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The impact of terrorism on the FDI of the EU and EEA Countries*[1]

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Abstract

The key goal of this research is to empirically determine the effects of terrorism on FDI of the selected EU and EEA member countries. The methodology is based on a system-GMM estimator for dynamic panel data models on a sample covering up to 29 countries, and 13-year periods from 2000 to 2013. The main results confirm that terrorism incidents, economic and institutional variables are found to depress FDI of analysed EU and EEA countries. It can be concluded that terrorism and institutional stability are most influential on FDI inflows of the observed EU and EEA countries. The results indicate that terrorist activities reduce security and confidence of investors in countries exposed to terrorist activities, reducing the inflow of foreign direct investment. The recommendations and proposals are given based on the results of empirical analysis.

Key words: *terrorism, GMM estimator, FDI, EU, EEA*

JEL classification: *F52, F59, F21, F62*

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1. Introduction

Due to its topicality, terrorism has been gaining in importance in the context of scientific and professional discussions. The events that occurred in the European Union in 2015 and 2016 (terrorist activities in France, Belgium, Germany, etc.) additionally underline the importance of the prevention of terrorism by strengthening national security and economic activities of the countries.

Terrorism is a violent act that has certain characteristics. It is primarily an act that carries a message that refers to the the objectives and intentions of the executor of the terrorist act. For this reason, after a terrorist attack, terrorists take responsibility for the terrorist act. Another important characteristic of terrorism is fear and causing fear. It is a desired effect in order to achieve an objective.

Foreign direct investment (FDI) is one of the main generators of economic development. Its inflow has a strong influence on a country's economy. In other words, terrorist activities reduce security and investors' confidence in countries exposed to terrorist activities, reducing the inflow of foreign direct investment. On the other hand, the costs of anti-terrorist security burden the economy and reduce its economic potential. The economic effects of international terrorism are evident in the short and long run. In the short run, terrorism results in material losses, casualties and creation of a negative investment climate. In the long run, international terrorism affects the price increase due to increased spending on national security and anti-terrorist activities. In this way, security costs are incurred by all users of products in the international market, in addition to the country threatened by terrorism.

The research is based on the hypothesis that terrorism and terrorist activities have a negative impact on the inflow of foreign direct investment in the selected countries of the European Union (EU) and countries of the European Economic Area (EEA). The main objective of the research is to systematically analyse and define institutional, economic, natural and terrorism factors and test their impact on FDI inflow in the selected countries and propose measures to improve security in order to create a safe investment environment.

The research consists of six interrelated parts. After the introduction, the second part of the research presents previous research covering direct foreign investment and terrorist activities. Methodological framework of the research are presented in the third part. The fourth part of the research includes the construction of an econometric model and background documentation. The fifth part shows the results of the conducted empirical research on the example of the EU and EEA countries. The sixth part of the research sets out the proposals and recommendations and concluding observations.

2. Literature review

Terrorism and related implications are covered by a number of research and scientific discussions. The previous research presented below covers the topical issues of tackling the problem of terrorism and its economic repercussions.

Scientific research, mostly by foreign authors is a proof of the growing interest of scientists in the study of the impact of terrorism on security and FDI inflow. The interest is especially encouraged by current acts of terrorism (September 11, Madrid, London, the Middle East, but also events in Ukraine). Economic causes and effects of international terrorism are examined as well as various economic aspects of the lack of a unified security policy. Previous analysis of economic consequences of terrorist activities presented by some authors has not sufficiently contributed to the creation of economic models aimed at measuring the effects of terrorist activities, which should have been the end results of these analyses.

The impact of terrorism on the inflow of FDI is still an insufficiently analysed topic, and this is a theoretical and practical justification of this research. The research conducted by Abadie and Gandeazab (2003) is based on the insight into terrorist activities that have caused increased global insecurity with a negative impact on the distribution and transfer of capital and investment inflow in different countries.

The world financial system, due to globalisation effects and the removal of barriers to the free movement of factors of production, is becoming more open. Alomar and El-Sakka (2011) have, on the basis of research conducted in 136 developing countries, found a negative impact of terrorism on FDI inflow. Tavares (2004) found in his research that increased activities of international terrorism also affect the economic development of the country at risk of terrorism. He measured the damage caused by terrorist activities to the economies of developing countries. Furthermore, he proved that intensified terrorist activities result in a reduction of tax and general total government revenues in some countries, which has a negative impact on their economies.

By using an extended gravity model, Volker and Schumacher (2004) found that an increased terrorist activity reduces economic growth by 4%. The study was conducted on a group of countries in the period between 1960 and 1993. Blomberg et al. (2004) have found that on average, the incidence of terrorism may have an economically significant negative effect on growth, albeit one that is considerably smaller and less persistent than that associated with either external wars or internal conflict. Moreover, Mehmood (2013) has highlighted the economic impact of terrorism on major macroeconomic variables of Pakistan. The finding of terrorism affect on the Pakistani macroeconomy lasting for as long as 2 years is also consistent with Pakistan's sensitivity and vulnerability to shocks hypothesis. The study has estimated the direct cost of post 9/11 terrorism to be around 7 billion in US dollars. Gries et al.

(2009) analysed the role of economic performance in determining terrorist violence of terrorism.The findings confirmed that economies under attack are successful in adjusting to the threats of terror, soeconomic growth is not impaired.

Furthermore, the results of a study (Pizam and Fleisher, 2001) conducted on the impact of acts of terrorism on tourism demand in Israel during the period of May 1991-May 2001, confirmed that the frequency of acts of terrorism had caused a larger decline in international tourist arrivals than the severity of these acts. The implications of this study are that tourist destinations can recover from even severe acts of terrorism, as long as the terrorist acts are not repeated.

On the other hand, Lutz and Lutz (2014) proved that terrorism did not have the expected effects on international economic activities in sub-Saharan Africa. For the region as a whole, there was very little indication that terrorism, either in terms of incidents or fatalities had the anticipated negative effects on foreign investment and foreign visits.

The negative impact of terrorism on economic growth was covered by James et al. (2006) and concluded that the private sector and foreign investment are more severely affected by the uncertainty and dangers of terrorism. This study shows a positive correlaton between the new inflow of foreign investment and economic growth in each country.

The cost effects of terrorism on individual countries can be viewed from several aspects. The most important ones relate to the lack of FDI and their redirection to other countries, devastation of infrastructure, investment of public funds into increasing security rather than investing in development, and trade restrictions. Developing countries that are more dependent on foreign capital are facing reduced economic growth caused by the reduced inflow of FDI. As civil war may affect the outflow of capital from a country (Collier and Sambanis, 2002), sufficiently strong terrorist activity can reduce the inflow of capital (Enders; Sandler, 1996).

