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THE TERRORISM AND FOREIGN DIRECT INVESTMENT: THE CASE OF PAKISTAN

Abstract

The purpose of the study is to investigate the affects of terrorism on foreign direct investment (FDI) inflows in Pakistan. Time-Series data from 2000 to 2015 has been taken for the variables. This research considers log value of FDI and terrorism data for analysis. It focuses on Correlation analysis and Ordinary Least Square (OLS) techniques used to examine the relationship and its intensity between the FDI inflows and Terrorism. The tests determine negative association between the dependent variable FDI inflows and independent variable Terrorism. It means terrorism put adverse affect and become a cause of variation in foreign direct investment in Pakistan.

Keywords: Terrorism, FDI, Pakistan, OLS.

Introduction

Sandler and Enders, (2005) define terrorism as the “the premeditated use or threat of use of violence by individuals or sub-national groups to obtain a political or social objective through the intimidation of a large audience, beyond that of the immediate victim”. After 9/11 attacks, terrorism became a global issue, this put adverse affects on all over the world economy especially in Middle-East and South Asia. Pakistan economy is also adversely affected after 9/11. Intensity of terrorism and its adverse affects on developing countries are much more serious as compare to developed countries. Pakistan is paying a great price for involvement in war against terrorism in term of economic, human, social losses and lost the confidence of foreign investors.

After 9/11, the decision of Pakistan to join the war against terrorism made it a direct target of terrorists. Furthermore, local and foreign investors feel insecure due to rapid growing terrorist activities and political instability. The behavior of foreign investors got changed and they decided to drain out there capital from Pakistan. Like all other developing countries, Pakistan also depends upon the foreign direct investment. Terrorism, indeed, creates a significant impact on foreign held capitals and growth, and also on smaller economies (Enders &

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Sandler, 1996) Investment made by foreign residents is referred as foreign direct investment.

Bandyopadhyah et al., (2013) categorized terrorism into two segments, first is transnational and the second one is domestic terrorism while analyzing the impact of terrorism in case of seventy eight developing countries including Pakistan. Bandyopadhyah et al. found adverse impact of both types of terrorism on foreign direct investment. Since 2000, Pakistan has been playing an important role against terrorism and is also facing economic threats especially in terms of decrease in foreign direct investment. Shahbaz et al., (2012) examines the relationship and its intensity between the foreign direct investment and terrorism. In this study foreign direct investment is taken as dependent variable whereas terrorism works as independent variable. Independent variable terrorism is combination of various types of terrorists attack and number of casualties and injuries reported against these attacks was taken into consideration. Furthermore, these attacks in Pakistan resulted in losses of precious lives of security forces, civilian, intellectuals etc. Detail regarding data used in this study from 2000 to 2015 with reference to terrorism and foreign direct investment is given as under.

Table 1: Terrorism and Foreign Direct Investment Net Inflows

Years	Terrorism		FDI, Net Inflows (% of GDP)	
	Number of Attacks		Casualties	Injuries
2000	15	79	316	0.42
2001	63	48	342	0.52
2002	35	68	299	1.14
2003	41	34	155	0.64
2004	137	255	1040	1.14
2005	245	210	571	2.01
2006	300	359	766	3.11
2007	678	1078	2484	3.67
2008	599	1251	3073	3.20
2009	500	1668	4312	1.39
2010	473	1547	3581	1.14
2011	639	1092	2633	0.62
2012	456	1729	1863	0.38
2013	347	2178	3770	0.58
2014	288	861	1332	0.77
2015	146	894	1215	0.36

Source: South Asia Terrorist Portal and World Bank Database, Mark 2015.

Literature Review

According to Abadie and Gandeazaba (2008), capital distribution and capital investments are adversely affected due to terrorism, political instability and insecurity. Alomar and El-Sakka (2011) elaborate relationship between terrorism and foreign direct investment with the help of 136 countries data. According to

them, FDI inflows are negatively affected by terrorism. James et al. (2006) state that terrorism put negative impact on foreign direct investment and economic growth. They further add that as compared to the public sector organizations, private sector is highly influenced by terrorism activities and political instability. According to Gaibullov and Sandler (2008) the only reason for negative impact on FDI is the loss of confidence by its investors. Due to instability and insecurity investors take more pressure and are hesitated in capital investment decision in countries. Terrorism put negative impact on economy in the form of decreasing inflow of FDI, destruction of infrastructure, cost incurred on insecurity, negative balance of payment (Bandyopadhyay, Sandler, & Younas, 2011).

Evrensel and Kutun (2007) articulate terrorism as a combination of different activities including political instability, social unrest, ethnic tensions, armed conflict, target killing, conflicts between different sects, and interference of different countries etc. Abadie and Gardeazabal (2008) argue that increase in terrorism activities results in capital flight. He further add that a decrease in FDI increases the ratio of terrorism. Mihalache (2010) mentioned that significant and negative impact of terrorism on net FDI is observed especially in mining, manufacturing, construction, transportation and infrastructure sectors. Ali (2010) explains the affects of terrorism in Pakistan in the form of destruction of infrastructure, low revenues, capital flight, loss of livelihood, declining of growth rates, tourism reduction in northern parts of Pakistan and hence the deterioration of overall economy. Terrorism has also its impact on macroeconomic variables, GDP, inflation and unemployment (Ismail & Amjad, 2014). Most research studies indicate that much importance has been given to FDI as it is considered as an important tool for survival, growth and stability of country. Alomar et al., (2011) acknowledges the Importance of FDI as it is not only a source of capital inflow but also a source of technology, expertise, income and market access to the countries.

