaller than the effects of external wars or internal conflicts. Gaibullov and Sandler (2008) find that an increase of 1 transnational incident per million population reduces growth by 0.4%. The effect of domestic incidents is about half. Meierrieks and Gries (2013) find that terrorism adversely affects growth in the Granger sense. Gaibullov and Sandler (2019) find that the economic and financial ramifications of large-scale terrorist attacks are transitory. The impact on GDP per capita growth is minimal since most nations sustain insignificant terrorist attacks annually. The well-to-do diversified nations can absorb these attacks with little macroeconomic consequences; however,

those nations that are developing or plagued with terrorism are adversely impacted. Overall, most researchers find a negative effect of terrorism on growth.

There is another strand of research that examines the effect of terrorism on trade. Bandyopadhyay et al. (2018) find that overall trade, manufactured goods imports, and exports are generally negatively impacted by domestic and transnational terrorism. Further, they note insignificant marginal differential impacts between domestic and transnational terrorism. De Sousa et al. (2018) using a game-theoretic framework examine the influence of transnational terrorism's location on security and international trade. They find that the negative spillover effect on a country's trade is positively correlated to the proximity to the source of terrorism with distant countries benefitting from an increase in security through additional trading. In a test of the empirical validity of these implications, they note a partial negative impact of transnational terrorism on trade. They also validate the non-monotonic general equilibrium effect of neighbor terror on trade.

Most of the research assumes constant marginal effects of terrorism. We conjecture that the marginal impact varies depending upon local conditions, such as immigration. We model these non-linearities by considering the interaction of terrorism with the quality of life of immigrants captured by the foreign-born unemployment rate and globalization index.

Prior literature suggests that immigrants can be perpetrators as well as victims of terrorist attacks (Helbling and Meierrieks 2020, p. 4). A recent example of a case in which an immigrant was the perpetrator was the stabbing of Sir David Amess (a British Member of Parliament) in 2021 (Faulkner and Kleiderman 2021). A report from the U.S. White House (2018) describes that "... roughly three in four individuals convicted of international terrorism-related charges since September 11, 2001, were foreign-born."<sup>4</sup> According to a paper by the Center for Immigration

Studies, 104 Islamic terrorists entered the E.U. between 2014-18, and the vast majority of them stayed inside E.U. for a long time using the pretext of seeking asylum.<sup>5</sup> However, immigrants can be victims too. Indeed, McAlexander (2020) considers the evidence in Western Europe between 1980-2004 and finds that an increase in immigration is related to an increase in terrorism, primarily because immigrants are targets.

There can potentially be major economic impacts in either case. When immigrants act as perpetrators, the government of the host country is forced to divert more resources to counter-terrorism. Also, more terrorist attacks create business uncertainty. On the other hand, attacks on immigrants can also affect the economy. First, it can reduce immigration and that can lead to labor shortages. Second, it can discourage foreign direct investment. Finally, it can also discourage foreign tourists, which impacts countries with major tourism industry.

Therefore, while terrorism and immigration can individually affect the economy as is shown in prior literature (Bandyopadhyay et al., 2018; Ortega and Peri (2014), etc.), we hypothesize that they interact with each other. In that case, the net effect of terrorism will vary depending on certain attributes of immigration.

There are several important takeaways from this paper. First, we find that in OECD countries (which is our sample), GDP per capita is adversely affected by domestic terrorism but the impact of transnational terrorism on GDP is not clear. Second, we show that the exports-to-GDP ratio increases in response to domestic terrorism and decreases in response to transnational terrorism. Third, we show that an increase in the foreign-born unemployment rate in a given year adversely affects GDP per capita next year.

The structure of the paper is as follows: We review the literature in Section 2. We describe our data in Section 3. In Section 4, we discuss our econometric methodology. We present our findings in Section 5. Concluding remarks are in Section 6.

## **2. Literature Review**

We first discuss the definition of terrorism that we subscribe to in this study and highlight relevant literature. We follow Enders and Sandler's (2002) characterization of terrorism. They define it as “the premeditated or threatened use of extra-normal violence or force to obtain a political, religious, or ideological objective through the intimidation of a large audience”. We focus on both domestic and transnational terrorism<sup>6</sup> as these are markedly different forms of terrorist activity and thereby could have significantly different impacts on the economy. These differences are described in RAND (2013) and Li (2005). As per the former, domestic terrorism features violence against the civilian population or infrastructure of a nation often but not always by the nation’s citizenry either for intimidation purposes or to influence national policy. Transnational terrorism, on the other hand, features victims, perpetrators, targets, or institutions of another country (Li 2005). Further, these attacks could be initiated by foreign terrorists against a country’s domestic target, by domestic terrorists against a country’s foreign target, or by foreign terrorists against a country’s foreign target.

Given our primary hypotheses that the marginal impact of terrorism varies depending upon local conditions and that while terrorism and immigration can individually affect the economy they also interact with each other, we next devote our attention to extant literature on immigrant unemployment, tourism, and globalization.

### **2.1. Immigrant Unemployment**

In recent times, immigration is one of the most important issues in public discourse in many western democracies. Indeed the rise of many politicians such as President Trump in the U.S.A., Marie Le Pen in France, Geert Wilders of the Netherlands, etc. can be attributed to a large extent to their rhetoric against immigration.<sup>1</sup> Some common complaints against immigrants are that they deprive locals of jobs, strain public services, contribute to crime, and more seriously to terrorism. Public sentiment against immigration contributed to a large measure in the U.K.'s decision to pull out of the European Union (E.U.), popularly known as 'Brexit'. Arnorsson and Zoega (2018) examine the characteristics of regions whose residents mostly voted for Brexit. Two important characteristics relevant to our paper are that these are poor regions and have high rates of immigration.

Indeed, a common complaint against immigration is that it does not add any significant value to the economy. According to a British think tank Migration Watch, immigration into the U.K. did not have any significant positive impact on GDP per capita primarily because most of the immigrants were low-skilled workers.<sup>2</sup> According to Borjas (2013 and 2015), immigration increases U.S. GDP by 11% (around \$1.6 trillion) annually. However, almost all of the gains accrue to the immigrants themselves, and the gain to the native-born population is only around \$35 billion annually (equivalent to 0.2% of the GDP).<sup>3</sup> There is however research that finds large positive effects of immigration. For example, Jaumotte et. al (2016) find that the elasticity of GDP per capita concerning the share of migrants in the adult population is around 2. So overall there are divergent opinions about the relationship between immigration and GDP per capita.

There is also literature that investigates the relationship between immigrants and terrorism. Bandyopadhyay and Sandler (2014) find that if a developed nation brings in more skilled labor from a developing nation, these immigrants are gainfully employed with a better quality of life.