Terrorism (and civil wars) may cause overflow of costs among neighbouring countries and divert capital inflows in the event of security risks in the neighbouring country. Also, increased danger of terrorism may affect the reduction of economic activity across the region. The example of terrorist attacks in the USA in 2001 shows that terrorism can have negative effects on particular sectors or branches of industry (air transport and tourism) (Drakos, 2004, Ito and Lee, 2004) or result in a drastic increase in spending on necessities for the establishment of national security (Enders; Sandler, 2006). Terrorism also affects the increase in operating costs, which is reflected through high insurance premiums, higher spending on security and higher wages for employees at risk. In 2005, Blomberg and Mody analysed quantitative impacts of terrorism using a gravity model of bilateral FDI flows that included 12 countries of origin and 43 host countries in the period between 1981 and 1988. This model separates the effects of terrorism on FDI from the effects

of other forms of insecurity/violence on FDI. The research results, for the most part applicable to developing countries, show how insecurity/violence in the host countries has a negative and significant impact on FDI while on the other hand, insecurity/violence in the country of origin results in an outflow of FDI.

Taking into account investment determinants, Tarzi in 2005 tried to identify the key factors of investment inflow in a particular country, i.e. to determine why certain developing countries have high FDI inflows, while inflows in other countries are minimal. The most important identified factors are market size, market growth rate, competitiveness of the economy, infrastructure, and productivity of the employees. Also, the author points out the importance of legislation in the host country with a particular focus on the policies that encourage investment, taxation, repatriation, rules for property acquisition for foreign citizens, FDI regulations, labour policy, etc. He also took into account company characteristics, such as company size, business sector, types of industry, and strong and sustainable strategies. Emphasis was also placed on product differentiation factors, among which the most important are technology, brand, marketing activities, skills, logistics, and organisation, that can be the foundations of international competitiveness of a particular company. Finally, the research indicate far-reaching consequences of terrorist activities, not only on FDI, but also on other economic parametres such as the gross domestic product of other countries.

3. Methodology

The impact of terrorism on FDI is the basis for testing the impact of the factors by applying the system GMM two-step estimation of the dynamic panel model.

Two forms of dynamic estimators were developed on the basis of the GMM method: differentiated GMM estimator (Arellano and Bond, 1991) and system GMM estimator (Arellano and Bover, 1995; Blundell and Bond, 1998). Differentiated and system GMM estimators have been created for the purpose of dynamic panel analysis and have certain assumptions of data generating process (Roodman, 2009), which should be considered, i.e. that:

- There is a possibility of autonomously distributed individual time-invariant effects. Such a situation is contrary to the temporal regression model;
- Some of the regressors can be endogenous,
- The occurrence must be dynamic in nature, with the realisation of the current dependent variable that is influenced by the variable from former periods,
- Idiosyncratic disorders (except for time-invariant effects) have specific forms of heteroscedasticity, autocorrelation, and

– Idiosyncratic disorders are uncorrelated between individual variables.

The dynamic model with a single time-shifted (lagged) variable can be shown by the following equation (1):

$$y_{it} = \beta y_{t-1} + u_i + v_{it}, |\beta| < 1 \quad (1)$$

wherein y_{it} is the value of the dependent variable also in the period t; y_{t-1} is the dependent variable with a shift (lag) for one period; u_i are individual time-invariant effects, and v_{it} is a random error. Individual impacts are treated as stochastic, and further assumption that is crucial for the consistency of the model is that errors v_{it} are serially uncorrelated. Individual time-invariant effects are initially associated with the former influence of the dependent variable of the model, which points to the above-mentioned problem of endogeneity.

In exceptional cases, when there is no serial correlation (autocorrelation) in the random error, lagged differences i.e. shifts of endogenous variables can be included as instruments of the model (Arellano and Bond, 1991; Greene, 2005; Stojčić et al., 2011; Stojčić and Hashi, 2011; Stojčić et al., 2012).

It is expected that the research will show significant impact of terrorism on incoming FDI per capita in the observed group of EU countries and EEA countries. It is not expected that the role of natural disasters on incoming FDI per capita will be significant. Furthermore, it is assumed that the economic variable GDP per capita has a certain effect in the context of an increase in the incoming FDI per capita. The variable of capital openness and financial climate should have a positive sign, but also a great impact on incoming FDI per capita. FDI is a process that develops over time. Proving the above predictions may provide an answer to the question of significance of the impact of terrorism on the FDI of the selected EU and EEA countries. These assumptions of the empirical part will be subjected to econometric testing in order to confirm the main hypotesis of the research. Based on the given model, relevant variables are selected and tested. The econometric model is as follows:

$$\begin{aligned} FDIpc_{it} = {} & \beta_0 + \beta_1 FDIpc(-1)_{i(t-1)} - \beta_1 INCIDENTS_{it} - \beta_2 DISASTERS_{it} + \\ & + \beta_4 GDPpc_{it} + \beta_5 ka\_open_{it} + \sum_{t=2002}^{2013} godina_t + u_{it} + v_{it} \end{aligned} \quad (2)$$

The state of incoming foreign direct investment per capita (*FDIpc*) is selected to be a dependent variable in the econometric model (2). As a dependent variable, FDI includes equity capital, reinvested earnings and intra-company loans. The FDI inflow represents a direct or indirect investment of a foreign investor. The data are taken from the reference database UNCTAD (2015). Arguments that support the selection of the dependent variable of foreign direct investment can be found in empirical studies that confirm the negative impact of terrorist attacks on foreign

direct investment. For example, Enders and Sandler (1996) observed countries such as Greece and Spain. Their results showed the decline in net FDI inflow by 13.5% and 11.9%, which was caused by the terrorist attacks in the period between 1975 and 1995. Enders, Sachsida and Sandler (2006) used time series analysis and panel analysis by which they proved the negative impact of international terrorism on American direct investment outflows. Filer and Stanišić (2012) analysed the impact of terrorism on capital inflows of 160 countries over a period of 25 years. The authors conclude that terrorist attacks can significantly reduce the foreign direct investment flow with no effect on foreign debt and investment portfolio.

The following variables were selected as independent variables of the model, including the natural logarithm of the state of incoming foreign direct investment from the previous year (*FDIpc*(-1)), the number of incidents (*INCIDENTS*), GDP per capita (*GDPpc*), the KAOPEN Index (*ka_open*), and natural disasters (*DISASTERS*). *FDIpc*(-1) represents the state of incoming foreign direct investment per capita in the previous year and, simultaneously, the time-shifted variable.

