IS THERE ANY CORRELATION BETWEEN TERRORISM AND IMMIGRATION? EVIDENCE FROM EU COUNTRIES

Daniel Dragičević

University of Rijeka, Faculty of Tourism and Hospitality Management

Original Scientific paper
Manuscript Received August 21st 2019
Manuscript Accepted December 9th 2019

ABSTRACT

The main goal of this research was to establish whether there is a potential correlation between immigration and terrorism for 27 European Union countries, two EEA countries (Iceland and Norway) and Switzerland from 1990 to 2017. Research implemented two nonparametric tests (Spearman’s $r_s$ and Kendall’s $\tau$) to verify the main hypothesis of no statistically significant relationship between immigration and terrorism. Evidence showed no statistically significant correlation (5% level of significance) between immigration and total terrorism for 28 out of 30 sample countries and no statistically significant correlation (5% level of significance) between immigration and terrorism incidents for 27 out of 30 countries. This research has its limitation such as a low number of observations and aggregation of terrorism data. Future scholar work could try to disaggregate domestic and international component of terrorism to establish whether there is a correlation between transnational terrorism and immigration or is domestic terrorism better predictor.

Key words: immigration, terrorism, nonparametric analysis, EU

JEL classification: J15, F52, C14

1 Address correspondence to Daniel Dragičević, Assistant Professor, University of Rijeka, Faculty of Tourism and Hospitality Management, Department for Micro and Macroeconomics, Primorska ul. 42, 51410 Opatija, Croatia. E-mail: danield@fthm.hr
INTRODUCTION

Public discourse in the last decade has been predominantly revolving around a few global issues – climate change, the critique of neoliberal economy, terrorism and migration. In September 2015 international migration became an integral part of United Nations global sustainable development agenda (IOM, 2018). The total number of people residing out of their birth country was reaching 252 million in 2017 which is 32% higher than in 2000 and 60% compared to 1980 (UN-DESA, 2017). Worldwide terrorist attacks in 2018 reached 9,607 with 22,987 deaths (START, 2019a). There is a declining trend in global terrorism since 2014. The number of terrorist attacks in 2018 is 43% lower than in 2014, while number of killed 48% (Miller, 2019). Most of the previous research examined the impact of terrorism (push factor) on migration (Moore & Shellman, 2004; Schmid, 2016; Simsek, 2006), security issues concerning migration (Bello, 2017; Humphrey, 2013; Mohapatra, 2013; Neal, 2009; Weiner, 1992), economic impacts of migration (Adams JR. & Page, 2005; Borjas, 1988; Cebreiros, Chiquiar, Roa, & Tobal, 2018; Grabowska, Garapich, Jazwinska, & Radziwinowiczówna, 2017) and terrorism (Enders & Hoover, 2012; Enders, Sandler, & Parise, 1992; Gaibulloev & Sandler, 2019a, 2019b; Isike & Isike, 2018; Sandler & Enders, 2004) but only in the last decade there has been empirical research dealing with migration-terrorism nexus (Choi, 2019; Elsayed & De Grip, 2018; Forrester, Powell, Nowrasteh, & Landgrave, 2019; McAlexander, 2019). This body of literature examines a relationship between migration and terrorism, i.e. does migration induces terrorism.

The main goal of this research is to establish and quantify potential immigration-terrorism nexus in the European Union. Quantification of this relationship is relatively new and since results are ambiguous there is a need to confirm potential effects using newer data and research area. Following the established goal, the main hypothesis of this paper is that there is no statistically significant correlation between immigration in EU countries and terrorism. This research takes annual immigration and terrorism data to test potential correlation for 27 European Union countries (Luxembourg omitted), two EEA countries (Iceland and Norway) and Switzerland for the 1990 – 2017 period.

The introduction is followed by four sections. The literature review provides an overview of the relationship between immigration and terrorism and lays a theoretical framework for immigration-terrorism nexus. Methodology and data section elaborates utilized data and methodology while Results section provides
outcomes on the observed period and variables and comments on the main findings. The conclusion emphasizes the main results, scientific contribution and limitations of the research as well as recommendations for potential future scholar work.

