
Terrorism in Pakistan and Its Impact on Foreign Investment

Samreen Fahim Babar*, Abdul Sattar*, Nadir Shah*, Harris Laeque*

**Bahria University, Islamabad*

Abstract

Terrorism activities decrease the foreign investor confidence, which decrease the FDI (Kinyanjui, 2014). This paper examines the impact of terrorism, CPI, exchange rate and interest rate on foreign investment in Pakistan. Foreign investment involves both Foreign Direct Investment and Portfolio Investment in Pakistan. The study was based on secondary time series data. Twelve (12) years quarterly data from 2003 to 2014 was assimilated for the purpose of analysis. Multiple regression analysis were applied to scrutinize the relationship among the different variables. All variables such as terrorism, CPI, exchange rate and interest rate are significant at 5% level and have positive relationship with foreign investment. The results indicated that terrorism events have a short term impact on the foreign investment that consequences the lack of long-term commitments of the foreign investors in Pakistan.

Keywords: Terrorism, foreign direct investment, foreign portfolio investment

Introduction

Terrorism means any activity that creates fear and harassment among the people of a country and the doers who create that problem are called terrorist (Shahbaz et al., 2013). Terrorism is used for threat of violence, a method of combat, or a strategy to achieve certain targets and aims to induce a state of fear in the victim that is ruthless and does not conform to humanitarian rules (Laqueru, 2015). Terrorism exists in Pakistan so it threatens its sovereignty and has crippled the economy. The terrorist activities in Pakistan have led to the loss of capital and investors. Moreover, tourism industry of Pakistan is also in a dying state and the threat of terrorism compels the government to divert resources to security spending. It hampers the prospects of good governance (World Times, 2015).

The ongoing war against terrorism in Pakistan is a disappointment at all sides. It has caused in closing industries, low agricultural production, no access to American and other European markets, depreciation of rupee, rising public debt, no ray of hope for the settlement of long standing Kashmir dispute, human losses in drone and other terrorists incidents. Moreover, weakening of social fabric, weakening of the law enforcement institutions and a declining trend in the life standard of the people (Farooq & Khan, 2014).

Terrorism activities are negatively affecting the FDI of a country. Terrorism activities decrease the foreign investor confidence, which decrease the FDI (Kinyanjui, 2014). FDI recently has been one of the major elements contributing in the global economy. They

have found that an increase in terrorist violence reduces FDI. Furthermore, the disaggregated analysis by individual sectors explores the nuances in considerations for FDI, where some sectors are affected while others remain immune to terrorism-related risks. The study has further illustrated that FDI flows to certain industrial sectors are more susceptible to terrorism than other sectors that attract investments to remotely located facilities. All this creates demand for huge external capital for undertaking huge projects and indirectly promoting growth (Haider & Anwar, 2014).

Foreign direct investment (FDI) is a measure of foreign ownership of productive assets, such as factories, mines and land. Increasing foreign investment can be used as one measure of growing economic globalization (Masood, 2015). FDI is important for a country's development, enhancing industrial development, use resources in affective and efficiently ways, attracting investors, enhancing innovation, increase demand of raw material and capital goods. Pakistan must attract foreign investors, find new international markets in the world and this is the way for its development. Pakistan creates a better relation to developed country (Hussain et al., 2014). FDI is increased competitive pressure and domestic firms have specific characteristics which make them to compete internationally. However, these benefits cannot always be exploited and the production abroad creates competitiveness and long-term survival of companies and employment in Germany. The study suggested reforms to labor, wage and tax laws, as well as a significant reduction in bureaucracy (Deutsche Bundes Bank, 2006).

Foreign portfolio investment and FDI investments play important role in economy growth of a country. Every country must attract foreign investments because they bring lots of benefits to the host country such as technology, knowledge and skills (Sharif et al., 2014) have explored in their study by using Autoregressive Model that FDI has negative impact on Net portfolio investment (NPI) while all other variables are positively related to NPI. The study suggested that extra protection should be given to foreign investors by the government of Pakistan. Terrorism should be eradicated to flourish market capitalization as well as to improve financial institutions in Pakistan. Government of Pakistan should provide welcoming atmosphere to the foreign investors. Interest rate on deposit in Pakistan should increase for attracting FPI.