Another independent variable is the *INCIDENTS* variable that represents the total number of terrorist attacks, i.e. incidents. The data were collected from the reference database Global Terrorism Database (2015). A number of empirical studies (Kang and Lee, 2007; Agrawal, 2011; Bandyopadhyay et al. 2011; Filler and Stanišić, 2012; Shahbaz et al., 2013) include the number of terrorist incidents and/or casualties of terrorism as independent variables of the model. The conducted studies generally confirm the negative impact of terrorism on foreign direct investment. Therefore, in this study, the variable *INCIDENTS* is selected, that measures the impact of terrorism on foreign direct investment. The model includes the economic variable GDP per capita (*GDPpc*) in the selected EU and EEA countries. The values of GDP per capita of the observed countries were collected from the reference database UNCTAD (2015). They are denominated in US dollars and shown through constant prices and constant exchange rates from 2005. The equation of the model involves the so-called Chinn-Ito (KAOPEN) Index measuring observed countries' degree of capital account openness. The variable *ka_open* represents the institutional variable of the model and at the same time shows the characteristics of the financial climate in a particular country. The KAOPEN Index is based on binary "dummy" variables that show the limitations of cross-border financial transactions of the Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) by the IMF. The Index was originally developed by Chinn and Ito (2006) and is applicable to the studies of the impact of terrorism on foreign direct investment by Filler and Stanišić (2012). The econometric analysis includes the variable of natural disasters (DISASTERS), whose data were downloaded from the International Disasters Database (2016). The natural disasters variable is treated as an independent variable in studies by authors such as Stanišić (2012), Sanjo (2011) who confirm the negative impact of natural disasters on the

inflow of FDI. The variable u indicates individual time-fixed effects, while v is the random error of the model. The impact of omitted variables is measured by the effects of the constant.

4. Empirical data and analysis

Empirical part of the research is based on secondary research by the authors. The research results relate to the period from 2000 to 2013. The econometric model consists of a total of 29 European economies at very high risk, high risk, medium risk, low risk, insignificant risk, or no risk of terrorist attacks. The group of selected countries includes the EU and EEA Member States, i.e. Austria, Bulgaria, Cyprus, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the United Kingdom, Switzerland, Norway, and Iceland. The countries' values are listed in Table A2 in Appendix. The classification of the analysed countries is downloaded from the website of Crisis Management Web Analytics from 2015.

By using a dynamic model, the potential problems of endogeneity and measured errors can be eliminated by using instruments i.e. temporal shifts (lags) of the dependent variable. Implementation of the dynamic panel eliminates the problems that can affect reliability and assessment of the results of the empirical analysis. Diagnostics of the model is conducted first, and the impact will be tested by the selection of the dynamic panel. The significance of the impact of terrorist incidents and other independent variables on FDI inflow is tested by using the system two-step GMM estimator. The dynamic panel analysis is based on the implementation of the econometric tool GRETL. The results monitor the impact of the selected independent variables of foreign direct investment from the previous year (*FDIpc*(-1)), the number of incidents (*INCIDENTS*), GDP per capita (*GDPpc*), the values of KAOPEN Index (*ka_open*), and natural disasters (*DISASTERS*) on the dependent variable *FDIpc*. The results of the assessment and diagnosis of the dynamic panel model are presented on the example of the dependent variable *FDIpc*. Detailed printout of the results of the system two-step GMM estimator can be found in Table A1 in Appendix.

Table 1: Results of the Dynamic Panel of System GMM Estimator from 2000 to 2013*

INDEPENDENT VARIABLES	VALUE
Lagged dependent variable *FDIpc*(-1)	0.504353***
INCIDENTS	−5.76717***
DISASTERS	−7.68247
GDPpc	0.0161146***
ka_open	576.131***
Constant	−384.246***
MODEL DIAGNOSTICS	VALUE
Number of observations	377
Number of instruments	95
Wald test	1.63313e+006
Prob>chi2	0.000
Sargantest	25.2068
Prob>chi2	1.0000
Arellano-Bond test for AR(1) in the first differenced errors	-2.16719
Prob>chi2	0.0302
Arellano-Bond test for AR(2) in the first differenced errors	-0.9103
Prob>chi2	0.3627

Note: * dependent variable *FDIpc*. P-values in parentheses and labels *** indicate the level up to 1% significance. P-values were obtained by calculating the two-step dynamic procedure.

Source: Authors' calculations

Table 1 indicates following results. The results of the Wald test indicate a sufficient explanatory power of the variables of the model, which is confirmed by the respective significance of the test. The synthesis of the diagnostics results leads to the conclusion that the model is specified in the appropriate manner. It can be concluded that the model can be subjected to econometric testing of the impact of independent variables on the dependent variable.

The resulting value (Prob>chi2) of the Sargan test amounts to 1.0000 and is higher than 0.05, which means that the model is acceptable and correct. Arellano-Bond test is used to examine the existence of autocorrelation of the first (AR1) and the second order of errors (AR2) in the first differences of the equation. The results of Arellano-Bond (2) tests do not indicate the presence of the second-order autocorrelation due to 0.36 coefficient, which is higher than the allowable limit of 0.05. Therefore, the null hypotheses of no second-order autocorrelation are fully accepted. The coefficients have the expected signs and satisfactory statistical significance.

5. Results and discussion

After reviewing the results of model diagnostics, the results are interpreted through GMM estimation. There is an evident positive and highly significant coefficient of temporally shifted (lagged) dependent variable *FDIpc*(-1), which supports the thesis that the current values are positively related to the previous realisations. In other words, the magnitude of the coefficient shows that a 1% increase in the value of incoming foreign direct investment per capita from the previous period results in an increase of 0.50% in the current period with provided constancy of other variables of the model. Incoming foreign direct investment per capita will be reduced by 5.76% if the variable number of incidents is increased by 1%, provided *ceteris paribus*. The value of incoming foreign investments per capita results in an increase of 0.01% if GDP per capita is increased by 1% provided the constancy of other variables of the model. Incoming foreign direct investment per capita increases by 576.1% if the variable *ka_open* increases by 1%, provided the constancy of other variables of the model. The *DISASTERS* variable has the expected sign, but its significance is unsatisfactory.

The results indicate a positive and statistically significant impact of terrorism on incoming FDI per capita. The impact of natural disasters on incoming FDI per capita is relatively weak and insignificant. There is a recorded statistically significant impact of GDP per capita on the incoming FDI per capita. The highly significant impact of the KAOPEN Index on the incoming FDI per capita has been confirmed as well. According to which incoming FDI is a process that develops over a period of time. One should not ingore the fact that FDI may be the result of FDIs from previous periods. It is evident that direct foreign investment do not provide short-term tangible results. The significance of the lagged variable may indicate that previous FDI of a company provides a clear picture of a favourable investment climate in a country and further attracts other companies and their FDI. Since on the basis of the conducted research, by using the appropriate scientifically based methodology, the negative impact of terrorist activities on the inflow of foreign direct investment has been confirmed, confirmation of the basic hypothesis of the research also results from the conclusions listed below.