Shahbaz et al. (2012) conducted a study to investigate the relationship between the FDI inflows and terrorism in Pakistan. According to the result of study significant negative impact of terrorism on foreign direct investment is observed. According to Rasheed & Tahir (2012) terrorism creates insecurity in a country that ultimately results in the loss of foreign investor confidence that leads to decrease in foreign direct investment. According to Hyder et al. (2015), Pakistan is facing the consequence of Afghan War; and faces the problems of decreasing foreign direct investment due to various religious conflicts that are enhancing the terrorist activities. He further demonstrates that terrorism is the major hurdle in inflow of FDI. Bandyopadhyay et al. (2014) reports the association between FDI and terrorism. In this study data regarding seventy eight under developed countries from 1984-2008 is collected. According to them significant relationship between the FDI and terrorism is observed but foreign aid brings FDI. Agrawal (2011) mentions significant negative association between the FDI and terrorism found in underdeveloped countries, with special impact of FDI in manufacturing, trade, repair and construction sectors.

Methodology

Secondary data of FDI net inflows in USD and index for terrorism (number of terrorist attacks, number of casualties and number of injuries resulting from these attacks) collected from South Asia Terrorist Portal and World Bank data base from 2000 to 2015. For further analysis log value of data is considered. Correlation analysis techniques used to examine the relationship between the dependent variable (FDI) and independent variable (Terrorism). Ordinary Least Square (OLS) techniques are used to measure the intensity of impact of dependent variable (FDI) on independent variable (Terrorism).

3.1 Model and Hypothesis

In the light of discussion, following model and hypothesis have been proposed

$$FDI = \beta_0 + \beta_1 T + E$$

In the above stated model, β_0 represents Intercept, β_1 for Effect of Terrorism, T for independent variable and E has been used for Error term

Ho There is no relationship between FDI and Terrorism.

H1 There is a relationship between FDI and Terrorism.

4. FINDING AND CONCLUSION:

Table 2: Correlation Matrix

	FDI	Terrorism
FDI	1	-0.742**
Terrorism	-0.742**	1

**Correlation is significant at the 0.01 level (2 tailed)

The results of correlation matrix indicate the value of Pearson's correlation between dependent variable (FDI) and independent variable (Terrorism) that is - 0.742. This value indicates that there is a negative relationship present between dependent variable (FDI) and independent variable (Terrorism) at significant value of 0.001. It means a significant negative relation is observed between all the concerned variables. Shahbaz et al. (2012) finds strong correlation between the foreign direct investment and terrorism.

4.1. Regression Results:

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.74	0.55	0.52	0.30

The model summary indicates that the value of R is 0.742 ($R^2 = 0.550$ and the value of adjusted R^2 0.518, it means 51.8% variation in dependent variable (FDI) observed through independent variables (Terrorism).

Table 4: ANOVAa

Model	Df	Sum of Squares	Mean Square	F	Sig.
Regression	1	1.504	1.504	17.14	0.001b
Residual	14	1.229	0.088		
Total	15	2.733			

- a. Dependent Variable: FDI
- b. Predictors: (Constant), Terrorism

The above cited ANOVA table indicates F value 17.135 at significant level 0.001, which indicates that the model is a good fit.

Table 5: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
Constant	7.140	0.519	13.769	0.000
Terrorism	-0.651	0.157	-0.742	0.4139

- a. Dependent Variable: FDI

In table 5, the values of beta coefficient with t and P-values are stated. Terrorism has -0.651 unstandardized coefficients of B, -0.742 Beta values of standardized coefficients with t-value 0.4139 (sig. 0.001). It is apparent from the stated calculations that Terrorism has negative significant impact on FDI inflows in Pakistan. Enders & Sandler (1996) also witness negative impact on foreign investment in case of small economies. Bandyopadhyah et al., (2013) also explains adverse impact of terrorism on FDI in seventy eight developing countries including Pakistan. These results not supported “Ho” which is there is no relationship between terrorism and foreign direct investment inflows.

Conclusion(s).

The purpose of this study is to examine relationship between terrorism and FDI inflows in Pakistan. The findings indicate that terrorism and FDI inflows are negatively associated and create an adverse impact on dependent variable. This study rejects its null hypothesis and accepts alternate hypothesis that there is a relationship between Terrorism and FDI inflows in Pakistan. Terrorism disturbs overall economy and business environment of a country which results in insecurity

for foreign investors and slows down the business activities. For the purpose of restoring confidence of foreign investors in Pakistan, concrete and comprehensive actions are needed to tackle the giant of terrorism. The policy makers should incorporate strategies for confidence building of foreign investors while their framing their policy frames. The results are consistent with Shahbaz et al. (2012), Rasheed & Tahir (2012), Hyder et al. (2015) and Agrawal (2011).

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