On the other hand, if skilled labor quotas are more stringent, this causes many to stay back with a lower standard of living. This could make them join terrorist groups that rely on such skilled labor to hit targets in the developed country. Restrictions on unskilled immigration lead to an opposite chain of events, where terrorism is focused on the host developing country. Specifically, an examination of the terror-supply elasticity showed that the relaxation of skilled labor quotas is particularly effective for skill-scarce developing countries that host terrorist groups.

Bove and Bohmelt (2016) find that immigration is unlikely to positively affect terrorism. They discover that more migration generally (that is, when immigration is not necessarily linked to terrorism in the migrants' countries of origin) into a country is associated with a lower level of terrorist attacks. Choi (2018 and 2019) empirically examines the effects of twelve restrictive policy alternatives that Western democracies employ for immigrant screening to thwart terrorism. The findings are mixed. On the one hand, terrorism is likely to decrease when a country imposes immigration restrictions based on skill or wealth, or if it offers immigrants limited legal rights that permit only restricted residence and designated employers. On the other hand, terrorism is expected to increase when states allow no special visas or procedures to recruit immigrants, or when states give workers citizenship only when they are born to a native parent. Therefore states should be selective in initiating and implementing new immigration reforms to deter terrorists.

There is prior literature (e.g., Bagchi and Paul (2018), Okafor and Piesse (2018), etc.) that shows that youth unemployment is one of the drivers of terrorism. In this paper, we extend the literature by considering the unemployment rate of another group viz. the immigrants. A country that is hostile towards immigrants is likely to severely restrict immigration, and also make it hard for them to prosper even after settling down in the host country. Gouda and Marktanner (2019) find that youth unemployment is one of the causes of the phenomenon of foreign fighters in

conflicts, such as Syria. Marone and Vidino (2019) examine profiles of 125 foreign fighters who originated in Italy. In their sample, 34.4% were unemployed and 44.8% had low-paying jobs. So, the quality of life of most of the persons in the sample was very poor.

We hypothesize that it is plausible for immigrants to have both a positive and a negative impact on economic indicators. Also, there may be interactions between immigration and terrorism that can change the marginal effect of immigration on economic indicators such as GDP per capita or the exports-to-GDP ratio. For example, if immigrants get involved with terrorist groups, the resulting disruption in the economy will dampen any positive effect that immigration may have on the economy.

As mentioned above, we are interested in capturing the motivation of immigrants to join or support terrorist groups. The unemployment rate among immigrants in OECD countries is one of the indicators of this motivation (with the other one being the globalization index). Unemployment can be a motivator of terrorism because it affects living conditions. It can also reflect systematic discrimination if a group continually faces a higher rate of unemployment relative to the rest of the population. Becker (1968) notes that an unemployed person has a higher incentive to commit crime due to the low opportunity costs of such acts. The low opportunity cost of crime can also lead to terrorism as long as there are other factors present, such as political grievances. Therefore, unemployment increases the incentive to join a terrorist movement. As noted in Berrebi (2007), highly educated individuals would be particularly frustrated by the loss of economic opportunities and the alternative economic cost of their risking arrest or worse would be lower. It also facilitates terrorist organizations to recruit volunteers (Krieger and Meierrieks 2011, Helbling and Meierrieks 2020).



Indeed, data show that in OECD countries, the unemployment rate is much higher for immigrants than for the native-born population. For example, in 2019, the average unemployment rate for native-born workers in OECD countries was 5.5% but it was 8.2% for foreign-born workers. There are also certain countries of concern particularly in Europe, e.g., in France, the average unemployment rate since 2007 for native-born workers was 8.6% but it was 15.4% for foreign-born workers. This indicates that the quality of life of immigrants in these countries is much lower than that of native-born residents. In this paper, we control the unemployment rate among immigrants and determine its interaction with terrorism.

## **2.2. Tourism**

Enders and Olson (2012) survey the literature on the economic costs of terrorism and point out that the effects of terrorism are felt primarily in a limited number of industries. One sector that is significantly affected is tourism. The relationship between terrorism and tourism is related to this paper. The hypothesis is that attacks on immigrants in a country can scare away foreign tourists, thereby adversely affecting the economy. There are several papers in support of this hypothesis. Enders and Sandler (1991) consider the case of Spain between 1970-88 and find that each additional attack reduces the number of tourist arrivals by around 140,000. Sandler et al. (1992) and Drakos and Kutan (2003) find that incidents of terrorism in a country have spillover effects on tourism in neighboring countries. Thompson (2011) finds that terrorism adversely affects tourism, but the effect is larger in developing countries than in developed countries. Karl et al. (2017) consider tourist arrivals from Germany to Israel and find that a terrorist incident in Israel can affect tourist arrivals for up to six months. Therefore, the literature overwhelmingly supports the hypothesis that terrorism has a significant effect on tourism. This in turn results in adverse impacts on the GDP per capita and on exports (since serving foreign tourists is an export of service).

### **2.3. Globalization**

Globalization is an over-encompassing term that captures the degree of integration of an economy with the rest of the world (Dreher 2006). It includes several aspects, such as economic, social, and political globalization.

The association between globalization and growth has been heavily and hotly debated with somewhat understandably mixed results. Studies such as Dollar (1992), Sachs and Warner (1995), and Edwards (1998) find a positive correlation between openness and growth. In a study featuring a new comprehensive index of globalization, Dreher (2006) investigates the impact of globalization on growth between 1970 and 2000 and finds that globalization promotes economic growth. Similarly, Samimi and Jenatabadi (2014) find that economic globalization affects the economic growth of OIC countries positively, and this positive effect is larger in countries with a higher level of human capital and deeper financial development. Further, the extent of benefits depends on the income level of each group. Specifically, benefits are restricted to high- and middle-income with low-income countries seeing no gains.

Trade with other countries has been noted to positively impact economic development and technological change, especially for small countries (Alesina et al. 2000; Alesina and La Ferrara 2005; Frankel and Romer 1999). Feyrer (2019) through a dynamic perspective on geography as an explanatory variable finds that trade has a positive impact on output. Further, the elasticity of income with regards to trade is between one-half and three-quarters.

Krugman (1993) on the other hand claims capital to be an unimportant factor as it pertains to economic development and that large flows of capital from rich to poor countries have never occurred. Therefore, openness is unlikely to positively impact the economy in developing

countries. In this paper, we extend the literature by investigating the impact of globalization on GDP per capita and the exports-to-GDP ratio.

There is also literature that investigates whether globalization could mitigate the negative effects of terrorism on growth. Younas (2015) finds that globalization dissipates these consequences of terrorism and therefore reforms aimed at openness can be effective counterterrorism policy tools.

We hypothesize that the marginal effect of globalization on economic indicators is affected by terrorism. If an economy depends on foreign tourists, investors, etc. then it is severely affected if terrorists succeed in scaring away foreigners. Therefore, we expect the interaction of globalization and transnational terrorism to be negative. Domestic terrorism is unlikely to scare away foreign investors. Therefore, we expect the interaction of globalization and domestic terrorism to be negligible.