6. Conclusion

The basis hypothesis of the research is confirmed, pointing out that terrorism and terrorist activities have a negative impact on the inflow of foreign direct investment in the selected countries of the European Union (EU) and countries of the European Economic Area (EEA). The research results confirm that terrorism has a negative impact on the security of the inflow of foreign direct investment in the selected countries. The consequence are anti-terrorist security costs that burden the economy

and reduce its competitive potential, and at the same time have an impact on an increase in fprices of products in the affected countries. The results derived from this research have contributed to the scientific approach in the research of the impact of terrorism on the inflow of FDI in the EU and EEA countries through the presentation of new facts and their interpretation. The methodological approach was used (the use of GMM estimators in the two-step dynamic panel analysis). The limitation of this scientific research is reflected in the selection of a limited number of the observed countries. The presented models can be methodologically complemented and developed and, depending on the objectives and interests of interested professionals, it is possible to add new variables to the models. In accordance with the conclusions of the conducted research, the following guidelines for increasing security resulting from anti-terrorist activities and increasing the FDI are adopted. Recipient countries should increase awareness of the circumstances and trends of FDI inflows in the world. World FDI flows are significantly reduced due to the consequences of the global financial crisis, especially in the EU and the USA, but also in BRICS countries. The competition for their attraction has intensified, especially among developed countries. In order to attract FDI, countries should revise their foreign trade policy (tariff and non-tariff barriers) and strengthen their regulatory environment. Pre-designed security policy can be used to alleviate the negative consequences of the impact of terrorism on FDI. The recommendation especially refers to the effects of foreign direct investment on economies of countries in which foreign investors invest their capital, the effects of terrorism on the economies of countries exposed to terrorist activities, as well as the prevention of terrorist attacks and avoiding the negative effects on the inflow of foreign direct investment and economic growth. The countries receiving FDI must be clear about the negative impact of terrorism on international exchange. Terrorism results in enhancement of security measures and control. In addition to the fact that such instruments are economically unproductive, they aggravate foreign trade activities and in turn influence the decline of the trade volume. This is supported by enhanced security measures after the terrorist attacks in the USA (September 11) that reflected negatively on the flow of the world trade. If funds were (partly) allocated for education, science or infrastructure, productivity of these countries would be higher, and the countries would achieve a higher level of international competitiveness. The countries receiving FDI should anticipate changes brought about by the increase in their political risk. The growth of political risk as a result of the geopolitical crisis in these countries adversely affects investment plans of FDI holders and causes a slowdown in the growth of global economy. Moreover, the negative implications of terrorist incidents weaken investors' confidence, and this is the key element in encouraging FDI inflows. The countries in the region should develop awareness of the negative implications of terrorist activities on their economic growth. Terrorism slows down/eliminates the inflow of FDI in these countries. Terrorism can result in property damage, casualties, costs of medical treatment, damage to the infrastructure and trade restrictions. In case of a larger terrorist act, the production capacity of these coutries

is threatened. However, it has to be stressed out that, in some cases, terrorism could affect positively on FDI, performance of some industrial sectors (maufacture of gun and armory) The application of the results of this research may contribute to a clearer perception of the impacts of terrorism on FDI. Ignoring the possibilities of occurrence of terrorist activities may have a long-term negative impact on the economic situation in a country. Terrorism has negative effects on the economic growth but this effect is depending about the social, political structure of observed country. In some cases of countries which unsucessfully confront to the effects of terrorism for periods of time, there is no relationship between terrorism and investments. Anyways, it cannot be applied on the EU case. Interruption of FDI inflow as one of the most important factors of savings affects slowdown of economic growth. Moreover, terrorism can be manifested through negative overflow effects on neighbouring countries by substantial withdrawal of capital. Ultimately, economic growth slows down, not only in one country, but also throughout the region.

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Utjecaj terorizma na izravna strana ulaganja (FDI) zemalja EU i EEA[1]

Heri Bezić[2], Tomislav Galović[3], Petar Mišević[4]

Sažetak

Glavni cilj istraživanja je empirijski odrediti učinke terorizma na izravna strana ulaganja (FDI) odabranih EU i EEA zemalja. Metodologija se temelji na primjeni sistemskog GMM procjenitelja dinamičke panel analize, obuhvaća grupu od 29 zemalja, razdoblje od 13 godina i to u periodu od 2000. do 2013. godine. Glavni rezultati potvrđuju kako teroristički incidenti, ekonomske i institucionalne varijable utječu na izravna strana ulaganja promatranih EU i EEA zemalja. Može se zaključiti kako su terorizam i institucionalna stabilnost zabilježile najznačajniji utjecaj na priljev FDI promatranih EU i EEA zemalja. Rezultati ukazuju kako terorističke aktivnosti smanjuju sigurnost i povjerenje ulagača u zemlje koje mogu biti pod utjecajem terorističkih aktivnosti, smanjujući im priljev inozemnih direktnih ulaganja. Preporuke i prijedlozi su dane temeljem rezultata empirijske analize.

Ključne riječi: *terorizam, GMM procjenitelj, FDI (izravna strana ulaganja), EU, EEA*

JEL klasifikacija: *F52, F59, F21, F62*

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Appendices

Table A1: Results of the System Two-Step GMM Estimator

Model 4: 2-step dynamic panel, using 377 observations

Included 29 cross-sectional units

Including equations in levels

H-matrix as per Ox/DPD

Dependent variable: FDIpc

Asymptotic standard errors

	Coefficient	Std. Error	Z	p-value	
FDIpc(-1)	0.504353	0.000406775	1239.8818	< 0.0001	***
const	−384.246	102.908	−3.7339	0.0002	***
GDPpc	0.0161146	0.000932268	17.2853	< 0.0001	***
DISASTERS	−7.68247	15.5508	−0.4940	0.6213	
INCIDENTS	−5.76717	1.63973	−3.5171	0.0004	***
ka_open	576.131	145.379	3.9630	< 0.0001	***

Sum squared resid 3.04e+09 S.E. of regression 2861.935

Number of instruments = 95

Test for AR(1) errors: z = -2.16719 [0.0302]

Test for AR(2) errors: z = -0.9103 [0.3627]

Sargan over-identification test: Chi-square(89) = 25.2068 [1.0000]

Wald (joint) test: Chi-square(5) = 1.63313e+006 [0.0000]