Foreign portfolio investment is passive investment of securities in a portfolio. It is made with the expectation of earning a return on it. This expected return is directly correlated with the investment's expected risk. It is distinct from direct investment, which involves taking a sizeable stake in a target company and possibly being involved with its day-to-day management. Portfolio investments can span a wide range of asset classes such as stocks, government bonds, corporate bonds, Treasury bills, real estate investment trusts, exchange-traded funds, mutual funds, certificates of deposit and so on. Portfolio investments can also include options, warrants and other derivatives such as futures, and physical investments like commodities, real estate, land and timber (Investopedia, 2015). Foreign portfolio investment is not fully explored by other researchers in Pakistan. This paper will explore the impact of terrorism on Foreign Portfolio Investment in Pakistan.

The nature of FDI's impact is explained by tracing its effect on GDP, export, import, per capita income, employment and manufacturing in Pakistan by (Tasneem & Aziz, 2011) in their paper. FDI effects on domestic output, employment, exports and overall growth are

positive but negative on imports. They suggested that FDI is concentrated in import substitution industries, then it is expected to affect imports negatively and export positively as the goods that were imported are now produced in the host country by foreign investors. The results of the study in their paper advocated that FDI is complementary to local enterprises and capabilities after a certain level of development.

Amna et al. (2012) have explored in their paper that FDI and GDP are significant and positive but inflation and GDP have significant negative relationship. The study further suggested that FDI is an important part of economic growth in emerging countries. FDI increases employment and profits in the host country.

Consumer Price Index is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them; the goods are weighted according to their importance. Changes in CPI are used to assess price changes associated with the cost of living. The Pakistan Bureau of Labor Statistics measures two kinds of CPI statistics: COICOP (Classification of Individual Consumption according to Purpose) is currently being used for CPI items, while CPC (Central Product Classification) is being used for Wholesale Price Index items. CPI is one of the most frequently used statistics for identifying periods of inflation or deflation. When large rises in CPI during a short period of time typically denote periods of inflation and large drops in CPI during a short period of time usually mark periods of deflation (Investopedia, 2015)

Ahmed et al. (2013) explored in his paper that GDP growth rate and interest rate have significant impact on FDI while inflation and exchange rate are insignificant in determining the FDI inflows in Pakistan. Exchange rate is a price for which the currency of a country can be exchanged for another country's currency. Factors that influence exchange rate are included like interest rates, inflation rate, trade balance, political stability, internal harmony, high degree of transparency in the conduct of leaders and administrators, general state of economy, and quality of governance (Business Dictionary, 2015).

Ahmed et al. (2013) explored in his paper that GDP and interest rate have significant relationship with FDI inflows and insignificant relationship of inflation rate and exchange rate with FDI inflow of Pakistan. The study suggested to facilitate foreign firms with attractive packages and encourage export oriented FDI which promote human capital, skills and latest technology. Policy makers should not ignore business related problems like inflation, infrastructure, interest rate and power.

Interest rates play a significant role in market economy. It is a channel flow of funds from savers to borrowers like banks, mutual funds and insurance firms. A balance is struck between the demand for funds by borrowers and the supply of funds from savers by an ever-adjusting level of interest rates. Changes in the quantity of funds available to finance the spending plans of borrowers as well as changes in borrowers' demands for funds alter interest rates which, in turn, affect the levels of consumer and business spending, income, the Gross National Product, the employment of resources and the level of prices. Finally, interest rates have a big impact on our economy (Richard & Trainer, 2015).