### **3. Description of Data**

In this paper, we focus on GDP per capita based on purchasing-power-parity and exports as % of GDP as economic indicators. This focus is in line with prior work such as Sandler and Enders (2008), Gaibulloev and Sandler (2019), to name a few. We use data from OECD. Table 1 lists the countries that make up the OECD. Our focus on OECD countries is motivated by multiple reasons:

- (i) We are analyzing the effect of immigrants on the economy, and OECD countries are major recipients of immigrants,
- (ii) There is a recent increase in hostility toward immigrants in developed nations and it is imperative to examine if allowing immigrants is a net gain for these economies or not.

(iii) Data availability is a major consideration. There is a significant issue with missing data from non-OECD countries which puts a serious dent in the credibility of any findings obtained.

In this paper, we use data from the Global Terrorism Database (GTD). We extract information about terrorist incidents in the OECD countries (listed in Table 1) for the years 2007 through 2017. Specifically, we focus on domestic and transnational incidents as our independent variables. Following Enders et al. (2011), we count an attack as a terrorist attack if it meets all of the following criteria:

- (i) The act must be aimed at attaining a political, economic, religious, or social goal.
- (ii) There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims.
- (iii) The action must be outside the context of legitimate warfare activities.

Further, some events do not seem to be terrorist attacks and GTD classifies them as doubtful events. We drop these doubtful events from our sample.

The next step is to classify each terrorist attack as domestic or transnational. We follow Paul and Bagchi (2019) in distinguishing between them. Specifically, we classify any attack as transnational if the variable INT\_ANY (variable in the GTD database) takes a value of 1. Please refer to this paper for a detailed discussion on these aspects.

Further, in this paper, we consider two kinds of transnational attacks motivated by prior literature such as Gaibullov and Sandler (2011). These involve attacks against foreign nationals in a country and attacks by foreign terrorist groups. Table 2 lists the domestic, transnational, and total terrorism incidents for our period of study.

Our variable descriptions and their type i.e., dependent, independent, or instrumental are listed in Table 3. We now briefly discuss the rationale behind the choice of variables and what they embody.

We measure the motivation of immigrants to support or join terrorist groups using foreign-born unemployment rates and the globalization index. Indeed, the unemployment rate seems to be much higher for immigrants than for the overall population of several OECD countries (OECD, 2020; US News, 2017; Drinkwater, 2017). As per OECD, the foreign-born unemployment rate is calculated as the share of unemployed foreign-born persons aged 15-64 in the foreign-born labor force (the sum of employed and unemployed foreign-born) of that same age. Unemployed people consist of those persons who report that they are without work during the reference week, are available for work, and have taken active steps to find work during the four weeks preceding the interview.

We measure globalization using KOF Globalisation Index. The KOF Globalisation Index (Gygli et al. 2019; Dreher 2006) measures the economic, social, and political dimensions of globalization. Globalization in the economic, social, and political fields has been on the rise since the 1970s, receiving a particular boost after the end of the Cold War.

We also include a measure of restriction on religion imposed either by governments or by private actors (groups and individuals) in a country. As per Pew Center (2020), restrictions on religion resulted from actions taken by government officials, social groups, or individuals espousing nationalist positions. Typically, these nationalist groups or individuals were seeking to curtail immigration of religious and ethnic minorities or were calling for efforts to suppress or even eliminate a particular religious group, in the name of defending a dominant ethnic or religious group they described as threatened or under attack. In the Netherlands, for instance, Geert Wilder's

Freedom Party announced an election platform in 2016 that called for the “de-Islamization” of the country, including barring asylum seekers from Islamic countries, prohibiting Muslim women from wearing headscarves in public, closing all mosques, and banning the Quran. In another case, the Czech group Block Against Islam (which opposes allowing Muslim refugees into the country and calls for restrictions on the Muslim community) organized about 20 anti-Islam rallies around the country during the year.

We also include the Economic Freedom Index (Fraser Institute 2019) published in *Economic Freedom of the World* in our modeling specifications. It measures the degree to which the policies and institutions of countries are supportive of economic freedom. The cornerstones of economic freedom are a personal choice, voluntary exchange, freedom to enter markets and compete, and security of the person and privately owned property. Forty-two data points are used to construct a summary index and to measure the degree of economic freedom in five broad areas: the size of government; legal system and property rights; sound money; freedom to trade internationally; regulation.

To the best of our knowledge, there is no single data set that includes all of the variables required for our analysis. Therefore, it was required that the information on these variables be collected from a variety of sources. All variables used in our analysis and their sources are provided in Tables 3 and 4.

There are 36 countries in the OECD. Out of these, we had to drop 4 countries (mentioned in Table 1) due to a lack of information. Further, multiple countries had missing data. This led to a loss of 25 observations. The surviving sample with no missing values for any of the variables has 327 observations with no obvious pattern or bias in the observations removed to raise concerns about the resulting sample. Table 5 provides summary statistics for this sample.

#### 4. Econometric Specifications

Five principal reasons motivate the choice of a Generalized Method of Moments (GMM). First, the dependent variables should be persistent. This is the case because the correlation between dependent variables and their first lags is higher than the rule of thumb threshold of 0.800 (0.997 and 0.993 for GDP per capita (PPP) and exports as % of GDP respectively) that is needed to establish persistence in the dependent variables. Second, the number of countries (N) is higher than the number of years per country (T). Hence, the sample of the study is consistent with the  $N > T$  criterion. Third, the estimation strategy accounts for endogeneity in the regressors. For instance, openness to trade could be a consequence, as much as a cause, of high income per person across countries (Frank and Romel 1999). Fourth, cross-country differences are taken into account in the estimation technique. Fifth, small sample biases that are typical of the ‘difference estimator’ are controlled for in the system GMM technique. For this reason, the system GMM estimator from Arellano and Bover (1995) and Blundell and Bond (1998) has been established to be better than the difference GMM estimator from Arellano and Bond (1991) (see Bond et al. 2001).

We adopt the Roodman (2009a; 2009b) extension of Arellano and Bover (1995) for our analysis. Specifically, instead of employing the first differences, the estimation approach uses forward orthogonal deviations because the latter limits instrument proliferation and controls for cross-sectional dependence. Noting that all independent indicators could be suspected endogenous or predetermined variables, we adopt the `gmmstyle` for these variables and only years are treated as exogenous. Further, we treat `ivstyle (years)` as ‘`iv(years, eq(diff))`’ because it is not likely for years to become endogenous in first-difference (Roodman 2009b). To address the concern of simultaneity, lagged regressors are employed as instruments for forward-differenced variables.