Source: Authors' calculations

Table A2: Values of Variables of the Model

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Austria	2000	1059,94211	4,32794366	1	0	1
Austria	2001	706,811225	2,8887434	1	0	0
Austria	2002	17,097106	0,06495735	1	0	1
Austria	2003	760,84216	2,37619915	1	0	1
Austria	2004	388,574227	1,06167574	1	0	0
Austria	2005	1309,01546	3,42754199	1	0	1
Austria	2006	574,426914	1,42233551	1	1	0
Austria	2007	3066,15901	6,59463988	1	1	1
Austria	2008	866,217405	1,68981165	1	6	1
Austria	2009	1107,09748	2,33123507	1	3	0
Austria	2010	306,532613	0,66095808	1	0	0
Austria	2011	1258,83892	2,47393657	1	1	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Austria	2012	471,27868	0,97868544	1	0	1
Austria	2013	1221,35807	2,42238676	1	1	1
Bulgaria	2000	127,052661	7,61186994	0,224489	2	2
Bulgaria	2001	101,881364	5,65180477	0,163896	1	0
Bulgaria	2002	117,183183	5,64315075	0,163896	1	0
Bulgaria	2003	267,52026	9,89761282	0,224489	0	0
Bulgaria	2004	438,644868	13,1063635	0,285083	0	0
Bulgaria	2005	510,195397	13,3787383	0,345677	0	3
Bulgaria	2006	1023,88109	23,1940897	0,939406	0	1
Bulgaria	2007	1638,05736	28,3912574	1	0	1
Bulgaria	2008	1313,27775	18,4844231	1	2	1
Bulgaria	2009	454,641943	6,74888091	1	0	0
Bulgaria	2010	209,648419	3,18296697	1	0	0
Bulgaria	2011	401,619833	5,28115657	1	2	0
Bulgaria	2012	233,200187	3,22722314	1	2	1
Bulgaria	2013	254,360802	3,37223989	1	3	0
Croatia	2000	221,905213	4,56073258	0,411093	2	2
Croatia	2001	227,262313	4,33923053	0,411093	3	0
Croatia	2002	216,375133	3,5630539	0,411093	0	0
Croatia	2003	406,177418	5,16990213	0,69703	0	1
Croatia	2004	288,604858	3,05423791	0,69703	0	0
Croatia	2005	406,937874	3,93250873	0,69703	1	2
Croatia	2006	750,500891	6,51542763	0,69703	0	0
Croatia	2007	1050,4065	7,63891688	0,69703	0	1
Croatia	2008	1214,96371	7,51912049	0,69703	2	0
Croatia	2009	707,370005	4,91251919	0,69703	1	0
Croatia	2010	261,113239	1,89845025	0,69703	0	0
Croatia	2011	388,995979	2,70248656	0,69703	0	0
Croatia	2012	336,847311	2,56870627	0,69703	0	2
Croatia	2013	222,660256	1,65053746	0,69703	2	0
Cyprus	2000	1207,59248	8,45472119	0,163896	2	1
Cyprus	2001	1324,17469	8,99734008	0,163896	1	0
Cyprus	2002	1464,66681	9,18373355	0,163896	0	0
Cyprus	2003	1241,90845	6,1789214	0,411093	0	0
Cyprus	2004	1490,05771	6,3205569	0,757624	1	0
Cyprus	2005	1584,53525	6,31221264	0,818218	0	0
Cyprus	2006	2444,23239	9,08001717	0,878812	0	0
Cyprus	2007	2904,56541	9,35343244	0,939406	1	1

