Bearing the Brunt: The Effect of Terrorism on the Foreign Direct Investment in South Asian Association for Regional Cooperation (SAARC) Nations

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Abstract

The current state of terrorism has posed serious challenges to macroeconomic environment stability by causing the dislodgment of foreign direct investment (FDI). This study aims to find the impact of terrorism along with other important policy variables such as FDI, Terrorism, law and order, Tariff, and Government regulation in the SAARC member nations, namely, Bangladesh, Bhutan, India, Nepal, Pakistan, Afghanistan, Maldives, and Sri Lanka. Utilizing a panel econometric estimation model on annual data from 1990-2019, the results of the study show a significant negative impact of terrorism and law and order situations in the SAARC countries. Whereas the magnitude of FDI is technology-driven in Pakistan, Bangladesh, and Afghanistan where there is a deep focus on the physical structural transformation. This empirically establishes the fact that terrorism is a serious threat to FDI and economic growth for the economies in this region.

Kev Words: FDI; Terrorism; Tariff, SAARC,

Introduction

Poreign direct investment (FDI) plays an important role in the economic growth and development of any country by providing much capital for required investment, boosting up jobs availability, increasing managerial skills, and bringing modern technology (Warfare and Nurudeen , 2010).FDI inflows help to increase the growth level in the host country especially if the country is a developing nation then FDI inflows help to decrease unemployment, obtain advanced technology, shrink the gap between saving and investment, boost production, and market competition (Khan, 2008). Countries take much interest in FDI because they consider it as a crucial tool for economic growth because through FDI countries get a skill, space for modern technology, generate income and get access to world markets (Herzer and Nunnenkamp, 2011).

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FDI provides capital inflows, skills, advanced technology, new products, entrepreneurial capability, and access to international markets, which are crucial for industrialization, so in this way, more jobs are being available to the masses which eventually reduces poverty and brings economic stability in the developing countries. This is the reason that now a day's developing nations acknowledge the prospective importance of FDI for their development, so they are going to liberalize their investment policies (Zeb *et al.*, 2014). Despite all these, FDI also has a positive impact on domestic firms in the form of spillover effects, which is to increase the movement of skilled workers from foreign to domestic industry, to increase the competition by enhancing and copying the production process of the foreign technology (Mishra, 2011).

South Asia is one of the affected regions by terrorism. According to Sandler and Enders (2004) terrorism is defined as "The premeditated use or threat of use of violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience, beyond that of the immediate victim". Any type of exploitation of a country's resources that bring financial instability to that country such as smuggling and attacks are counted as a form of terrorism. Terrorism not only destroys the financial system but also damages the physical infrastructure and investors' confidence. Investors tend to invest only when they feel about their investment is safe and secure (Rasheed & Tahir, 2012). In the case of an open economy, the terrorist attacks will affect the allocation of productive capital, increase uncertainty and risk about returns on investment so foreign investors shift investment across the countries where they feel safer about their profit (Abadie & Gardeazabal, 2008)

In Pakistan, since 2003, more than 52,000 people, with 19,000 civilians, have lost their lives due to terrorism (South Asia Terrorism Portal, 2014). Due to terrorism, Pakistan lost 33% of its real national income, which is equal to annually 1% GDP loss per capita. Reduction in FDI and foreign worker remittances are the consequences of this loss (Mehmood, 2013). According to a study conducted by Singh (2013) on investment data of 510 farmers in India, a significant negative relationship is found between terrorism and level of investment for the long period. But for short period this relationship is statistically insignificant. Insecurity increased borrowing costs for farmers too.

There is a significant negative correlation between FDI inflows in manufacturing, trade, and repair and construction sector s and terrorist activities in developed nations (Agrawal, 2011). Both domestic and transnational terrorism reduce FDI. But the impact of transnational terrorism on FDI is more because here foreign assets and persons are the targets of terrorists (Bandyopadhyay et. *al.*, 2014). In developing economies, an increase in violence in the host country induces to shift in horizontal FDI to vertical FDI (Bloomberg & Mody, 2002). Terrorism in its different forms brings uncertainty amongst investors and they make a less direct investment (Schneider and Frey, 1985).