LITERATURE REVIEW

Migration can be defined as “the movement of persons away from their place of usual residence, either across an international border or within a state” (IOM, 2019). This change of residence can be permanent or semipermanent (Lee, 1966). The theoretical framework of the migration analyses this phenomenon from different angles. Gheasi & Nijkamp, (2017) provide seven different theoretical approaches – neoclassical macroeconomic and microeconomic theories, the new economics of migration theory, dual labour market theory, the direction of migration flows, migration systems theory, social change and social transformation. Migration can be caused by wage difference (Bijwaard & Wahba, 2019; Borjas, 1988; Todaro, 1969) and employment opportunities (Harris & Todaro, 1970; Muth, 1971), push (climate change, civil wars, terrorism) (Beine & Parsons, 2015; Simsek, 2006; Wesselbaum, 2019) and pull factors (higher standard of living, better education, safety and peace etc.) (Chiquiar & Hanson, 2005; Massey et al., 1994), family-based decisions (Mincer, 1978) etc. Migrants are not only contributing to their host country they are also agents of change in their origin country through financial (remittances) (Adams JR. & Page, 2005; Grabowska et al., 2017; Mughal & Anwar, 2015; Yang, 2008) and non-financial transfers (knowledge, skills, code of behaviour, practices and social capital) (Gheasi & Nijkamp, 2017; Grabowska et al., 2017).

Terrorism is “the premeditated use, or threat of use, of extranormal violence to obtain a political objective through intimidation or fear directed at a large audience” (Sandler & Enders, 2004). As Gaibulloev & Sandler, (2019b) highlight without the presence of the threat of violence and a political motive, the violent act is a crime, not terrorism. Same authors indicate that terrorism literature mainly suggests three facilitators of terrorism: globalization, poverty and democracy. There is a well-established negative effect of terrorism on economic growth (Blomberg, Hess, & Weerapana, 2004; Gaibulloev & Sandler, 2009), trade (Bandyopadhyay, Sandler, & Younas, 2018; Nitsch & Schumacher, 2004), tourism (Arana & León, 2008; Enders et al., 1992; Llorca-Vivero, 2008) and vice-versa (tourism attracts terrorism) (Goldman & Neubauer-Shani, 2017; Nikšić Radić, Dragičević, & Barkidija Sotošek, 2018).
and migration (Moore & Shellman, 2004). Terrorism has a strong negative effect on emigration. The case of Turkey showed that the high migration movements in the East and Southeast regions were due to terrorism (Simsek, 2006). Similarly, Dreher, Krieger, & Meierrieks, (2011) find evidence that terrorism increases skilled emigration.

As shown in table 1 research on migration-terrorism nexus is rather scarce. Most of the studies were done in the last decade. Findings of analyzed empirical literature are mixed. There is no uniquely view that immigration increases or induces terrorism. Immigration-terrorism nexus is analyzed in a framework of three research areas – immigration policies (asylum), attitudes towards migrants and migration and migration itself. The bulk of the research is quantitative in nature. Applied methodology ranges from panel data analysis, negative binomial model to difference-in-differences model and OLS (spatial). The qualitative approach encompasses qualitative content analysis and metaphor identification procedure.

Table 1 State of the art on the migration-terrorism nexus

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sample and Period</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forrester et al., (2019)</td>
<td>170 countries; 1990-2015</td>
<td>Panel data analysis with IV</td>
</tr>
<tr>
<td>Nussio, Bove, &amp; Steele, (2019)</td>
<td>EU countries; 2015</td>
<td>Regression analysis</td>
</tr>
<tr>
<td>Arcimaviciene &amp; Baglama, (2018)</td>
<td>USA and EU media; 2015-2016</td>
<td>Metaphor identification procedure</td>
</tr>
<tr>
<td>Dreher, Gassebner, &amp; Schaudt, (2017)</td>
<td>20 OECD countries, 1980-2010</td>
<td>Panel data analysis</td>
</tr>
</tbody>
</table>
Choi, (2018) points out that countries with more restrictive immigration policies i.e. states with reduced immigration based on skill or wealth diminish the risk of terrorism. Similarly, Bohmelt & Bove, (2019) research confirms that terrorism diffuses via migration but only in target countries with extremely lax regulations and control mechanisms. Policy tightening is a more viable option when countries experience terrorism on their own soil or against their citizens (Avdan, 2014). Post 09/11 attacks reaction in the United States shows that asylees from Muslim-majority countries are (4 percentage points) less likely to receive asylum than those not from Muslim-majority countries (Brodeur & Wright, 2019). The likelihood of not receiving asylum for people from attack associated countries is even higher (6.7–13.6 percentage points). Based on pooled panel data of 23 immigrant-receiving countries, for the 1970-2010 period, Choi, (2019) finds no supporting evidence for the link between terrorist attacks and the adoption of restrictive immigration policies.