For each regression, we report the Sargan and Hansen J test of overidentifying restrictions and the autocorrelation test for confirming the validity of instruments and the absence of serial correlation in the residuals, respectively. In essence, while the Sargan OIR test is not robust but not weakened by instruments, the Hansen OIR is robust but weakened by instruments. We employ the Difference in Hansen Test for exogeneity of instruments to assess the validity of results from the Hansen OIR test. We also report a Fischer test for the joint validity of estimated coefficients. We employ the two-step estimation approach in place of the homoskedasticity-consistent one-step strategy because it is robust to heteroskedasticity and asymptotically efficient (Asiedu and Lien 2011). Finally, following Windmeijer (2005), we report estimation results derived using the finite-sample correction of standard errors in all GMM regressions.

The following equations in levels (1) and first difference (2) summarize the system GMM estimation procedure:

$$GDP_{it} = \theta_0 + \theta_1 GDP_{it-\zeta} + \theta_2 D_{it} + \theta_3 G_{it} + \theta_4 I_{it} + \theta_5 (D_{it} \times G_{it}) + \theta_6 (D_{it} \times IQ_{it}) + \alpha X_{it-\zeta} + \delta_i + \sigma_t + \eta_{it} \quad (1)$$

$$GDP_{it} - GDP_{it-\zeta} = \theta_1 (GDP_{it-\zeta} - GDP_{it-2\zeta}) + \theta_2 (D_{it} - D_{it-\zeta}) + \theta_3 (G_{it} - G_{it-\zeta}) + \theta_4 (IQ_{it} - IQ_{it-\zeta}) + \theta_5 (D_{it-1} \times G_{it} - D_{it-\zeta} \times G_{it-\zeta}) + \theta_6 (D_{it} \times IQ_{it} - D_{it-\zeta} \times IQ_{it-\zeta}) + \alpha (X_{it-\zeta} - X_{it-2\zeta}) + (\sigma_i - \sigma_{i-\zeta}) + (\eta_{it} - \eta_{it-\zeta}) \quad (2)$$

where  $i$  refers to countries and  $t$  to time,  $\alpha_t$  indicates time-effects,  $\delta_i$  reflects country-specific effects,  $\theta_0$  is a constant, and  $\eta_{it}$  is the usual error term. GDP represents the response variable – GDP per capita. D specifies the number of domestic terrorist incidents, G is the index of globalization, and IQ is the index of the quality of life of immigrants. X is a vector of time-variant control variables.  $\zeta$  represents the coefficient of autoregression. A similar functional form applies to the remaining models featuring exports-to-GDP ratio as the dependent variable and those featuring Transnational Terrorism as the key independent variable. In the case of the



latter TT, the index representing transnational terrorism takes place of D in equations (1) and (2).

As a robustness test, we also present estimation results using an alternative econometric methodology. Specifically, we employ the feasible generalized least squares (FGLS) estimator because it can explicitly allow for the presence of heteroskedasticity across panels and serial correlation within a panel, which gives panel-corrected robust standard errors. A few recent panel data studies on terrorism have also employed the FGLS for the same reason (For example, see Gaibullov and Sandler 2008; Dreher et al. 2011; Younas 2015). We address endogeneity issues by employing lagged independent variables. We realize that the lagging of the independent variable does not properly resolve the concern of reverse causation. The traditional approach of using two-stage least squares is problematic and infeasible. This is because i) instruments must display variation over time since we use fixed-effects model specifications, ii) The exclusion restriction of instruments requires that they have a high correlation with the instrumented variables, but be uncorrelated with the error term, and iii) as noted earlier we have multiple endogenous variables in play since simultaneous causation is a pertinent issue for all the right-side variables in a growth model. Another related concern is that use of invalid instruments could contaminate the estimation results.

Given the above, the dynamic panel data model of GDP per capita we estimate takes the following form:

$$GDP_{it} = \beta_0 + \beta_1 D_{it-1} + \beta_2 G_{it-1} + \beta_3 IP_{it-1} + \beta_4 (D_{it-1} \times G_{it-1}) + \beta_5 (D_{it-1} \times IP_{it-1}) + \beta_6 X_{it-1} + \tau_t + \gamma_i + \mu_{it-1} \quad (3)$$

where  $i$  refers to countries and  $t$  to time,  $\tau_t$  indicates time effects,  $\gamma_i$  reflects country-specific effects, and  $\mu_{it}$  is the usual error term. A similar functional form applies to the remaining

models featuring exports-to-GDP ratio as the dependent variable and those featuring Transnational Terrorism as the key independent variable. In the case of the latter TT, the index representing transnational terrorism takes place of D in equation (3).

## **5. Results**

### **5.1. Domestic Incidents, Globalization, and Immigrant Living Conditions**

In Table 6, we first present results for System GMM regressions for GDP per capita and exports-to-GDP ratio, followed by results from FGLS specifications. The regressions include main variables of interest along with lagged dependent variables, time, and country-specific fixed effects. It also includes all other time-variant control variables. It follows that the lagged value of GDP per capita has a statistically significant effect on its contemporaneous value under both specifications. Regarding exports, we find a similar result only for the FGLS specification.

In Table 6, none of the coefficients of the interaction terms are statistically significant. Because of the interaction terms, the marginal effect of domestic terrorism varies with the values of the globalization index and the foreign-born unemployment rate. The marginal effects of domestic terrorism are presented in Table 7. Based on these results, we predict that at the sample mean, a one standard deviation increase in domestic incidents of terror will decrease GDP per capita by approx. 7.8% (of the average value of GDP per capita) according to the System GMM regression, and by approx. 5.7% according to the FGLS regression. The 95% confidence interval is also presented in that table. As can be noted, domestic terrorism has a statistically significant negative impact on GDP per capita according to both specifications. Gaibullov and Sandler (2019) while reviewing the literature on terrorism wrote that “Generally, terrorism had a small adverse effect on the growth of GDP per capita. The effect is driven by transnational terrorism;

domestic terrorism is usually not statistically significant” (p. 316). In contrast to the literature, we find that domestic terrorism has a negative and statistically significant effect on GDP per capita, and the magnitude of this effect is quite large.

We also find that domestic terrorism has a statistically significant positive marginal impact on the exports-to-GDP ratio at the sample mean. Based on Table 7, we also compute that a one standard deviation increase in domestic incidents will increase the exports-to-GDP ratio by approx. 6% according to the System GMM regression, and by approx. 0.9% according to the FGLS regression and both are statistically significant at the 95% level of confidence. Bandopadhyay et al. (2018) find that domestic terrorism reduces manufactured exports and increases primary exports. In this paper, we consider all exports, including services. If domestic terrorism reduces GDP more than exports, the exports-to-GDP ratio can increase.