A few studies are found regarding terrorism and FDI (Zulfiqar *et al.*, 2014; Bandyopadhyay *et al.*, 2011; Zeb *et al.*, 2014; Shahzad *et al.*,2014, Fatima et. al 2014, Rauf et. al. 2014). In studies on terrorism and FDI, some use an insufficient number of observations that do not represent the overall situation in that country such as (Rasheed and Tahir, 2012). The empirical studies analyzed that the impact of Terrorism on FDI is limited (Shah & Faiz, 2015; Haider & Anwar, 2014; Hussain and Faiz, 2015).

The above studies examine the effects of terrorism on FDI irrespective of whether the country is developing or developed. One distinguishing point is that apart from considering FDI as an aggregate phenomenon, it rather can be examined separately on different sectors of the economy. In this way, we can get a broader view of the economy. Unlike the previous literature, this study focuses on the impact of terrorism on some selected sectors in the SAARC countries.

An Overview of the SAARC Nations

The South Asian Association for Regional Cooperation (SAARC) consists of Pakistan, India, Bangladesh, Bhutan, Maldives, Nepal, Sri Lanka, and Afghanistan. It is a geopolitical region and economic association established in 1985. The Secretariat of SAARC is in Kathmandu, Nepal. The main objective of the SAARC was to improve the quality of life, accelerate economic, social, and cultural development activities among members through combined economic areas. In 2007, Afghanistan became the 8th member of SAARC. The member countries of SAARC cover up an area of 4.1 million km² and the residents of the region accumulate to a fifth of the population around the world. The SAARC region

consists of almost 67 percent of the low-income population of the world (Das, 2007; Behera, 2008). India is the largest economic country among all the member countries where the services sector generates more than half of GDP (Zaheer, 2013). Table 3.1 shows the gross national income of each member country.

SAARC with more than 2 billion population is the world's largest regional cooperation. SAARC members must devise policies for common benefits to boost up trade and investment amongst the members and to increase GDP growth to eliminate poverty. (Mamood 2013). The major traded items from and within the SAARC countries are primarily agricultural and semi-manufactured products. Some of the major indicators of SAARC member is depicted in the table.

Table 1: Major Economic Indicators for the SAARC Countries (annual growth)

Indicat	Afghanis	Banglad	Bhuta	Ind	Pakist	Nep	Maldi	Sri
ors	tan	esh	n	ia	an	al	ves	Lan
								ka
GDP	14.4	6.2	4.61	4.7	4.0	4.9	1.34	6.3
growth								
Inflatio	7.21	6.22	10.9	9.4	9.7	9.5	12.2	7.6
n								
Exports	5.6	23.2	36.0	24	12.4	10.0	111.4	23
(% of						7		
GDP)								
Imports	39.2	32.2	64.5	30.8	20.3	33.6	112.3	36.5
(% of								
GDP)								

Source: World Bank (2020)

FDI in Sample Nations

After GATT (1948), SAARC economies couldn't get their benefits due to their failure to produce competitive prices commodities and innovative methods of production. During the last decade, FDI inflows have increased in the SAARC region due to establishing trade and FDI-friendly policies. However, in 2015 due to the low growth rate in SAARC size of the FDI share declined (UN, 2015). India was

the first who relaxed its trade policies for FDI and during 1994 it gets FDI inflows of 3.5 dollars (RBI, 2000). While Pakistan started to receive maximum FDI in 1991-92 ranging from 200 to 400 million dollars (SBP, 1997), a sharp increase in FDI was observed during the last decade, it has reached 55 billion dollars (WDI, 2018). Bangladesh received the highest FDI inflows since after 2010 amount ranges 41.5 to 407.5 million dollars, Nepal received a greater FDI share during 2015 and 2020. In this way, during the 2010s, most of the Asian countries increased their growth rate more rapidly than other developing countries of the rest of the world.