Attitudes towards immigrants and immigration after terrorist attacks are on the average negative. Negative attitudes are more pronounced for people who identify themselves with conservative parties (Germany) (Jungkunz et al., 2019), right extremists (Greece) (Sakellariou, 2017) and for countries with relatively homogenous societies (Nussio et al., 2019). Elsayed & De Grip, (2018) argue that attitudes of immigrants in destination country also change. Their research results reveal that Muslim immigrants’ attitudes toward integration became more

Continued Table 1

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sample and Period</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nowrasteh, (2016)</td>
<td>USA; 1975-2015</td>
<td>Risk and cost-benefit analysis</td>
</tr>
<tr>
<td>Adamson, (2006)</td>
<td></td>
<td>Qualitative analysis</td>
</tr>
<tr>
<td>Schoenholtz, (2003)</td>
<td></td>
<td>Qualitative analysis</td>
</tr>
</tbody>
</table>

Source: Author’s research
negative after the terrorist attacks than did those of non-Muslim immigrants. They also emphasize that highly educated, employed and less religious witnessed the greatest decline in integration attitudes. Analysis of EU and USA media writing on immigration, after terrorist attacks, shows negative coverage (Woods & Arthur, 2014) while migrants were represented as objects, physical force or criminals and terrorists (Arcimaviciene & Baglama, 2018).

There is mixed evidence on the hypothesis that migration induces terrorism. McAlexander, (2019) examines the relationship between migration and terrorism in Western Europe for 1980 – 2004 period. The author demonstrates that an increase in migration is positively related only to an increase in right-wing terrorism. Bove & Bohmelt, (2016) research supports the claim of immigrants being an important vehicle for the diffusion of terrorism from one country to another but their findings also confirm that 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. Terror becomes more likely with a larger number of foreigners but the same holds for native population in OECD host countries (Dreher et al., 2017). Results of this quantitative research indicate that high skilled migrants are associated with a significantly lower risk of terror compared to low skilled ones. Authors find no significant likelihood of terrorist activity to increase for migrants coming from Muslim-majority countries and countries with intensive terrorist activity. Evidence from 170 countries, from 1990 to 2015, suggests that an increase in the share of immigrants is not correlated with higher rates of terrorism (Forrester et al., 2019).

**DATA AND METHODOLOGY**

The main goal of this paper is to investigate the potential correlation between immigration and terrorism. The study uses annual immigration and terrorism data for 27 European Union countries, two EEA countries (Iceland and Norway) and Switzerland from 1990 to 2017. Luxembourg was omitted from research due to non-existing terrorism data. Country abbreviations use ISO ALPHA-3 Code. Immigration data were obtained from Eurostat database (Eurostat, 2019) while terrorism from the Global Terrorism Database (GTD) (START, 2019a).

Eurostat definition of immigration is “the action by which a person establishes his or her usual residence in the territory of a Member State for a period that is, or is
expected to be, of at least 12 months, having previously been usually resident in another Member State or a third country” (OJEU, 2007). The GTD defines 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” (START, 2019b). Terrorism was proxied with two sets of variables. First, total incidents which include overall incidents that happened in the observed country (successful and unsuccessful attacks, exclude ambiguous cases and fulfil all of the three criteria). Second, total terrorism which includes total casualties (both injuries and fatalities) but only for the cases which meet all three criteria, include successful attacks and exclude ambiguous cases.

Most widely used correlation statistic to measure a relationship between two variables are Pearson’s product-moment correlation coefficient \( r \), Spearman’s rank correlation coefficient \( r_s \) and Kendall’s tau rank correlation coefficient \( \tau \).

Pearson’s correlation coefficient is a measure of the strength of the linear relationship between two variables and it assumes normality of the variables while Spearman’s rank correlation coefficient is a nonparametric (distribution-free) measure of a monotone association that is used when the distribution of data makes Pearson’s \( r \) undesirable or misleading (Hauke & Kossowski, 2011). Kendall’s tau was introduced by Kendall, (1938) as an alternative correlation coefficient to Spearman’s \( r_s \).

When data is nonnormally distributed, which is the case for variables of interest (immigration and terrorism), a test of the significance of Pearsons’s \( r \) may inflate Type I error rates and reduce power (Bishara & Hittner, 2012). In such a case, nonparametric tests are more desirable. This research has chosen Kendall’s tau coefficient since confidence intervals for Spearman’s \( r_s \) are less reliable and less interpretable than confidence intervals for Kendall’s \( \tau \) parameters (M. Kendall & Gibbons, 1990). Compared to Pearson’s \( r \), Kendall’s \( \tau \) is much more robust to extreme observations and to nonlinearity (Newson, 2002).