In Table 7, we also present the marginal effects of globalization and the foreign-born unemployment rate at the sample mean. We predict that at the sample mean, a one standard deviation increase in the foreign-born unemployment rate decreases GDP per capita by around 5% according to the System GMM Regression and by 0.24% according to the FGLS regression, and both are statistically significant at the 95% confidence level. This means that the deterioration of employment chances of immigrants adversely affects the economy in OECD countries. Based on this evidence, it does not seem that immigrants can be easily replaced with native-born workers with no effect on the economy, as is alleged by proponents of tougher immigration policies.

We also find that the foreign-born unemployment rate has a statistically significant positive effect on exports. It follows from Table 7 that a one standard deviation increase in the foreign-born unemployment rate increases the export-to-GDP ratio by 4.2% according to the System GMM regression and by 0.44% according to the FGLS Regression. An increase in the foreign-born

unemployment rate compared to the recent past is often due to a recession in the home country. In that case, there will be a reduction in demand in the home country, and the export-to-GDP ratio may increase in response to relatively higher demand abroad.

The marginal impact of globalization is not clear-cut. It follows from Table 7 that globalization does not have a statistically significant effect on GDP per capita according to the System GMM Regression. Regarding exports, the marginal effect of globalization is statistically significant, but the signs are different for the two specifications.

## **5.2. Transnational Incidents, Globalization, and Immigrant Living Conditions**

We present the regression results for transnational terrorism in Table 8. Lagged values of GDP per capita and exports have a positive and statistically significant effect on their corresponding contemporaneous values. These results are similar to the case of domestic terrorism presented in Table 6. We also find that the interaction terms are negative whenever statistically significant.

Gaibulloev and Sandler (2008, 2009, and 2011) find that transnational terrorism exerts a negative effect on growth. Our estimates of the marginal effects of transnational terrorism are presented in Table 9. The effect of transnational terrorism on either GDP per capita or exports is not very clear. According to the System GMM Regression, a one standard deviation increase in transnational incidents will decrease GDP per capita by approx. 24.6% (of the average value of GDP per capita) and this is statistically significant at the 95% level of confidence. In contrast, the FGLS Regression implies that a one standard deviation increase in transnational incidents will increase GDP per capita by 0.3% and this is also statistically significant at the 95% confidence interval. Given the contrasting signs of the marginal effects in the two specifications, it is difficult to draw strong conclusions about the effect of transnational terrorism on GDP per capita, except that this marginal effect will either be negative or a small positive number.

Based on Table 9, we also compute that a one standard deviation increase in transnational incidents will decrease the exports-to-GDP ratio by approx. 1.85% (of the average export-to-GDP ratio) according to the System GMM regression, and by approx. 1.3% according to the FGLS regression and both are statistically significant at the 95% confidence level. Transnational terrorism comprises attacks in the home country in which either the perpetrator or the victim is a foreigner. Attacks on foreigners may affect the operations of foreign firms located in the home country. Also, attacks on foreigners may lead to a reduction in the export of services, such as tourism (Enders and Sandler 1991; Drakos and Kutan 2003; etc.). All of these mean that an increase in transnational terrorism leads to a reduction in exports, which is what we find.

In Table 9, we also present the marginal effects of globalization and the foreign-born unemployment rate at the sample mean when these variables interact with transnational terrorism. We predict that at the sample mean, a one standard deviation increase in the foreign-born unemployment rate decreases GDP per capita by around 12.7% according to the System GMM Regression and by 0.23% according to the FGLS regression, and both are statistically significant at the 95% confidence level. This means that the deterioration of employment chances of immigrants adversely affects the economy in OECD countries, even after taking into account its interaction with transnational terrorism. Again, it does not seem that immigrants can be easily replaced with native-born workers with no effect on the economy, as is alleged by opponents of immigration. We also find that the foreign-born unemployment rate has a statistically significant effect on the exports-to-GDP ratio, but we obtain different signs for the two specifications. The marginal impact of globalization is also not clear when we consider its interaction with transnational terrorism.

## 6. Concluding Remarks

In this paper, we look at the interaction of terrorism with the foreign-born unemployment rate and globalization in OECD countries and find several interesting results. We find strong evidence that GDP per capita is adversely affected by domestic terrorism. The magnitude of this effect is also substantial. For example, at the sample mean, a one-standard-deviation increase in the number of domestic incidents is found to decrease GDP per capita by 7.8% of the sample average according to the System GMM Regression and by 5.7% according to the FGLS specification. The effect of transnational terrorism on GDP per capita is not so clear because we obtain different signs for the two specifications.

We also find strong evidence that domestic terrorism increases the exports-to-GDP ratio. Transnational terrorism, on the other hand, tends to decrease this ratio. Therefore, the impact of terrorism on exports depends upon the nature of terrorism.

When the interaction of the foreign-born unemployment rate with either type of terrorism is factored in, it is found that an increase in the foreign-born unemployment rate decreases GDP per capita. This means that when we account for security aspects related to immigration, an improvement in the living conditions of immigrants is a net positive for the economies of OECD countries. Also, an increase in the foreign-born unemployment rate increases the exports-to-GDP ratio when we interact the unemployment rate with domestic terrorism.

Overall, the results are stronger for the case of domestic terrorism. In our sample, the number of transnational incidents exceeds the number of domestic incidents. Despite that, we find a stronger systematic effect of domestic terrorism on economic indicators. This means that in developed economies, there is a need to seriously consider the threat of domestic terrorism, even

though the frequency of such attacks is less than transnational attacks. Transnational terrorism may interact with other variables not captured in this study. We leave this for future research.

As a robustness check, we also ran alternative models with exports per capita as the dependent variable and found that the foreign-born unemployment rate and transnational terrorism hurt exports per capita. This dynamic panel model accounts for interactions between key independent variables in line with our models featuring exports-to-GDP ratio and GDP per capita. Due to multicollinearity issues and related variable omissions, the domestic terrorism model (and related impacts) could not be estimated.

## Notes

1. For a summary of the position on immigration of each of these politicians, see the following:

<https://www.reuters.com/article/us-usa-election-immigration-factbox/trump-and-biden-take-sharply-different-paths-on-immigration-idUSKBN2611VD>

<https://www.independent.co.uk/news/world/europe/french-elections-latest-marine-le-pen-immigration-suspend-protect-france-borders-front-national-fn-a7689326.html>

<https://time.com/4696459/geert-wilders-the-dutch-trump/>.

2. See <https://www.migrationwatchuk.org/key-topics/economics> and

[https://www.migrationwatchuk.org/pdfs/BP1\\_16.pdf](https://www.migrationwatchuk.org/pdfs/BP1_16.pdf) for policy papers on the effects of immigration on GDP per capita by Migration Watch.

3. See <https://cis.org/Report/Immigration-and-American-Worker>.

4. See <https://www.whitehouse.gov/articles/national-security-threats-chain-migration-visa-lottery-system/>.

5. See <https://cis.org/Report/Terrorist-Migration-Over-European-Borders>.

6. This extends prior work such as Paul and Bagchi (2019) that looks at the impact of civil liberties on domestic and transnational terrorism.