During 2013 FDI inflows in South Asia became 2.4 % of the world share. In 2014, FDI inflows reached 41.2 billion dollars with an increase of 16%, and this inflow became 3.4% of the world's share in FDI inflows (UNCTAD, 2015).

Table 2: FDI Inflows in Selected SAARC Countries as % of GDP (billion US\$)

Year	India	Pakistan	Bangladesh
2011	5.47	0.485	0.079
2012	5.62	0.798	0.052
2013	4.32	0.949	0.27
2014	5.77	1.524	0.45
2015	7.70	3.521	0.81
2016	20.33	5.1396	0.70
2017	25.4	5.409	0.66
2018	43.40	3.1799	1.00
2019	35.60	2.1508	0.97
2020	24.16	1.739	0.71

Source: World Investment Report 2020.

During the previous 5 years, India has received 177.77 billion dollars FDI inflows for the same period Pakistan only received 24.96 billion dollars. This credit goes to friendly policies for FDI, during 2010 size of this inflow declined due to a low level of economic growth (UN, 2018). During the 1990s, FDI inflows in SAARC nations was 6658 million dollars this consists of 0.33 percent of total world FDI inflows, however, during 2010 onwards this amount increased to 49177 million dollars which consists of 2.89 percent (UNCTAD, 2019).

Terrorism in SAARC Nations

Due to high threats of terrorist attacks in the region, the 3rd conference of SAARC in 1987, terrorism was the top agenda and all members signed and agreed on 'SAARC Regional Convention on Suppression of Terrorism.' (Jabeen and Choudry, 2013). South Asian countries facing discontent and disturbances due to undermining factors of religious and ethnic clashes, political divergence (Malik, 2009). The causes of terrorism in South Asia are poor law and order, income inequality, poverty, Unemployment, illiteracy rate (Zeb, et al., 2014). For South Asia phenomenon of terrorism and violence in any form is not a new challenge, sometimes in form of separatism, right- and left-wing politics and religious extremism, terrorism, and political violence have been existing in this region from time to time. The major purpose of many of the groups is to capture the power and to transform the systems of governance according to their will (IPS, 2009). South Asia is paying heavy costs of terrorism in the direct and indirect form of infrastructure, crops and industrial unit destruction, deterioration of economic activities, and loss of confidence in the economy thus as a result economy must face long term brain drain, expenditure on counter-terrorism, low level of FDI inflows, heavy economic and transaction costs (Kumar, 2012).

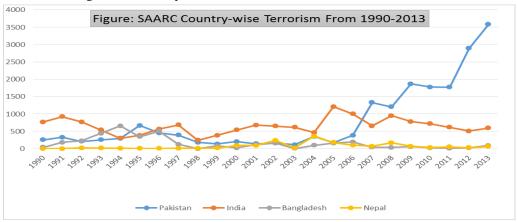


Figure 1: Country-Wise Terrorism in SAARC Countries

Source: GTD (1990-2013)

Studies regarding terrorism and FDI have usually focused on aggregate FD. Unlike the previous literature, this study adds a new dimension of FDI inflows by focusing

on a sector-wise study with a special reference to those countries that are facing terrorism. This study also adds the role of law and order and governance as a policy variable that is never realized in discussing the South Asian countries. This study is focused to clarify the FDI and governance nexus in true spirit.