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Cyprus	2008	1799,66079	5,14309701	1	0	0
Cyprus	2009	4301,97987	13,5665998	1	0	0
Cyprus	2010	924,909043	3,03218587	1	0	0
Cyprus	2011	2808,14104	8,80099406	1	0	0
Cyprus	2012	1455,41863	5,04132524	0,692209	1	0
Cyprus	2013	4032,08109	14,5379651	0,631615	9	0
Czech Republic	2000	486,342992	8,11003751	0,592874	0	0
Czech Republic	2001	551,412456	8,37348181	0,939406	1	0
Czech Republic	2002	830,427746	10,3823422	1	0	1
Czech Republic	2003	206,072957	2,1175526	1	1	1
Czech Republic	2004	487,320249	4,1810846	1	0	0
Czech Republic	2005	1139,04878	8,56918642	1	0	1
Czech Republic	2006	531,647245	3,51943537	1	0	0
Czech Republic	2007	1010,25709	5,53114205	1	0	0
Czech Republic	2008	619,583609	2,74271188	1	2	0
Czech Republic	2009	279,104872	1,42264998	1	1	1
Czech Republic	2010	581,841687	2,96623028	1	0	2
Czech Republic	2011	218,409735	1,01956883	1	1	0
Czech Republic	2012	748,974709	3,86169557	1	0	2
Czech Republic	2013	340,035399	1,74290954	1	1	1
Denmark	2000	6336,02403	20,6042406	1	0	0
Denmark	2001	2151,86122	6,99220949	1	0	0
Denmark	2002	1236,23828	3,71559989	1	0	1
Denmark	2003	485,0473	1,19714611	1	0	0
Denmark	2004	-1984,96835	-4,26515205	1	0	0
Denmark	2005	1578,32961	3,23213389	1	0	1
Denmark	2006	1709,29805	3,28671523	1	0	0
Denmark	2007	1329,30349	2,27481314	1	0	0
Denmark	2008	-147,573938	-0,23003575	1	1	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Denmark	2009	70,9420179	0,12256338	1	0	0
Denmark	2010	-1650,65947	-2,86503671	1	1	0
Denmark	2011	2056,07204	3,35788926	1	0	0
Denmark	2012	74,6339708	0,12986731	1	0	0
Denmark	2013	-132,103515	-0,22046333	1	1	2
Estonia	2000	286,420796	6,87695658	1	0	0
Estonia	2001	397,544627	8,65108264	1	1	0
Estonia	2002	214,241847	3,95047399	1	0	0
Estonia	2003	692,819948	9,44789138	1	0	0
Estonia	2004	718,595536	7,93787922	1	0	0
Estonia	2005	2112,4062	19,9929246	1	0	0
Estonia	2006	1011,76518	7,86443691	1	0	1
Estonia	2007	1760,06776	10,3991296	1	0	0
Estonia	2008	1399,02618	7,57425823	1	0	0
Estonia	2009	1411,73464	9,3607778	1	0	0
Estonia	2010	788,359738	5,25232472	1	0	0
Estonia	2011	752,257902	4,27039368	1	1	0
Estonia	2012	1215,78562	6,92523016	1	0	1
Estonia	2013	429,53896	2,22234203	1	0	0
Finland	2000	1706,57357	7,03685013	1	0	0
Finland	2001	719,21591	2,88708676	1	0	0
Finland	2002	1547,23474	5,76530519	1	0	0
Finland	2003	636,643547	1,94017943	1	0	0
Finland	2004	540,615119	1,43641033	1	0	0
Finland	2005	905,419076	2,32360223	1	0	0
Finland	2006	1452,53865	3,53360024	1	0	0
Finland	2007	2352,68743	4,87565588	1	1	0
Finland	2008	-215,106397	-0,40316743	1	1	0
Finland	2009	134,285277	0,28535058	1	0	0
Finland	2010	1370,94892	2,96966844	1	0	0
Finland	2011	473,151079	0,93171025	1	0	0
Finland	2012	768,788892	1,62562747	1	0	0
Finland	2013	-951,825399	-1,9320461	1	0	0
France	2000	449,994475	2,00554154	1	28	0
France	2001	259,218211	1,15160902	1	21	0
France	2002	347,003385	1,43118499	1	32	1
France	2003	125,657873	0,42423277	1	34	1
France	2004	-40,8403868	-0,12092434	1	11	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
France	2005	523,47419	1,505267	1	33	0
France	2006	396,240441	1,0871859	1	34	1
France	2007	987,427722	2,37929111	1	16	0
France	2008	581,274062	1,28307522	1	13	0
France	2009	472,539275	1,13863853	1	9	0
France	2010	212,350222	0,52368754	1	3	2
France	2011	480,993369	1,10298372	1	8	0
France	2012	256,613895	0,63060108	1	65	0
France	2013	644,557345	1,52479308	1	12	0
Germany	2000	2374,21468	10,1826111	1	8	0
Germany	2001	315,881252	1,35542376	1	8	0
Germany	2002	639,56605	2,57764605	1	3	2
Germany	2003	386,411848	1,29392686	1	2	2
Germany	2004	-121,562724	-0,36201589	1	3	0
Germany	2005	565,978793	1,6604869	1	3	0
Germany	2006	664,601056	1,8560786	1	4	0
Germany	2007	959,718187	2,33479648	1	3	1
Germany	2008	97,4682052	0,21688641	1	3	0
Germany	2009	286,179334	0,69753277	1	4	1
Germany	2010	790,707032	1,92386508	1	1	0
Germany	2011	814,480435	1,7993782	1	8	0
Germany	2012	245,364739	0,57500243	1	5	0
Germany	2013	219,913546	0,48770603	1	0	0
Greece	2000	100,862355	0,8384297	0,752803	28	1
Greece	2001	144,315533	1,16858679	0,752803	14	1
Greece	2002	4,55784753	0,03290736	1	11	0
Greece	2003	115,59687	0,63274564	1	12	0
Greece	2004	190,448415	0,87693575	1	4	0
Greece	2005	56,4490369	0,2516658	1	6	0
Greece	2006	484,494933	1,95959212	1	23	0
Greece	2007	190,776867	0,66254019	1	15	2
Greece	2008	405,901033	1,26854583	1	53	0
Greece	2009	219,528914	0,73865707	1	115	0
Greece	2010	29,6952422	0,11011891	1	48	0
Greece	2011	102,885793	0,39609741	1	11	0
Greece	2012	156,429024	0,69741061	1	22	0
Greece	2013	253,206555	1,16322343	1	53	0
Hungary	2000	270,347346	5,86719889	0,411093	0	1