## References

- Alesina, A., Spolaore, E., Wacziarg, R. (2000). Economic integration and political disintegration. *American Economic Review*, 90(5): 1276-1296.
- Alesina, A., La Ferrara, E. (2005). Ethnic diversity and economic performance. *Journal of Economic Literature*, 43(3): 762-800.
- Arellano, M., Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2): 277-297.
- Arellano, M., Bover, O. (1995) Another look at the instrumental variable estimation in error component models. *Journal of Econometrics*, 68: 29-51.
- Arnorsson, A., Zoega, G. (2018). On the causes of Brexit. *European Journal of Political Economy*, 55: 301-323.
- Asiedu, E., Lien, D. (2011). Democracy, foreign direct investment and natural resources. *Journal of International Economics*, 84: 99-111.
- Bagchi, A., Paul, J.A. (2018). Youth unemployment and terrorism in the MENAP (Middle East, North Africa, Afghanistan, and Pakistan) region. *Socio-Economic Planning Sciences*, 64: 9-20.
- Bandyopadhyay, S, Sandler, T. (2014). Immigration policy and counterterrorism. *Journal of Public Economics*, 110(1): 112-123.
- Bandyopadhyay, S, Sandler, T., Younas, J. (2018). Trade and terrorism: a disaggregated approach. *Journal of Peace Research*, 55(5): 656-670.
- Becker, G. (1968). Crime and punishment: an economic approach. *Journal of Political Economy*, 76(2): 169-217.
- Berrebi, C. (2007). Evidence about the link between education, poverty and terrorism among Palestinians. *Peace Economics, Peace Science and Public Policy*, 13(1): 1-36.
- Blomberg, S. B., Hess, G. D. and Orphanides, A. (2004). The macroeconomic consequences of terrorism. *Journal of Monetary Economics*, 51(5): 1007-1032.
- Bond, S., Hoeffler, A., Temple, J. (2001). GMM estimation of empirical growth models. *Economics Papers*, Economics Group, Nuffield College, University of Oxford.

- Borjas, G. J. (2013). Immigration and the American worker. Available at <https://cis.org/Report/Immigration-and-American-Worker> (downloaded March 9, 2021).
- Borjas, G. J. (2015). Immigration and globalization: a review essay. *Ethnic diversity and economic performance. Journal of Economic Literature*, 53(4), 961-974.
- Bove, V., Bohmelt, T. (2016). Does immigration induce terrorism? *The Journal of Politics*, 78(2): 572-88.
- Choi, S.-W. (2018). Does restrictive immigration policy reduce terrorism in western democracies? *Perspectives on Terrorism*, 12(4): 14-25.
- Choi, S.-W. (2019). Immigration policy and terrorism: An empirical analysis. *Defence and Peace Economics*, 30: 1-25.
- De Sousa, J., Mirza, D., Verdier, T. (2018). Terror networks and trade: Does the neighbor hurt? *European Economic Review*, 107: 27-56.
- Dollar, D. (1992). Outward-oriented developing economies really do grow more rapidly: evidence from 95 LDCs, 1976–1985. *Economic Development and Cultural Change*, 40: 523–544.
- Drakos, K. Kutan, A. M. (2003). Regional effects of terrorism on tourism in three Mediterranean countries. *Journal of Conflict Resolution*, 47(5): 621-641.
- Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics*, 38(10): 1091-1110.
- Dreher, A., Krieger, T., Meierrieks, D. (2011). Hit and (they will) run: the impact of terrorism on migration. *Economic Letters*, 113: 42–46.
- Drinkwater, S. (2017). Why does unemployment differ for immigrants?. *IZA World of Labor*: 376 doi: 10.15185/izawol.376. Accessed April 8, 2020.
- Edwards, S. (1998). Openness, productivity and growth: what do we really know? *Economic Journal*, 108: 383-398.
- Enders, W., Olson, E., (2012). Measuring the economic costs of terrorism. *Oxford Handbook of the Economics of Peace and Conflict*, 362-387.
- Enders, W., Sandler, T., (1991). Causality between transnational terrorism and tourism: The case of Spain. *Studies in Conflict & Terrorism*, 14(1): 49-58.

- Enders, W., Sandler, T. (2002). Patterns of transnational terrorism 1970-99: Alternative time series estimates. *International Studies Quarterly*, 46(2): 145-65.
- Enders, W., Sandler, T., Gaibulloev, K. (2011). Domestic versus transnational terrorism: Data, decomposition, and dynamics. *Journal of Peace Research*, 48(3): 319-337.
- Faulkner, D., Kleiderman, A. (2021). Sir David Amess killing was terrorism, police say. BBC. Available at <https://www.bbc.com/news/uk-58935372>
- Feyrer, J. (2019). Trade and income. *American Economic Journal: Applied Economics*, 11(4): 1-35.
- Frankel, J. A., Romer, D. (1999). Does trade cause growth? *American Economic Review*, 89(3): 379-399.
- Fraser Institute. (2019). *Economic Freedom of the World: 2019 Annual Report*. <https://www.fraserinstitute.org/studies/economic-freedom-of-the-world-2019-annual-report>. Accessed April 8, 2020.
- Gaibulloev, K., Sandler, T. (2008). Growth consequences of terrorism in Western Europe. *Kyklos*, 61: 411-424.
- Gaibulloev, K., Sandler, T., (2011). The adverse effect of transnational and domestic terrorism on growth in Africa. *Journal of Peace Research*, 48(3): 355-371.
- Gaibulloev, K., Sandler, T. (2013). Determinants of the demise of terrorist organizations. *Southern Economic Journal*, 79(4): 774-792.
- Gaibulloev, K., Sandler, T. (2019). What we have learned about terrorism since 9/11. *Journal of Economic Literature*, 57(2): 275-328.
- Global Terrorism Database. (2013). National consortium for the study of terrorism and responses to terrorism. <http://www.start.umd.edu/gtd/>. Accessed April 10, 2020.
- Gramlich, J. (2018). Defending against terrorism has remained a top policy priority for Americans since 9/11. Pew Research Center. Available at <https://www.pewresearch.org/fact-tank/2018/09/11/defending-against-terrorism-has-remained-a-top-policy-priority-for-americans-since-9-11/> .
- Gouda, M., Marktanner, M. (2019). Muslim youth unemployment and Expat Jihadism: Bored to death? *Studies in Conflict & Terrorism*, 42(10): 878-97.
- Gygli, S., Haelg, F., Potrafke, N., Sturm, J. E. (2019): The KOF Globalisation Index – Revisited. *Review of International Organizations*, 14(3): 543-574.