Theoretical Model of FDI

As literature shows that lots of empirical work done on FDI but sound theoretical model is lacking (Blonigen, 2005). Earlier studies on FDI show mixed findings about the nature, consequences, flow, barriers, causes and determinants of FDI. Capital movement theory based on portfolio investment provided a base for FDI description. The concept of industrial organization theory has considered FDI as a means of transfer of information and assets of the firms and multinational organizations acquire FDI only if they possess some advantages of brand, patent and managerial skill etc. from locally based firms, in product life cycle model firms establish entities abroad for their home products to sale out in the host country. According to Investment Development cycle higher value-addition used by MNE, this value addition increased with the host country's development (Mina, 2007). She developed "OLI (ownership advantage, location advantage and internalization advantage" paradigm for a firm (occupy FDI), it is the best theoretical approach of FDI inflows, this OLI paradigm includes microeconomic and macroeconomic determinants of FDI to describe the reasons or advantages of FDI for a firm. Firm size, benchmark and product diversification is included in ownership advantages, Location advantages are attributed to developing economies; minimize costs of transportation and communication, natural resources, political stability and policies etc. in the host country. This paradigm is empirically examined by Galan and Gonzalez-Benito (2001) for Spanish MNC.

Theoretical Model for Terrorism

For a long time, economists have been considering the economic concerns of conflict and war. An increase in fundamentalism or the harmony of groups is the sole motivator to terrorist movements. However, bad economic conditions are also responsible to increase conflicts, wars, and terrorism. Groups involved in terrorism when they become unable to bring changes in the political scenario of the country, having limited access to economic opportunities so they consider terrorist attacks as the only way to displace unwanted policy and policymaking influential,

terrorism diverge investment spending to unproductive spending on military Epstein and Gang, 2002; Bernholz, 2003). When economic elite groups diminish and use resources in the form of taxes and rents, this is shocking for deprived groups in the economy through terrorist activities and insurgency these groups try to demolish the status quo and get access to resources (Tornell, 1998). Terrorist groups with political, religious, and ideological motives perform extra violence and with instant effect usually hit large audiences too (Enders and Sandler, 2006). An increase in terrorist attacks going to decline in income and affects other economic variables in a closed economy.

Empirical Model

The studies of (Schneider and Frey, 1985; Enders and Sandler, 1996; Gaibulloev and Sandler, 2009; Hallberg, 2016) explains that FDI depends on number of factors including economic, geographic, political and etc. following the literature FDI and terrorism are demonstrated as following:

The functional form of the model is expressed as:

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NFDI_{jt} = f (Law and Order, Tariff, Government Regulations and Terrorism)jt..... (1)

NFDI_{jt} = \alpha + \beta_1 (Law and Order)_{jt} + \beta_2 (Tariff)_{jt} + \beta_3 (Government Regulations)_{jt} + \beta_4 (Terrorism)_{jt} + \epsilon_{jt} \dots (2)
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Where; the dependent variable is FDI, independent variables are Terrorism, Tariff, while Government regulations and law and order are control variables. The data is taken from the world Bank data base.

NFDI = Net Foreign Direct investment inflows in selected SAARC countries

 α = constant term

 β = Coefficient of independent Variable

 ε = Error Term

where, *j* represents selected sectors of selected SAARC countries.

Empirical Model of the Study

To undergo linearization of the data we take the natural log of the variables. The model after log transformation is given as:

$$lnNFDI_{jt} = \alpha + \beta_1 ln(\text{Law})_{jt} + \beta_2 ln(\text{Tariff})_{jt} + \beta_3 ln(\text{Regel})_{jt} + \beta_4 ln(\text{Terr})_{jt} + \epsilon_{it} \dots \dots (3)$$

Estimation and Results

Descriptive Statistics of the data are given in Table 3 depicting mean, median, standard deviation and range. India has maximum mean value in manufacturing sector, Pakistan, Bangladesh and Nepal have maximum mean value in communication sector, if we compare the mean values regarding FDI, India is leading in manufacturing, Finance and business, transport and communication. However, in case of terrorism Pakistan has higher mean value than other SAARC countries of India, Bangladesh and Nepal. For India, summary of statistics shows a maximum mean value for regulation and law and order, where Pakistan, India have maximum average value for tariff.