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Hungary	2001	386,033288	7,35256948	0,757624	1	0
Hungary	2002	294,393333	4,44411659	0,818218	0	0
Hungary	2003	210,742478	2,52235256	0,878812	0	1
Hungary	2004	421,603722	4,13519201	0,939406	0	0
Hungary	2005	763,568415	6,8897617	1	0	2
Hungary	2006	676,543915	5,96781966	1	0	1
Hungary	2007	392,696467	2,85093932	1	0	1
Hungary	2008	629,81777	4,04089309	1	2	1
Hungary	2009	198,913072	1,54245405	1	1	0
Hungary	2010	218,960701	1,69220575	1	0	0
Hungary	2011	630,249947	4,51817173	1	0	0
Hungary	2012	1440,92809	11,3345143	1	0	1
Hungary	2013	311,127917	2,32136827	1	0	0
Ireland	2000	6777,38998	25,9566615	1	0	2
Ireland	2001	2496,46205	8,89858827	1	2	0
Ireland	2002	7450,38817	23,0494743	1	0	0
Ireland	2003	5680,19684	13,93607	1	1	0
Ireland	2004	-2596,22073	-5,49495079	1	0	0
Ireland	2005	-7621,28063	-15,0644683	1	0	0
Ireland	2006	-1311,44591	-2,40423548	1	1	0
Ireland	2007	5758,52713	9,17513565	1	1	0
Ireland	2008	-3780,84122	-6,01059306	1	5	0
Ireland	2009	5830,58256	11,0109861	1	0	0
Ireland	2010	9581,08267	19,5958224	1	4	0
Ireland	2011	5205,72968	9,90224972	1	4	1
Ireland	2012	9879,295	20,3664044	1	29	0
Ireland	2013	8003,45024	15,9573472	1	26	0
Italy	2000	234,702782	1,17095429	1	7	1
Italy	2001	259,973774	1,27888614	1	11	0
Italy	2002	296,59915	1,34597674	1	7	1
Italy	2003	335,66697	1,23700902	1	15	1
Italy	2004	345,407134	1,118598	1	3	0
Italy	2005	396,975685	1,25663492	1	6	0
Italy	2006	720,754397	2,19101832	1	4	0
Italy	2007	737,143412	1,98955962	1	0	0
Italy	2008	-180,969194	-0,45298839	1	2	0
Italy	2009	333,385841	0,91837202	1	4	2
Italy	2010	151,684282	0,43158905	1	10	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Italy	2011	565,193324	1,50659934	1	3	0
Italy	2012	1,51943248	0,00442259	1	10	1
Italy	2013	409,972828	1,16327222	1	7	0
Latvia	2000	138,305844	3,32240713	0,939406	3	0
Latvia	2001	45,0225946	1,0116189	0,939406	0	1
Latvia	2002	90,5692007	1,82160806	0,939406	0	0
Latvia	2003	122,345228	2,17244149	1	0	1
Latvia	2004	268,942891	3,97702171	1	0	0
Latvia	2005	317,025545	4,13185381	1	0	0
Latvia	2006	757,211265	7,69584337	1	0	1
Latvia	2007	1072,21689	7,50868933	1	1	0
Latvia	2008	591,181163	3,54388159	1	0	0
Latvia	2009	44,4391539	0,35886348	1	0	0
Latvia	2010	181,487887	1,58962902	1	0	0
Latvia	2011	700,875691	5,13144649	1	0	0
Latvia	2012	538,281309	3,88450043	1	0	1
Latvia	2013	440,476314	2,92404055	1	0	0
Lithuania	2000	108,29737	3,29436285	1	0	0
Lithuania	2001	128,787393	3,64825771	1	0	1
Lithuania	2002	211,891277	5,09194937	1	0	0
Lithuania	2003	53,4007096	0,964854	1	0	0
Lithuania	2004	232,113829	3,4163726	1	0	0
Lithuania	2005	312,79394	3,93278564	1	0	0
Lithuania	2006	560,938313	6,01412749	1	0	0
Lithuania	2007	631,648247	5,07156566	1	0	0
Lithuania	2008	624,984383	4,10166317	0,939406	0	0
Lithuania	2009	-4,42287572	-0,03664499	0,878812	0	0
Lithuania	2010	260,586815	2,15552428	0,818218	0	2
Lithuania	2011	475,691312	3,32987451	0,757624	0	0
Lithuania	2012	231,282955	1,63531156	0,69703	0	2
Lithuania	2013	155,451595	1,01068177	0,69703	0	0
Malta	2000	1427,03226	14,3475982	0,163896	0	0
Malta	2001	574,976571	5,78473152	0,163896	0	0
Malta	2002	-1019,93679	-9,37236194	0,163896	0	0
Malta	2003	2330,76256	17,7221506	0,163896	0	0
Malta	2004	957,087173	6,5427102	0,510427	0	0
Malta	2005	1629,637	10,5721092	0,818218	0	0
Malta	2006	4425,50945	27,1800198	0,878812	0	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Malta	2007	1821,15436	9,61378957	0,939406	0	0
Malta	2008	1016,56505	4,76488287	1	0	0
Malta	2009	-20443,3173	-101,374556	1	0	0
Malta	2010	2186,07197	10,6230041	1	0	0
Malta	2011	36378,7589	161,833043	1	0	0
Malta	2012	28195,9779	130,760614	1	0	0
Malta	2013	22319,6346	96,0261413	1	0	0
Netherlands	2000	4026,20025	15,4464227	1	1	0
Netherlands	2001	3255,59892	12,1870517	1	1	0
Netherlands	2002	1560,75818	5,39037022	1	2	1
Netherlands	2003	2034,20302	5,7487994	1	3	1
Netherlands	2004	767,655832	1,92741168	1	1	0
Netherlands	2005	2395,20296	5,80750366	1	0	0
Netherlands	2006	853,559479	1,94303536	1	0	1
Netherlands	2007	7275,86195	14,3595047	1	0	1
Netherlands	2008	350,004262	0,62024749	1	1	0
Netherlands	2009	2339,92169	4,5163837	1	1	0
Netherlands	2010	-432,40241	-0,85898584	1	1	0
Netherlands	2011	1462,15214	2,72652644	1	2	0
Netherlands	2012	1056,30069	2,14484112	1	0	0
Netherlands	2013	1911,74567	3,753709	1	0	1
Poland	2000	246,283209	5,50080626	0,163896	0	1
Poland	2001	145,616402	2,92259012	0,163896	1	1
Poland	2002	105,278204	2,02845141	0,449833	0	1
Poland	2003	104,111415	1,83082366	0,449833	0	0
Poland	2004	325,438125	4,90680928	0,449833	0	0
Poland	2005	254,373356	3,19260855	0,449833	0	1
Poland	2006	481,260078	5,35483817	0,449833	0	0
Poland	2007	566,720381	5,0477664	0,449833	0	0
Poland	2008	362,988282	2,61468408	0,449833	0	1
Poland	2009	311,269505	2,7237805	0,449833	0	1
Poland	2010	334,976119	2,68428685	0,449833	0	1
Poland	2011	477,912825	3,48208588	0,449833	0	0
Poland	2012	186,323181	1,43482168	0,449833	0	2
Poland	2013	3,12944319	0,02274295	0,449833	0	0
Portugal	2000	636,489638	5,54230601	1	0	1
Portugal	2001	598,576149	5,09742872	1	0	1
Portugal	2002	157,45604	1,2193968	1	0	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Portugal	2003	764,807301	4,83993131	1	0	2
Portugal	2004	171,078226	0,94747315	1	0	0
Portugal	2005	329,541415	1,75560312	1	0	1
Portugal	2006	1005,42831	5,07963565	1	0	1
Portugal	2007	272,362821	1,19714829	1	0	0
Portugal	2008	335,745472	1,35441033	1	0	0
Portugal	2009	152,289328	0,66110714	1	0	0
Portugal	2010	228,899795	1,01719108	1	0	1
Portugal	2011	700,926065	3,03319805	1	2	0
Portugal	2012	777,245314	3,78061812	1	0	0
Portugal	2013	210,561739	0,98259481	1	0	1
Romania	2000	47,2010256	2,82259945	0,163896	0	0
Romania	2001	51,9016897	2,84384362	0,163896	0	0
Romania	2002	51,2662722	2,4703367	0,449833	0	0
Romania	2003	98,9255176	3,66859751	0,510427	0	0
Romania	2004	290,438847	8,44372431	0,818218	0	0
Romania	2005	278,217671	6,17086467	0,878812	0	1
Romania	2006	492,087769	8,78959488	0,939406	0	2
Romania	2007	442,080201	5,67377774	1	0	1
Romania	2008	614,229894	6,48054937	1	1	0
Romania	2009	212,904778	2,78664716	1	0	1
Romania	2010	139,104772	1,81016094	1	0	1
Romania	2011	108,346576	1,27475888	1	0	0
Romania	2012	147,027659	1,85915038	1	0	1
Romania	2013	165,979489	1,8748765	1	0	0
Slovakia	2000	504,89488	13,1566138	0,163896	1	1
Slovakia	2001	422,169723	10,6429966	0,163896	0	0
Slovakia	2002	1088,52515	23,628819	0,163896	0	0
Slovakia	2003	552,334211	8,75769705	0,510427	0	0
Slovakia	2004	747,724405	9,34305129	0,571021	0	1
Slovakia	2005	576,767914	6,35287939	0,631615	0	0
Slovakia	2006	1075,16408	10,1868145	0,692209	0	1
Slovakia	2007	743,147386	5,23901778	0,752803	0	1
Slovakia	2008	898,916612	5,0645291	0,752803	0	0
Slovakia	2009	-1,12056296	-0,00685906	0,752803	0	0
Slovakia	2010	325,716621	1,98834729	0,752803	0	3
Slovakia	2011	641,750658	3,57964944	0,752803	0	0
Slovakia	2012	547,52501	3,21484859	0,752803	0	1