- Helbling, M., Meierrieks, D., (2020). Terrorism and migration: An overview. *British Journal of Political Science*:1-20. doi: 10.1017/S0007123420000587.
- Jaumotte, F., Koloskova, K., Saxena, S. (2016). Impact of migration on income levels in advanced economies. *IMF Spillover Note*, Issue 8, October.
- Karl, M., Winder, G., Bauer, A. (2017). Terrorism and tourism in Israel: Analysis of the temporal scale. *Tourism Economics*, 23(6): 1343-52.
- Krieger, T., Meierrieks, D. (2011). What causes terrorism? *Public Choice*, 147(1-2): 3-27.
- Kroet, C. (2016). Terrorism fears on the rise: EU study. Politico. Available at <https://www.politico.eu/article/terrorism-fears-on-the-rise-eu-study-terrorism-immigration/>.
- Krugman, P. (1993). International finance and economic development. In: Giovannini A, editor. *Finance and Development: Issues and Experience*. Cambridge Cambridge University Press. 11-24.
- Li, Q. (2005). Does democracy promote or reduce transnational terrorist incidents? *Journal of Conflict Resolution* 49 (2): 278-97.
- Marone F, Vidino L. 2019. Destination Jihad: Italy's Foreign Fighters. International Centre for Counter-Terrorism. Available at <https://icct.nl/app/uploads/2019/03/Marone-Vidino-Italys-Foreign-Fighters-March2019.pdf>
- McAlexander, R. J. (2020). How are immigration and terrorism related? An analysis of right- and left-wing terrorism in Western Europe, 1980–2004. *Journal of Global Security Studies*, 5(1): 179–195.
- Meierrieks, D., Gries, T. (2013). Causality between terrorism and economic growth. *Journal of Peace Research*, 50(1): 91–104.
- Okafor, G. and Piesse, J. (2018). Empirical investigation into the determinants of terrorism: Evidence from fragile states. *Defence and Peace Economics*, 29(6): 697-711.
- Ortega, F., Peri, G. (2014). Openness and income: The roles of trade and migration. *Journal of International Economics*, 92(2): 231-251.
- Paul, J. A., Bagchi, A. (2019). Civil liberties and terrorism in Middle East, North Africa, Afghanistan, and Pakistan. *Annals of Operations Research*, 275(2): 623–651.

- Pew Center. (2020). Global uptick in government restrictions on religion in 2016. <https://www.pewforum.org/2018/06/21/global-uptick-in-government-restrictions-on-religion-in-2016/>. Accessed April 8, 2020.
- RAND. (2013). Domestic terrorism. <https://www.rand.org/topics/domestic-terrorism.html>. Accessed September 9, 2013.
- Roodman, D. (2009a). A note on the theme of too many instruments. *Oxford Bulletin of Economics and Statistics*, 71(1): 135-158.
- Roodman, D. (2009b). How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata Journal*, 9(1): 86-136.
- Sachs, J., Warner, A. (1995). Economic reform and the process of global integration. *Brookings Papers on Economic Activity*, 1995: 1-118.
- Samimi P., Jenatabadi, H. S. (2014). Globalization and Economic Growth: Empirical Evidence on the Role of Complementarities. *PLoS ONE* 9(4): e87824. <https://doi.org/10.1371/journal.pone.0087824>.
- Sandler, T., Enders, W. and Parise F, G. (1992). An econometric analysis of the impact of terrorism on tourism. *Kyklos*, 45(4): 531-554.
- Sandler, T., Enders, W. (2008). Economic consequences of terrorism in developed and developing countries: An overview, in: Philip Keefer and Norman Loayza (eds.), *Terrorism, Economic Development and Political Openness*. Cambridge: Cambridge University Press.
- Thompson, A., (2011). Terrorism and tourism in developed versus developing countries. *Tourism Economics*, 17(3): 693–700.
- US News. (2017). Europe's out-of-step workforce. <https://www.usnews.com/news/best-countries/articles/2017-06-30/in-europe-unemployment-divides-native-and-foreign-born>. Accessed April 8, 2020.
- Windmeijer, F. (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of Econometrics*, 126: 25-51
- Younas, J. (2015). Does globalization mitigate the adverse effects of terrorism on growth? *Oxford Economic Papers*, 67(1): 133-156.

**Table 1: List of Countries in OECD**

<b>ID</b>	<b>Countries</b>
1	Australia
2	Austria
3	Belgium
4	Canada
5	Chile
6	Czech Republic
7	Denmark
8	Estonia
9	Finland
10	France
11	Germany
12	Greece
13	Hungary
14	Iceland
15	Ireland
16	Israel
17	Italy
18	Japan*
19	South Korea*
20	Latvia
21	Lithuania*
22	Luxembourg
23	Mexico
24	Netherlands
25	New Zealand
26	Norway
27	Poland
28	Portugal
29	Slovak Republic*
30	Slovenia
31	Spain
32	Sweden
33	Switzerland
34	Turkey
35	United Kingdom
36	United States

Due to data limitations, we had to drop four countries (in asterisks) from our sample. Colombia joined in 2020 which is outside of our study focus period.

**Table 2: Terrorism Data for OECD Countries (2007-2017)**

<b>Year</b>	<b>Domestic Incidents</b>	<b>Transnational Incidents</b>	<b>Total Incidents</b>
2007	28	78	106
2008	59	158	217
2009	39	55	94
2010	30	105	135
2011	45	81	126
2012	107	154	261
2013	67	162	229
2014	80	189	269
2015	277	221	498
2016	258	227	485
2017	114	160	274
<b>Grand Total</b>	<b>1104</b>	<b>1590</b>	<b>2694</b>

**Table 3: Variable Description**

<b>Variable Notations</b>	<b>Definitions</b>	<b>Type</b>	<b>Numeric Interpretation</b>
GDP per Capita	GDP per capita based on purchasing-power-parity	Dependent	
Exports	Exports as % of GDP	Dependent	
Globalization Index	Measures the economic, social, and political dimensions of globalization	Independent	Higher values indicate more globalization
Religion Restriction Index	Measures restrictions on religion imposed either by governments or by private actors (groups and individuals) in a country	Independent	Higher values indicate more restriction
Economic Freedom Index	Measures the degree to which the policies and institutions of countries are supportive of economic freedom	Independent	Higher values indicate greater economic freedom

Domestic Incidents	Total Domestic Incidents	Independent
Transnational Incidents	Total Transnational Incidents	Independent
Population Density	Population Density	Independent
Foreign-Born Unemployment Rate	The share of unemployed foreign-born persons aged 15-64 in the foreign-born labor force of that same age	Independent

**Table 4: Variable Data Sources**

No.	Variables	Data Source
1.	GDP per Capita	OECD.org
2.	Exports	OECD.org
3.	Globalization Index	KOF Swiss Economic Institute
4.	Religion Restriction Index	Pew Center
5.	Economic Freedom Index	Fraser Institute
6.	Domestic Incidents	Global Terrorism Database
7.	Transnational Incidents	Global Terrorism Database
8.	Population Density	World Bank
9.	Foreign-Born Unemployment Rate	OECD.org

