

Terrorism and Its Impacts on Export of Pakistan an Empirical Analysis

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Abstract

This research paper study the empirical relation between export and terrorism in Pakistan. Using data from 1996 to 2015, by applying the simple linear regression model, the Ordinary Least Square (OLS) testing approach is used to check the relationship among variables, the normality and linearity of the data have been checked. By estimating the Model the result clearly showed that there is significant relationship between both variables, terrorism have negative significant effects on Pakistan export. The study suggests that government should take positive step to maintain peace in the country and negotiate with all terrorist groups and parties who are responsible for all that kind of vicious activities. It hampers economic growth of Pakistan, as export play a vital role in the economic growth of a country.

Keywords: Export, Terrorism, Pakistan

1. Introduction

There are no single definitions to the term terrorism. Laqueur (1987), described, "Terrorism is the use or the menace of the practice of fierceness, a method of battle, or a tactic to attain definite aims" and according Alexander (1976) terrorism is "the use of fierceness against arbitrary civilian objects in order to frighten or to create general pervasive terror for the aim of attaining political goals." Terrorism is, in its broadest sense, the use of deliberately indiscriminating fierceness as a means to make terror, horror, fright or fear, in order to attain a political, religious, or ethical goals. In general words, terrorism means any activities or actions that increase fear and anxiety in the world, region or country are called terrorism and persons who involves in that specific activities are called terrorists.

Before terrorist attacks in United States there was a lack of research in this study but after that, this topic got pretentious attentions. Since the dreadful events of September 11, 2001, with the attacks on the World Trade Center, the issue of terrorism has burst on the global platform. The United States declared a war against terrorism. Backup united states against Taliban, Pakistan have faces many threats and intense consequences of terrorism. In the recent, Pakistan is facing the menace of terrorism, facing the costs of Afghan War after the Soviet invasion in 1979, Pakistan is also influenced by numerous ethnic, political, religious and linguistic clashes which have enhanced terrorists activities in the country. Pakistan is also included in one of the top terrorism affected countries list, on the Globe. According to Global Terrorism Index (GTI), among 159 terrorism effected countries, Iraq ranked first, Pakistan second, Afghanistan third and India fourth, Husain et al (2014). Between 1st January 1996 to 31 December 2015, a total of 11378 incidents of terrorism have occurred on Pakistan's hapless soil, resulting in 19249 human losses and 33281 injuries of both civilians as well as personnel of law enforcement agencies. It is officially estimated that Pakistan's economy has been impacted to the extent of over US\$ 51.3 billion between 2001 and 2010, and causes huge reduction to GDP growth and FDI, loss of employments, income and export, damage to infrastructures and tourism industry, exchange rate depreciation and inflation, capital and human capital flight, and much more. Pakistan Embassy, Economic division FY (2011).

There is many study conducted to check the terrorism effects on development, economic growth and impacts on inward FDI of Pakistan but this study will discuss the impact of terrorism on export of Pakistan. Terrorism directly leads to capital and human loss, which effect all the production, consumption and investment in the economy, there are also capital and human flight from economy, industries shut down, labors hesitate to go for work and so on. The objective of this study is to find out links between terrorism and export and the impact of these attacks on productions and business activities of Pakistan. The secondary data for last 20 years have been used for analysis.

Oladimeji and Sanjo (2014) conducted a study for Nigeria, and find out that terrorism has both direct and indirect significant effects on international business, they use random sampling methods for the study. A pilot study through test-re-test method was conducted to check out the consistency of Pearson's product moment correlation coefficient with these results, 72% for balance of payment, 68% for foreign exchange earnings, 67% for foreign investors while 83% for financial market. Nitsch and Schumacher (2004) examines the effect of terrorism and warfare on international trade, and observes trade flows between more than 200 countries over the period from 1960 to 1993. An augmented gravity model are used and find out that terrorism reduce the volume of trade, doubling in the number of terrorist incidents, decrease bilateral trade by over 4 percent. Fatima et al (2014) have find out the empirical evidence of terrorist activities impact on the economic growth and the results

showed that the terrorist activities have a negative impact on the economic growth of a country. Tavares (2003) suggested that terrorist activities in a country effect on development of a country, he estimate the cost of terrorism in developing countries. Shahbaz et al (2013) and Hussain et al (2014) find out the relationship between terrorism and FDI, there result shows that there is negative significant effects of terrorism on net inward FDI in Pakistan.

There is very limited number of literature available in this study, so this research has been conducted to check the impact of terrorism on export of Pakistan. Export is considering an engine for economic growth in developing countries. The research aims is to closing gap on the impacts of terrorist attacks on export of Pakistan. Our research question as:

Is there any negative relationship between terrorism and export of Pakistan or not?