Table 3: Summary Statistics of the variables for Countries:

	PAKISTAN		
Sectors	Mean	Standard Deviation	Range
FDI Finance & Business	264.4792	405.4738	1859.7
FDI Manufacturing	66.29375	58.43863	188.7
FDI Transport &	353.7517	612.4275	1934.8
Communication			
Terrorism	795.4304	945.7279	3469.33
Law	4.219202	0.117505	0.369147
Tariff	28.60250	19.83720	54.76
Govt. Regulation	4.422673	0.142079	0.469495
	INDIA		
Sectors	Mean	Standard	Range
		Deviation	
FDI Finance & Business	998.0933	1288.898	4428.88
FDI Manufacturing	2489.740	2350.965	9283.75
FDI Transport	995.8362	1565.227	7070.51
&Communication			
Terrorism	646.5833	225.6176	364
Law	5.106908	0.141447	0.401468
Tariff	28.18708	21.89475	82.96

Govt. Regulation	4.607272	0.094650	0.354895					
BANGLADESH								
Sectors	Mean	Standard	Range					
		Deviation						
FDI Finance & business	94.61042	71.77257	260.2					
FDI Manufacturing	145.8792	153.6349	679.58					
FDI Transport &	270.3808	363.3279	1153.13					
communication								
Terrorism	149.3883	172.7494	656					
Law	4.103800	0.083770	0.312788					
Tariff	45.33458	36.99258	96.01					
Govt. Regulation	4.052883	0.092220	0.367603					
	NEPAL	<u> </u>						
Sectors	Mean	Standard	Range					
		Deviation						
FDI Finance & Business	0.036417	0.044978	0.218					
FDI Manufacturing	19.17375	16.88605	82.08					
FDI Transport &	979.0508	1286.114	4015.81					
Communication								
Terrorism	68.03375	88.14390	363					
Law	4.479458	0.307715	0.885224					
Tariff	14.20933	4.142791	12.116					
Govt. Regulation	4.406994	0.149270	0.459754					

Panel Unit Root Test

The order of integration of variables of the study through unit root test recommended by Levin, Lin and Chu (2002) to examine the stationarity of variables in the model. Null hypothesis of this test is existence of unit root. Table 4 shows the results of panel unit root test at the significance level of 5%.

Table 4: Test for Stationarity for the Sample Nations

Variable	Level		At Diffe	erence	Order of
					Integration
	Stat.	Prob.	Stat.	Prob.	
FDI _{Financial} & business	0.93723	0.8257	-11.7788	0.0000	1(1)
$\mathrm{FDI}_{Manfacturing}$	2.32944	0.9901	-9.62572	0.0000	1(1)
FDI _{Trans & Commu}	1.04290	0.8515	-8.78105	0.0000	1(1)
Terrorism	0.13042	0.5519	-12.8658	0.0000	1(1)
Law	-	0.2917	1	0.0000	1(1)
	0.54849		9.69886		
Tariff	-0.02528	0.4899	-5.48122	0.0000	1(1)
Regulation	-1.01715	0.1545	-11.3089	0.0000	1(1)

Note: All the variables are measured in the log form.

Table 4 shows that all variables are stationary at first difference i.e., I (1). Because p-values are less than 5 percent, so the null hypothesis is rejected of existence of unit root at the 1st difference.

Results of Padroni Residual Co-Integration Test

As the results of panel unit root test confirms the seven series (finance and business, manufacturing, transport and communication, terrorism, law and order, tariff and regulations) are the 1(1), by using these results we continue further and test presence of co-integration among the variables we apply heterogeneous panel co-integration test developed by Pedroni (1999), this test also allows cross-sectional interdependence for various individual effects.