**Table 5: Summary Statistics for Variables**

Variables	sample (n=327)	
	Mean	Std. Deviation
<i>Dependent Variables</i>		
GDP per Capita	1373.434	2980.404
Exports	51.811	34.872
<i>Independent Variables</i>		
Globalization Index	83.330	5.589
Religion Restriction Index	2.503	1.506
Economic Freedom Index	7.631	0.440



Domestic Incidents	3.174	20.047
Transnational Incidents	4.425	15.825
Population Density	123.975	117.154
Foreign-Born Unemployment Rate	10.913	6.040
Globalization Index x Domestic Incidents	233.728	1428.585
Foreign-Born Unemployment Rate x Domestic Incidents	41.763	256.202
Globalization Index x Transnational Incidents	82.951	377.890
Foreign-Born Unemployment Rate x Transnational Incidents	40.499	130.326

---

**Table 6: Domestic Terrorism, Immigrant Living Conditions, and Globalization in OECD Countries**

Variables	System GMM				Feasible Generalized Least Squares			
	GDP Per Capita		Exports		GDP Per Capita		Exports	
	Coef.	Std. Error.	Coef.	Std. Error.	Coef.	Std. Error.	Coef.	Std. Error.
GDP per capita <sub>t-1</sub>	1.027***	0.2064	-	-	1.031***	0.0021	-	-
Exports <sub>t-1</sub>	-	-	0.697	0.4242	-	-	1.007***	0.0068
Globalization Index <sub>t-1</sub>	-2.487	59.272	0.384	0.440	-0.135	0.401	-0.028	0.029
Religion Restriction Index <sub>t-1</sub>	-41.719	77.986	0.925	2.778	-0.364	1.276	-0.178**	0.080
Economic Freedom Index <sub>t-1</sub>	-69.803	492.615	8.216	7.679	-1.430	5.172	-0.379	0.347
Domestic Incidents <sub>t-1</sub>	26.366	120.752	-0.432	0.768	3.515	4.200	-0.102	0.189
Population Density <sub>t-1</sub>	-4.912	16.752	0.123	0.208	-0.011	0.013	0.001	0.001
Foreign Born Unemployment Rate <sub>t-1</sub>	-11.973	55.154	0.414	0.351	-0.602*	0.351	0.038**	0.019
Globalization Index x Domestic Incidents <sub>t-1</sub>	-0.410	2.086	0.009	0.011	-0.048	0.061	0.002	0.003
Foreign Born Unemployment Rate x Domestic Incidents <sub>t-1</sub>	0.226	2.400	-0.017	0.011	0.016	0.051	0.000	0.003
Constant	1304.438	5536.366	98.579	44.977	44.313	39.439	5.857	2.319
Year Dummy	Yes		Yes		Yes		Yes	
Sample Size	327		327		327		327	
AR(1)	0.308		0.277					
AR(2)	0.233		0.107					
Sargan OIR	0		0.092					
Hansen OIR	1		1					
Difference in Hansen	1		1					
Fisher	29.82		31.61					

**Table 7: Marginal Effects: Domestic Terrorism, Immigrant Living Conditions, and Globalization in OECD Countries**

Marginal Effect	System GMM				Feasible Generalized Least Squares			
	GDP per Capita		Exports		GDP per Capita		Exports	
	95 Percent Confidence Interval		95 Percent Confidence Interval		95 Percent Confidence Interval		95 Percent Confidence Interval	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit
Domestic Incidents	-8.706	-1.943	0.143	0.170	-0.369	-0.199	0.019	0.027
Foreign Born Unemployment Rate	-16.438	-6.074	0.323	0.395	-0.586	-0.515	0.036	0.040
Globalization Index	-9.861	2.284	0.363	0.464	-0.335	-0.239	-0.026	-0.020

**Table 8: Transnational Terrorism, Immigrant Living Conditions, and Globalization in OECD Countries**

Variables	System GMM				Feasible Generalized Least Squares			
	GDP Per Capita		Exports		GDP Per Capita		Exports	
	Coef.	Std. Error.	Coef.	Std. Error.	Coef.	Std. Error.	Coef.	Std. Error.
GDP per capita <sub>t-1</sub>	1.178***	0.0790	-	-	1.031***	0.0025	-	-
Exports <sub>t-1</sub>	-	-	0.988***	0.1034	-	-	1.007***	0.0069
Globalization Index <sub>t-1</sub>	101.280	108.263	0.312	1.337	-0.165	0.455	-0.043	0.029
Religion Restriction Index <sub>t-1</sub>	58.462	195.142	0.176	1.069	-0.538	1.437	-0.118	0.079
Economic Freedom Index <sub>t-1</sub>	107.492	341.649	4.936	15.344	-2.003	5.518	-0.328	0.341
Transnational Incidents <sub>t-1</sub>	2.019	6.423	0.065	0.137	-0.006	0.325	-0.002	0.018
Population Density <sub>t-1</sub>	2.185	2.343	-0.003	0.010	-0.013	0.015	0.002*	0.001
Foreign Born Unemployment Rate <sub>t-1</sub>	-29.676*	17.204	-0.127	0.270	-0.535	0.355	0.035**	0.018
Globalization Index x Transnational Incidents <sub>t-1</sub>	-0.311*	0.161	0.000	0.002	0.003	0.005	-0.001**	0.000
Foreign Born Unemployment Rate x Transnational Incidents <sub>t-1</sub>	0.227	1.165	-0.008	0.009	0.002	0.035	0.001	0.002
Constant	-9661.319	6989.353	-63.446	59.332	51.397	41.347	6.648	2.296
Year Dummy		Yes		Yes		Yes		Yes
Sample Size		327		327		327		327
AR(1)		0.112		0.088				
AR(2)		0.125		0.071				

Sargan OIR	0	0.167
Hansen OIR	1	1
Difference in Hansen	1	1
Fisher	1.54	71.8

---

**Table 9: Marginal Effects: Transnational Terrorism, Immigrant Living Conditions, and Globalization in OECD Countries**

Marginal Effect	System GMM				Feasible Generalized Least Squares			
	GDP per Capita		Exports		GDP per Capita		Exports	
	95 Percent Confidence Interval		95 Percent Confidence Interval		95 Percent Confidence Interval		95 Percent Confidence Interval	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit
Transnational Incidents	-22.943	-19.825	-0.073	-0.048	0.229	0.319	-0.045	-0.040
Foreign Born Unemployment Rate	-30.198	-27.330	-0.187	-0.133	-0.566	-0.491	0.037	0.041
Globalization Index	88.297	111.770	0.166	0.454	-0.202	-0.102	-0.049	-0.043