Kendall’s \( \tau_b \) is defined as

\[
\tau_{XY}^{(b)} = \text{sign}(\tau_{XY}) \times \sqrt{D_{XY}D_{YX}}
\]  

(1)

which is the geometric mean of the two regression coefficients \( D_{YX} \) and \( D_{XY} \) multiplied by their common sign (Newson, 2002).
RESULTS

Europe was chosen as a research area because of its high percentage of overall world migration. In 2019 30.3% of the total world’s international migration stock was living in Europe which makes this region the second-highest just after Asia (30.8%) (UNDESA, 2019). High-income countries were preferred destination of migrants. International migration stock in Europe rose by an average annual growth rate of 1.8%.

Average immigration data for the period 1990-2017 shows that Germany had the highest number of immigrants – 879,811 on average per year (figure 1). Second highest was the United Kingdom, third Spain and fourth France. The country with the smallest number of immigrants was Slovakia with an average of 4,534 immigrants per year. Total terrorism data (both injuries and fatalities), for the 1990 – 2017 period, put Spain at the top with a total of 3,356 casualties. Following Spain is the United Kingdom with 3,332 casualties, France (1,629) and Germany (560). Countries with the lowest recorded casualties were Island (0), Slovenia (1), Malta (1) and Latvia (1).

Figure 1 Average immigration (y-axis, in thousands) and total terrorism (z-axis) from 1990 to 2017

Source: Eurostat (2019), START (2019a)
First, variables were checked to see if they are normally distributed. This is one of the assumptions for Pearson’s correlation test. In this regard, graphical and statistical tests were employed. The former included drawing histograms and q-q plots and the latter involved computing Shapiro-Wilk, Shapiro-Francia W' and Skewness/Kurtosis tests. Combine with graphical presentations tests confirmed that all three variables (immigration, terrorism incidents and total terrorism) were not normally distributed which implied that nonparametric test would be more appropriate for assessment of potential correlation.

Analysis proceeded with two nonparametric tests - Spearman’s $r_s$ and Kendall’s $\tau$. Results were nearly identical except the fact that Spearman’s coefficients were more inflated. Following the previous argument and due to space limit table 2 presents only results for Kendall’s $\tau$. Kendall’s statistics give information in a form of $\tau_a$ and $\tau_b$. The $\tau_b$, unlike $\tau_a$, makes adjustment for ties (Agresti, 2010). Values of $\tau_b$ range from −1 (perfect inversion) to +1 (perfect agreement). A value of zero indicates the absence of an association.

The null hypothesis is that there is no statistically significant relationship between immigration and terrorism. Null was accepted for most European countries.