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Slovakia	2013	108,438617	0,60484951	0,752803	0	0
Slovenia	2000	67,0077364	0,65530912	0,69703	1	0
Slovenia	2001	180,191259	1,71743967	0,69703	0	0
Slovenia	2002	788,745451	6,66169256	0,69703	0	0
Slovenia	2003	136,177674	0,91311066	0,757624	0	1
Slovenia	2004	338,646195	1,9595161	0,818218	0	1
Slovenia	2005	280,77453	1,54532529	0,878812	0	0
Slovenia	2006	351,549895	1,78418263	0,939406	0	0
Slovenia	2007	374,868016	1,57401114	1	0	1
Slovenia	2008	599,472336	2,19170245	0,939406	0	0
Slovenia	2009	-232,767531	-0,94708968	0,878812	0	0
Slovenia	2010	51,2938504	0,21965644	0,818218	0	0
Slovenia	2011	527,37204	2,12170393	0,757624	0	0
Slovenia	2012	164,108633	0,73348478	0,69703	0	0
Slovenia	2013	-69,2569015	-0,29902172	0,69703	0	0
Spain	2000	982,431104	6,6467853	1	112	1
Spain	2001	697,017821	4,53825551	1	78	0
Spain	2002	948,625471	5,56208105	1	40	0
Spain	2003	614,513198	2,84724104	1	21	1
Spain	2004	579,735651	2,31494374	1	31	1
Spain	2005	576,668331	2,16204227	1	24	0
Spain	2006	699,442779	2,43595915	1	23	1
Spain	2007	1438,83928	4,34434553	1	11	0
Spain	2008	1701,74095	4,70887947	1	37	0
Spain	2009	227,445422	0,69424323	1	21	1
Spain	2010	863,377	2,7851952	1	3	0
Spain	2011	610,120293	1,89878513	1	0	0
Spain	2012	549,603361	1,89539243	1	1	0
Spain	2013	889,324494	2,99584307	1	5	0
Sweden	2000	2641,12452	9,01952974	1	0	0
Sweden	2001	1227,9264	4,54923092	1	0	1
Sweden	2002	1377,26631	4,6501876	1	0	0
Sweden	2003	603,441562	1,62962354	1	0	0
Sweden	2004	1360,0644	3,20013784	1	3	1
Sweden	2005	1287,41594	2,98825029	1	1	0
Sweden	2006	3028,93358	6,5547871	1	0	0
Sweden	2007	3149,37323	5,91318245	1	1	0
Sweden	2008	3994,55048	7,17711688	1	1	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Sweden	2009	1084,11967	2,34919911	1	3	0
Sweden	2010	14,9734131	0,02876565	1	1	0
Sweden	2011	1367,71163	2,29501643	1	2	0
Sweden	2012	1717,3672	3,0033091	1	0	1
Sweden	2013	373,09596	0,6160193	1	6	1
United Kingdom	2000	2059,88473	7,87152273	1	5	1
United Kingdom	2001	621,682245	2,4153175	1	0	0
United Kingdom	2002	354,306753	1,26247522	1	0	0
United Kingdom	2003	284,21327	0,87625279	1	0	1
United Kingdom	2004	1024,28469	2,68389432	1	1	0
United Kingdom	2005	3037,08016	7,62079668	1	0	0
United Kingdom	2006	2444,06719	5,75881265	1	2	0
United Kingdom	2007	2967,89393	6,13042788	1	0	1
United Kingdom	2008	1516,30954	3,34416668	1	5	0
United Kingdom	2009	1462,49574	3,92350702	1	4	0
United Kingdom	2010	946,147581	2,44833658	1	2	0
United Kingdom	2011	667,013416	1,6128679	1	0	0
United Kingdom	2012	942,01306	2,27059095	1	2	0
United Kingdom	2013	752,163391	1,77995356	1	3	1
Switzerland	2000	2674,84635	7,02399318	1	0	1
Switzerland	2001	1224,15285	3,15021977	1	0	0
Switzerland	2002	862,717208	2,06591334	1	0	3
Switzerland	2003	2253,58129	4,64799745	1	1	1
Switzerland	2004	126,342674	0,23483477	1	0	0
Switzerland	2005	-127,790314	-0,23131906	1	0	1
Switzerland	2006	5815,72495	10,0923068	1	1	1
Switzerland	2007	4267,77375	6,72896922	1	0	1
Switzerland	2008	1978,53053	2,7328963	1	3	0
Switzerland	2009	3714,1492	5,31071989	1	0	0

Country	Year	FDIpc	FDIgdp	ka_open	INCIDENTS	DISASTERS
Switzerland	2010	3653,92795	4,90271748	1	0	0
Switzerland	2011	3560,18622	4,03253412	1	0	0
Switzerland	2012	1990,13598	2,38075322	1	0	1
Switzerland	2013	-2779,52821	-3,26375492	1	0	0
Norway	2000	1578,61196	4,13884152	1	0	0
Norway	2001	470,158635	1,21987676	1	1	0
Norway	2002	174,380763	0,40482477	1	0	0
Norway	2003	761,106354	1,51721358	1	1	0
Norway	2004	554,382277	0,96224418	1	0	0
Norway	2005	471,526175	0,70630516	1	0	0
Norway	2006	2254,45915	3,04729244	1	1	0
Norway	2007	1692,05728	1,99266992	1	0	0
Norway	2008	2145,4602	2,21906209	1	0	0
Norway	2009	3441,42639	4,30699846	1	0	0
Norway	2010	3484,56092	3,97731287	1	1	0
Norway	2011	3084,68949	3,06127455	1	3	1
Norway	2012	3759,48289	3,6833841	1	0	0
Norway	2013	2863,79807	2,76466281	1	0	0
Iceland	2000	608,877598	1,91358358	0,878812	0	0
Iceland	2001	611,873029	2,13333441	0,878812	0	0
Iceland	2002	304,367995	0,950815	0,818218	0	0
Iceland	2003	1146,00558	2,933981	0,757624	0	0
Iceland	2004	2512,33099	5,3617295	0,69703	0	0
Iceland	2005	10381,6556	18,3391554	0,69703	0	0
Iceland	2006	12779,6838	22,4709224	0,69703	0	0
Iceland	2007	22378,2399	31,8202233	0,69703	0	0
Iceland	2008	2964,8424	5,21218046	0,163896	0	0
Iceland	2009	273,570105	0,66943544	0,163896	0	0
Iceland	2010	772,645978	1,85305191	0,163896	0	0
Iceland	2011	3441,18713	7,55663988	0,163896	0	0
Iceland	2012	3145,82121	7,2279994	0,163896	1	0
Iceland	2013	1204,2544	2,58866586	0,163896	0	0

Source: Authors' calculations