Table 5: Padroni Test

	Inte	rcept aı	nd no tr	end	Intercept and trend		nd	No intercept and trend			end	
Alternative	hypothe	esis: con	ımon Al	R coeffici	ients (wi	thin-din	nension)	1				
Test	Stati	Prob	Stati	Prob	Stati	Prob	Stati	Prob	Stati	Prob	Stati	Pro
	stic		stic		stic		stic		stic		stic	b.
Panel v-	1.303	0.09	0.70	0.23	0.05	0.47	-	0.68	1.46	0.07	0.711	0.23
Stat	401	62	8315	94	278	9	0.48	66	4936	15	113	85
							6287					
Panel	-	0.06	-	0.04	-	0.215	-	0.19	-	0.01	-	0.01
rho-Stat	1.54	07	1.68	6	0.78	8	0.85	64	2,110	74	2.126	67
	887		4923		648		4391		502		931	
	6				2							
Panel	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
PP-Stat	2.96	15	3.165	08	3.19	07	3.47	03	3.124	09	3.10	09
	8507		989		8251		9755		626		9339	
Panel	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
ADF-	2.90	18	3.138	08	3.171	08	3.48	02	3.05	11	3.07	11
Stat	904		459		516		3821		0379		080	
	9										2	
Alternativ			dividual			`	n-dimer					
Test	St	atistic		Prob.	St	tatistic		Prob.		tatistic	Prob.	
Group	-0.8	64389		0.1937	-о	.07623	•	0.4696	-1.	745817	0.0404	
rho-												
Statistic												
Group	-3	.143116		8000.0	-3.2	235896	(0.0006	-4	.00573		
PP-											.000	
Statistic												
Group	-3.	091103		0.001	-3.1	156664	•	8000.0	-3.	.90689	0.000	
ADF-												
Statistic												

The study also apply Engel-Granger test on the variables in the model to observe whether a co-integration exists among the variables. The null hypothesis for this test is "no co-integration" among the variables. Results of the tests are shown in table 5. The null hypothesis is rejected because *p-values* are significant at 5% for Pedroni, Kao and augmented Dickey-Fuller test. Such as in case of *Intercept and no trend, p-values* are significant at 5%, similarly in presence of *Intercept and trend, p-values* are significant at 5%, while in case of *No intercept and trend p-values* are significant at 5%. Thus, most of the *p-values* are significant at 5%. Therefore, it is proved by the results that long run relation exists among the variables of the model.

As long run relationship is found among the variables OLS estimation provides spurious results. To acquire reliable results Fully Modified OLS (FMOLS) test is applied this test is introduced by Pedroni (1999). The results of this test are not

only reliable for long-run co-integrated variables but also helpful in controlling for auto-correlation and endogeneity problems. On the other hand, results of Kao augmented Dickey-Fuller test for co-integration also describe that the model of panel data is co-integrated

Table 6: Kao Residual Co-Integration Test

	t-Statistic	Prob.
ADF	-2.46599	0.0068
Residual variance	119944.1	
HAC variance	71113.93	

Table 7: Augmented Dickey-Fuller Test

	Coefficient	Std. Error	t-Statistic	Prob.
RESID(-1)	-0.460367	0.097786	-4.707919	0.000
R-squared	0.199466	Mean dependent var	-23.97282	
Adjusted R-	0.199466	S.D. dependent var	360.138	
sq				
S.Error	322.2248	Akaike info criterion	14.39967	
Sum	9033107	Schwarz criterion	14.42783	
squared				
resid				
Log	-632.5857	Hannan-Quinn criter.	14.41102	
likelihood				

Dependent Variable: D (RESID)

The panel cointegration test confirms the long run association among the variables. It means that all variables are cointegrated in the long run. The results of Kao residual test and Pedroni tests permit us to further apply the Fully Modified OLS (FMOLS) model to see the long run impact of the exogenous variables in the target variable i.e. the FDI in all the three selected sectors of Pakistan. Table 8 shows the outcome of FMOLS if FDI is considered as a target variable in the first sector.