### Table 2 Kendall’s $\tau_b$ correlation coefficient (p-value) for a relationship with immigration

<table>
<thead>
<tr>
<th>Variable</th>
<th>terrorism total coefficient (p-value)</th>
<th>terrorism incidents coefficient (p-value)</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT</td>
<td>-0.2024 (0.2718)</td>
<td>-0.2366 (0.1841)</td>
<td>22</td>
</tr>
<tr>
<td>BEL</td>
<td>0.0191 (0.9291)</td>
<td>-0.1843 (0.2451)</td>
<td>25</td>
</tr>
<tr>
<td>BGR</td>
<td>-0.3290 (0.4470)</td>
<td>-0.1588 (0.7508)</td>
<td>7</td>
</tr>
<tr>
<td>HRV</td>
<td>0.1915 (0.2639)</td>
<td>0.3177 (0.0542)*</td>
<td>24</td>
</tr>
<tr>
<td>CYP</td>
<td>. (1.0000)</td>
<td>-0.1782 (0.3388)</td>
<td>20</td>
</tr>
<tr>
<td>CZE</td>
<td>0.3008 (0.1116)</td>
<td>-0.1935 (0.2895)</td>
<td>20</td>
</tr>
<tr>
<td>DNK</td>
<td>0.0705 (0.6835)</td>
<td>0.1135 (0.4950)</td>
<td>27</td>
</tr>
<tr>
<td>EST</td>
<td>0.0588 (0.8472)</td>
<td>0.2674 (0.2072)</td>
<td>18</td>
</tr>
<tr>
<td>FIN</td>
<td>0.3102 (0.0592)*</td>
<td>0.2495 (0.1215)</td>
<td>27</td>
</tr>
</tbody>
</table>
Continued Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>terrorism total coefficient (p-value)</th>
<th>terrorism incidents coefficient (p-value)</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRA</td>
<td>0.3817 (0.0990)*</td>
<td>0.3077 (0.1905)</td>
<td>12</td>
</tr>
<tr>
<td>DEU</td>
<td>0.4728 (0.0012)**</td>
<td>0.4349 (0.0020)**</td>
<td>27</td>
</tr>
<tr>
<td>GRC</td>
<td>-0.0518 (0.7377)</td>
<td>-0.0280 (0.8598)</td>
<td>26</td>
</tr>
<tr>
<td>HUN</td>
<td>-0.1485 (0.4192)</td>
<td>-0.0896 (0.6229)</td>
<td>23</td>
</tr>
<tr>
<td>ISL</td>
<td>(1.0000)</td>
<td>0.0906 (0.6106)</td>
<td>27</td>
</tr>
<tr>
<td>IRL</td>
<td>-0.3174 (0.0466)**</td>
<td>-0.3166 (0.0316)**</td>
<td>27</td>
</tr>
<tr>
<td>ITA</td>
<td>0.0214 (0.8986)</td>
<td>-0.0685 (0.6433)</td>
<td>27</td>
</tr>
<tr>
<td>LVA</td>
<td>-0.0111 (1.0000)</td>
<td>-0.2084 (0.2061)</td>
<td>26</td>
</tr>
<tr>
<td>LTU</td>
<td>-0.1510 (0.3749)</td>
<td>-0.2574 (0.1181)</td>
<td>27</td>
</tr>
<tr>
<td>MLT</td>
<td>0.3922 (0.1416)</td>
<td>0.5604 (0.0238)**</td>
<td>13</td>
</tr>
<tr>
<td>NLD</td>
<td>0.0902 (0.5839)</td>
<td>0.1169 (0.4435)</td>
<td>27</td>
</tr>
<tr>
<td>NOR</td>
<td>0.1909 (0.2622)</td>
<td>0.0347 (0.8559)</td>
<td>26</td>
</tr>
<tr>
<td>POL</td>
<td>-0.2526 (0.1128)</td>
<td>-0.3020 (0.0522)*</td>
<td>27</td>
</tr>
<tr>
<td>PRT</td>
<td>0.1256 (0.4801)</td>
<td>-0.0374 (0.8533)</td>
<td>27</td>
</tr>
<tr>
<td>ROU</td>
<td>-0.0497 (1.0000)</td>
<td>-0.0497 (1.0000)</td>
<td>10</td>
</tr>
<tr>
<td>SVK</td>
<td>-0.2108 (0.1830)</td>
<td>-0.1763 (0.2672)</td>
<td>28</td>
</tr>
<tr>
<td>SVN</td>
<td>-0.0099 (1.0000)</td>
<td>-0.0495 (0.7892)</td>
<td>28</td>
</tr>
<tr>
<td>ESP</td>
<td>0.0029 (1.0000)</td>
<td>-0.2403 (0.0837)*</td>
<td>27</td>
</tr>
<tr>
<td>SWE</td>
<td>0.1453 (0.3552)</td>
<td>0.2877 (0.0524)*</td>
<td>27</td>
</tr>
<tr>
<td>CHE</td>
<td>-0.0297 (0.8767)</td>
<td>-0.2163 (0.1657)</td>
<td>27</td>
</tr>
<tr>
<td>GBR</td>
<td>-0.1353 (0.4409)</td>
<td>0.2398 (0.1617)</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: *, ** and *** denote rejection of the null hypothesis at 10%, 5% and 1% significance level.

Source: Authors’ calculations
The total number of observations \((n)\) varied from 10 to 27. When correlation was measured between immigration and total terrorism, at least on 5% significance level, only Germany \((p<0.01)\) and Ireland \((p<0.05)\) show a statistically significant correlation. Germany’s coefficient indicates moderate positive correlation between immigration and total terrorism \((\tau_b = 0.4728, n = 27)\). Similar results were found in McAlexander, (2019) for right-wing terrorism in German states were foreign-born immigrants are a bigger predictor of anti-immigrant violence than economic conditions. A negative statistically significant moderate correlation between immigration and total terrorism was recorded for Ireland \((\tau_b = -0.3174, n = 27)\). Empirical finding of negative correlation is in line with Nussio et al., (2019) argument that heterogeneous societies are less likely to have negative views towards immigrants and refugees. Null of no statistically significant relationship between immigration and total terrorism could not be rejected for 28 out of 30 sample countries on the 5% significance level.