2. Theoretical Frame Work

In this study we will check the relationship between terrorism and export of Pakistan, terrorism can be measured as the number of incidents annually, which includes all types of terrorist attacks and activities regardless of doubt, and export is the total net export of Pakistan to the rest of the world in US billion dollars annually. Export means sending of the goods and services out of the dominion of a country, or "exports" refers to selling of goods and services produced in the home country to other foreign markets. Here the net export means the final market value of goods and services in US dollars. Exports of a country are considered as a main pillar of the economy, a source of earnings, and foreign exchange, employment opportunities and ability to achieve strong and sustainable growth for a country, Alam (2015).

2.1 Research Design

In this study export has been taken dependent variable and terrorism is independent variable. The data sample of this study is from 1996 to 2015 for 20 years. Secondary data has been used which are collected from different sources. Data of export has been collected from World Bank (WB) and data of terrorism has been taken from Global Terrorism Data Base (GTD).

2.2 Hypothesis of the Study

H₀: There is no Relationship between export and terrorism in Pakistan

H₁: There is a relationship between export and terrorism in Pakistan

3. Data Analysis

Table 1. Historical overview of terrorist activities in Pakistan (1996-2015)

Years	Terrorism Indicators			Net Export
	No's of Incidents	Fatalities	Injured	
1996	180	423	735	10.70306
1997	206	443	525	10.04049
1998	37	151	350	10.25221
1999	39	127	246	09.66869
2000	49	118	423	09.94017
2001	53	109	265	10.60027
2002	46	108	317	11.00771
2003	29	120	182	13.91767
2004	67	304	671	15.35007
2005	78	150	297	17.18032
2006	163	314	669	19.40085
2007	260	1407	2343	20.13718
2008	564	1168	1883	21.05956
2009	667	1487	3543	20.84380
2010	700	1691	2961	23.97878
2011	993	1642	2625	29.83104
2012	1652	2600	4227	27.81608
2013	2213	2872	5774	30.69924
2014	2147	2409	3397	29.91608
2015	1235	1606	1848	28.69088

Sources: <https://www.start.umd.edu/gtd/> and <http://data.worldbank.org/> Annual data from 1st January to 31 1st December

Above table data show total no's of Incidents, Fatalities, Injuries and Net export. No's of incidents have includes all and every type of attacks or terror regardless of doubts, terrorism data have been taken from global terrorism data base (GTD) and data for total net export in US billions dollar is taken from World Bank

(WB).

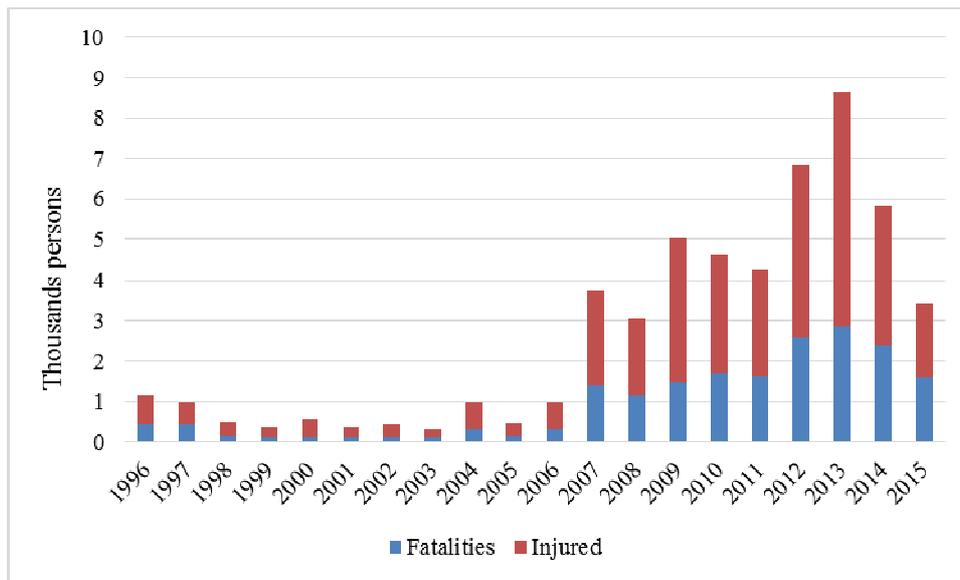


Figure 1. Total No's of Incidents and Human losses since 1996.