Table 8: Estimates of FMOLS in Finance and Business Sector (FDI as dependent variable)

Variable	Coefficient	Std.	T-Statistic	P-Value
		Error		
Law and Order	13.777	4.725	2.914	0.004
Govt Regulation	3.518	4.365	0.805	0.4226
Terrorism	-0.320	0.186	-1.716	0.090
Tariff	-0.903	0.307	-2.938	0.004

Table 8 shows the empirical outcomes of the FMOLS model that is executed keeping the FDI as dependent variable in the business sector of overall sector wise segmentation of the SAARC countries. The FMOLS model has a null hypothesis of no long run association among the said variables against the alternative that tell that there is long run impact among the variables. The coefficient value shows the magnitude of change in the endogenous variable explained by the exogenous variable of the model. According to the results depicted in the above table, the pvalue is below 5% that means that the probability of accept the null is very low. So, we accept the alternative hypothesis by concluding that there is a long run significant impact of law and order situation on the FDI in sector 1. Keeping in view the magnitude, the table shows that 1 % improvement in the law and order situation in the country will bring about 13.77% rise in the amount of FDI in the region. It is also justifiable on theoretical grounds that FDI increases where there is safety to the invested amount of the investors. Similarly, reduction in the terrorism activity enhances the FDI in the country by a significant amount. The role of tariff is very important over here. If terrify on imports are subsidized or reduced that there would be a significant rise in the level of FDI in the country, while we do not find any foot prints of government regulations in the improving of FDI in business sector.

Table 9: Estimates of FMOLS in Manufacturing Sector (FDI as dependent variable)

Variable	Coefficient	Std.	T-Statistic	P-Value
		Error		
Law and Order	-4.399	3.594	-1.224	0.224
Govt Regulation	1.544	3.226	0.481	0.631
Terrorism	-0.359	0.132	-2.702	0.008
Tariff	-0.606	0.155	-3.896	0.002

Table 9 shows the empirical outcomes of the FMOLS model that is executed keeping the FDI as dependent variable in the manufacturing of overall sector wise segmentation of the SAARC countries. The FMOLS model has a null hypothesis of no long run association among the said variables against the alternative that tell that there is long run impact among the variables. The coefficient value shows the magnitude of change in the endogenous variable explained by the exogenous variable of the model. According to the results depicted in the above table, the pvalue is below 5% that means that the probability of accept the null is very low. So, we accept the alternative hypothesis by concluding that there is a long run significant impact of law and order situation on the FDI in sector 2. Keeping in view the magnitude, the table shows that the government regulation as well as law and order situation in the country has no foot prints over FDI in the region. Whereas FDI is improved remarkably due to reduction in the level of terrorism and tariff. The above table shows that if the government overcome the issue of terrorism in the country, it can boost up the FDI by 35.9% in the long run. On the other hand, reducing the tariff on the international trade the FDI can be raise by the rate of 60.6% in the long run that is a very significant impact over a long run.

Table 10: Estimates of FMOLS in Transport and Communication Sectors (FDI as dependent variable)

Variable	Coefficient	Std. Error	T-Statistic	P-Value
Law and Order	-2.561	4.306	-0.594	0.553
Govt Regulation	5.652	3.840	1.471	0.145
Terrorism	-0.253	0.160	-1.582	0.117
Tariff	-2.293	0.252	-9.907	0.000

Table 10 shows the empirical outcomes of the FMOLS model that is executed keeping the FDI as dependent variable in the transport and communication sectors of overall sector wise segmentation of the SAARC countries. The FMOLS model has a null hypothesis of no long run association among the said variables against the alternative that tell that there is long run impact among the variables. The coefficient value shows the magnitude of change in the endogenous variable explained by the exogenous variable of the model. According to the results depicted in the above table, the p-value is below 5% that means that the probability of accept the null is very low. So, we accept the alternative hypothesis by concluding that there is a long run significant impact of law and order situation on the FDI in transport and communication. Keeping in view the magnitude, the table shows that there is no impact of law and order situations and government regulation with the improvement of FDI in the transportation and communication sectors in the country. Whereas there is a significant relationship between the amount of tariff and the level of FDI in the long run i.e. reduction the tariff will; bring about a rise of 22.93% in the FDI that is a good sign if the governing body take this variable in consideration.