The correlation was also tested for second terrorism proxy – terrorism incidents. Similarly, the null hypothesis is that there is no statistically significant relationship between immigration and terrorist incidents. Data provided in table 2 suggests that, besides Germany and Ireland, Malta is also statistically significant at least on 5 % significance level. The coefficient for Germany is still positive, although bit deflated, and statistically significant \((p<0.01)\) and points out to moderate correlation between immigration and terrorism incidents \((\tau_b = 0.4349, n = 27)\). Same holds for Ireland with negative moderate correlation \((p<0.05)\) between mentioned variables \((\tau_b = -0.3166, n = 27)\). Results for Malta show strong positive correlation between variables of interest at 5% significance level \((\tau_b = 0.5604, n = 13)\). One should be very careful with the interpretation of these results since the number of observations was only 13. The null hypothesis was rejected, at a 5% significance level, for 3 out of 30 European countries.

Migrant stock data for 2019 (table 3) shows a similar structure for Germany and Malta. More than 50% of migrant stock comes from Europe (57.6% for Germany and 52.5% for Malta) while more than 40% from the Rest of the World (42.4% for Germany and 47.5% for Malta). Correlation coefficients for these countries are positive at the 5% significance level. On the other hand, Ireland migrants stock is mostly made of European nationals (76%) and to the less extent of other nationals (24%). Ireland has more international migrant stock as a percentage of the total population (17.1%) compared to Germany (15.1%) (UNDESA, 2019). Its correlation coefficients are negative at the 5% significance level.
CONCLUSION

The main goal of this paper was to analyze and quantify potential immigration-terrorism nexus in the European Union. The effects of migration and terrorism on the economy are well established but linkages between these two phenomena not so much. Previous research indicates mixed results regarding immigration-terrorism nexus. A positive relationship was established for Western European countries for the 1980-2004 period but only for right-wing terrorism (McAlexander, 2019). Risk of terrorism depends on education (skill) level of migrants (Dreher et al., 2017) and implemented immigration policies (Bohmelt & Bove, 2019) in destination countries. Panel data analysis with IV, on the sample of 170 countries, shows that increase in the share of immigrants is not correlated with higher rates of terrorism (Forrester et al., 2019).

This paper tested the existence of a correlation between immigration and terrorism for 27 European Union countries, two EEA countries (Iceland and Norway) and Switzerland from 1990 to 2017. The null hypothesis was that there is no statistically significant relationship between immigration and terrorism. The null was tested by implementing nonparametric statistic tests Spearman’s $r_s$ and Kendall’s $\tau$. Results of the research show no statistically significant correlation (5% level of significance) between immigration and total terrorism for 28 out of 30 sample countries and no
statistically significant correlation (5% level of significance) between immigration and terrorism incidents for 27 out of 30 countries.

A positive moderate correlation was established for Germany, for both terrorism proxies, and this is in line with McAlexander, (2019). Negative moderate correlation, for both terrorism proxies, was confirmed for Ireland and this can be argued with Nussio et al., (2019) conclusions that heterogeneous countries are less likely to have negative views towards immigrants.

The main contribution of this paper lies in the expansion of empirical results to the existing body of knowledge especially in the case where previous results are ambiguous. Results indicate no correlation between immigration and terrorism and this has policy implications regarding immigration policies. As Nowrasteh, (2016) states “Foreign-born terrorism is a hazard to American life, liberty, and private property, but it is manageable given the huge economic benefits of immigration and the small costs of terrorism”. Policymakers should consider cost-benefit of strict immigration policies especially with regard to skilled migration which can be important leverage in science and technology development of destination country, USA as an obvious case. Also, it is very important to emphasize the value of scientific research and its use or lack of in media coverage. Penić Sirak, (2016) analysis of online articles points out that only a small portion of media has entered in “depth” to explain the link between terrorism and migration. This research has its limitation such as a low number of observations and aggregation of terrorism data. Future scholar work could try to disaggregate domestic and international component of terrorism to establish whether there is a correlation between transnational terrorism and immigration or is domestic terrorism better predictor.

AKNOWLEDGMENT

This work was supported by the University of Rijeka under Grant ZP UNIRI 8/18.
REFERENCES