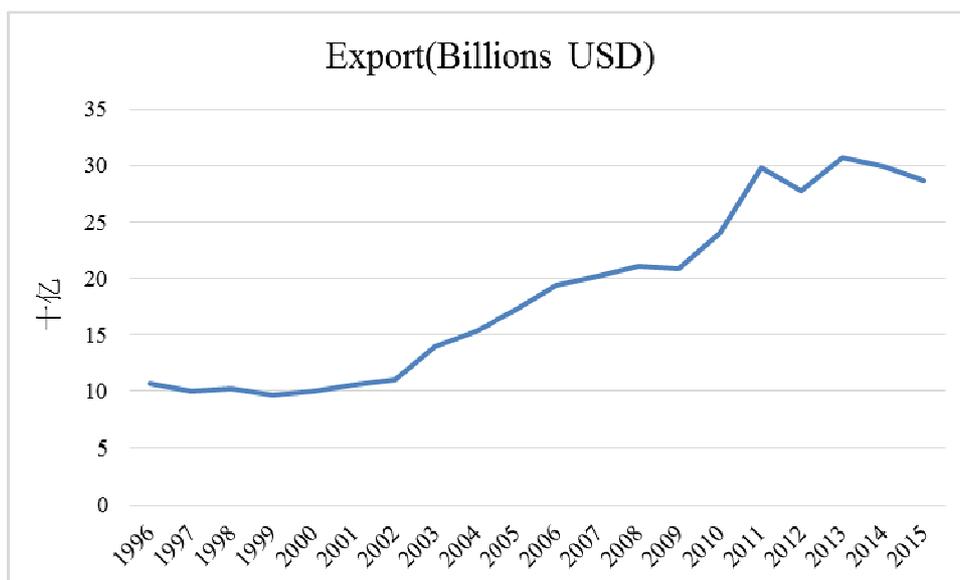


Figure 2. Total Net Export in US billions dollars

3.1 Hypothesis Testing

The OLS techniques is used to check the linearity and normality of the data used in this research paper. The basic assumption of simple linear regression Model is that both variables will be correlated and the model should be best fitted and significant, and there should be constant variance of residuals. Our Model is:

$$Exp = \beta_0 + \beta_1 Terr + \varepsilon \dots \dots \dots (1)$$

Exp = Export, dependent variable

β_0 = intercept or constant term

β_1 = coefficient or effects of independent variable

Terr = Terrorism, independent variable

ε = error term or residuals

The model value of constant is 23.037 and the value of the β is .027 which shows the variation in export due to terrorism incidents. β value is small due to transformation of the data.

4. Findings and Estimations

The export data have been change to log and square root of terrorism have been taken for the better transformation and analysis. There is no problem of homoscedastic but however there is some issue of serial

correlation in our data. The model have been estimated which gives the following outcomes and results.

Descriptive Statistics

	Mean	Std. Deviation	N
Export	23.556640	.4334244	20
terrorism	19.4582	14.15254	20

In above descriptive statistics tables the mean and Std.Devaiation of two variables is presented.

Correlations

		Export	terrorism
Pearson Correlation	Export	1.000	.872
	terrorism	.872	1.000
Sig. (1-tailed)	Export	.	.000
	terrorism	.000	.
N	Export	20	20
	terrorism	20	20

In the above Correlations table, it is clear that there is strong correlation between dependent and independent variables. Export is dependent while terrorism is independent variable. The coefficient is .872 which is significant at the 1% level of significance, which shows strong correlation among both variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.872 ^a	.760	.747	.2182145	.760	56.957	1	18	.000

a. Predictors: (Constant), terrorism

The above table shows the values of R square is very significant which indicates that there is 76% variation in export, adjusted R square value is .74, means there is strong relationship between both variables.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.712	1	2.712	56.957	.000 ^b
	Residual	.857	18	.048		
	Total	3.569	19			

a. Dependent Variable: Export

b. Predictors: (Constant), terrorism

The model is good fit as the F statistic indicated by ANOVA is 56.957.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	23.037	.084		273.048	.000		
	terrorism	.027	.004	.872	7.547	.000	1.000	1.000

a. Dependent Variable: Export

The above table displays the regression coefficient of terrorism for dependent variables of export. There is significant impact of terrorism on export as clear from the coefficient value of .872 accompanied by t-statistics 7.547. Estimate the impact of terrorism on export at 1% level of significance.

5. Conclusion and Suggestion

We conclude from the current findings that there is a negative association between export and terrorism in

Pakistan. Terrorism activities decrease export negatively. Null hypothesis is rejected while alternative hypothesis is accepted which as, there is a relationship between export and terrorism in Pakistan. Terrorism is an evil which hinder economic growth of Pakistan as export is considered to be the engine of economic growth and play vital role in any economy, Humayon et al (2011). According to the export led growth hypothesis, exports are the major source of economic growth Faridi (2012). So Pakistani government should cope with the problem of terrorism which is great loss for export, humans and capitals, and should negotiate with all terrorist parties and groups who are responsible for this destructive activities.

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