Our results are consistent with the outcomes of Rasheed and Tahir (2012), Iqbal et. al. (2014), and Shah and Faiz (2015) who documented the negative impact of terrorism and tariff on the FDI in the country while the law and order situation improves the level of FDI in the overall business sector, manufacturing and transport and communication sectors of the country. According to the findings of Ali (2010) in Pakistan political instability and terrorist attacks hit manufacturing sector badly, its share to GDP remains very low i.e. 18.2 percent in last few years. The most affected areas across the country are wood work, stone mining, Power looms, marble work and units of consumer items because of power shortages and increase in terrorist attacks.

Conclusion

Results of this study indicate a negative and significant impact of terrorism on SAARC countries. This study is per the results of the study conducted by (Ahmad, *et al.*, 2014). FDI inflows transport and telecommunication sectors tend to create competition in between investors, to transfer technology-based knowledge,

and provide a low rate of transportation of goods. The communication sector which is considered as the urban or service-oriented sector is directly targeted by a significant negative impact of terrorist events because urban sectors are usually targeted through terrorist activities. The transport sector is also an urban sector usually large attacks on transport and infrastructure are observed. This study also indicates that the impact of terrorism is negative on the FDI of the sectors across the region. However, the impact of terrorism on FDI in the financial and business sectors shows an insignificant negative effect on the sector's inflow of FDI. The large effect of terrorism is found in commodity-producing sectors such as the manufacturing sector. However, a lower impact of terrorism is found in the financial and business sectors. Because tariff and law and order situation of the country has proved to effect factors for most of the economic sectors. The inflows of FDI depend on business-friendly parameters. This maximum inflow of FDI in the physical infrastructure in the forms of roads and highways etc. reduces the cost of production in various sectors. On the other hand, more FDI deposited in transportation and communication sectors mean a greater approachability to transportation and communication services and this tends to reduce the mobility and time cost in various sectors.

According to the empirical outcome of this study law and order situation in the region boosts the economic prosperity across the region as it is positively linked with the FDI inflow of south Asian countries. Moreover, the decline of terrorist activities in the region calls out for more increase in the flow of FDI. Hence, we conclude that lowering terrorism accompanied by a better law and order situation boost economic prosperity in the South Asian region.

According to the results by FMOLS, in the SAARC region from different sectors of Transportation and communication, Financial and business sector and manufacturing sectors, the most affected sector is the manufacturing sector where the effect of terrorism is 76 percent, as this sector received more FDI in SAARC. Another affected sector is the transportation and large terrorist attacks on transportation and its infrastructures are usually observed in terrorist-effected countries, as it is an easy target for terrorists.

Policy Implications

Policy inferences that are drawn from the empirical findings of the study.

The governments of the SAARC countries must announce stable economic reforms and beneficial policies for investors and businesses to attract more FDI in different sectors. In the SAARC region, which sectors are more neglected in terms of FDI inflows, so, policies are required to diverge foreign investors' concerns towards neglected sectors too. Investment conducive and business-friendly regulatory policies can increase the FDI inflows.

- 2. sector-wise FDI fascination, stable and better law and order situation is also necessary to attract FDI in the country. Along with law and order, the establishments in the country should control terrorism and ensure political stability, low level of tariff, to provide and maintain quality of physical infrastructure to attract the attention of foreign investors and required FDI in various sectors. A low rate of tariff especially on manufacturing products will increase the amount of FDI inflows in this sector.
- 3. Tax holidays to foreign investors can increase the FDI inflow in the sectors. The setting of various regulations regarding anti-bribery and anti-corruption is also helpful to increase FDI in different sectors.
- 4. Internal political unrest and poor economic policies, neglecting deprived areas of the country while projecting developmental plans may encourage terrorism or widely spread terrorism in the country. Therefore, the authorities in the country also focus these weaknesses as focusing on military operations against terrorism. Along with Paramilitary forces, governments must strengthen the police and levies force on the town level. The Government must enforce its laws and regulations on the traders of illicit goods.

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