Background of the Study

Terrorism is one of the important factors that destroys both inside and outside of the basic system of every country. Pakistan has been fronting the big issue of terrorism events. It is known as the fashion of the day which is like disease that effects government and public. It is regarded as headache for federation and a nightmare for public. It has extremely large roots inside and outside of Pakistan. The insecure condition is caused due to several factors like weak political, weak injustice, religious clashes, nationalization and weak governance of federal government and external terrorism events. One of inside factors is poverty which is the main cause of terrorism. Pakistan population (65.5%) has been gaining 2 dollar a day. The backbone of Pakistan economy is agriculture sector for generating revenue and it is the biggest source of food but terrorism adversely affected it as well as other industry sectors. Ali (2013) has explored in his study that origin of terrorism in Pakistan can be traced back to two significant events that brought obscurantism, intolerance and resultantly terrorism in Pakistan. Before 1980s, religion has never been a controversial issue in Pakistan. The sectarian militants emerged in Pakistan after the 1979 Iran Revolution which transformed the nature and magnitude of sectarian violence in Pakistan. Harvard study (December, 2000) has explored that higher levels of terrorism risk are associated with lower levels of net FDI. In case of Pakistan, terrorism has affected foreign investment in the country. Ultimately, FDI was increased many years in the past but terrorism events had negative effect on FDI in the country. According to the World Economic Forum, Pakistan got 113 out of 130 countries in 2009 as tourism destination due to increasing of terrorism events and the hotel industry faced a loss of Rs. 60 billion and a loss of Rs. 35 billion in agriculture. The loss to agriculture alone amounts to Rs.35 billion. Economic survey of Pakistan report has explored shows that the stock of agriculture in GDP decreasing, 25.99 % of GDP in 2000 and 21.3 % in 2008. After September 11, 2001, destruction to the Pakistani economy is estimated at 68 billion dollar for ten years. The important sources of profits are affected adversely like agriculture, tourism, manufacturing and small-scale industries due to terrorism events in Pakistan.

Foreign investments are important for emerging economies that support to build saving-investment gap, makes employment opportunities, profits from transfer of technology, and finally gives economic growth of host countries. Foreign investments not only facilitate emerging economies with urgent capital for investment, they also improve job creation, managerial skills as well as transfer of technology. All of these finally support the economic growth and development. Therefore, emerging economies are very interested to encourage foreign investments. Foreign investments are very necessary for the economic growth of Pakistan that fulfills the gap of saving-investment. Pakistan does not have enough inside generated facilities to keep the speed of economic activities; therefore, FDI is very necessary to attract the local investment in order to gain economic objectives. FDI is necessary for Pakistan in order to support projects of development, empowering industrial sectors, enhance job opportunities, getting improved technology, support local managerial skills, helping productivity and output, increasing balance of payments, foreign exchange reserves, physical infrastructure and human resources and finally getting higher rate of economic growth (Zahid, 2013).

According to the UNCTAD (2006), in 2005 FDI share of emerging economies as percentage of GDP reached to 27.0 level points than 9.8 in 1990. The emerging countries are changing investment policies to attract foreign investments. According to the UNCTAD (2002) from 1991-2001 internationally 95% changes of 1393 extended to control foreign investment which resulted in creating of investment agreements (2099). The agreements were too safe and develop investments among two countries. According to Dutta (2005) Chinese government permits full ownership and profit of foreign investments and the inflow of them was 72406 million dollar that was closed to 99443 million dollars of US in 2005.

Government of Pakistan (2006) improved the economic system such as emphasizing on liberalization, E-governance and legal framework of modernization to encourage foreign investments. FDI was increased because privatization and liberalization policies were implemented. Foreign investment inflow was \$ 64 million in 1980 (SHRDC, 2007) as FDI was encouraging, so, the average yearly inflow was \$463 million in 2000 and \$2183 million was in 2005. It showed that Pakistan FDI was increasing but there is a long distance and gap to progress with growing countries.

The more attracting foreign investment countries are Singapore, Hong Kong and Malaysia as compared to Pakistan. The weak political and policies has been destroying the development in Pakistan. The wars between India and Pakistan and weak security may not be permitting Pakistan to implement proper development policies. From the initial stage, Pakistan had lots of troubles such as financial resources, investments, saving and improper allocation of funds for the development that hurt economy of Pakistan. The above serious picture of realities about foreign investment, the terrorism and foreign investment in Pakistan is witness of this situation. Terrorism has both political and economic implications. They manifest themselves in dwindling FDI inflows, damage to infrastructure, extra cost incurred on security, loss of trade, disturbed balance of payments, and increased insurance premiums, etc. As high loans, costs and distance between saving and investments led the government of Pakistan to attract and adopt foreign investments (Tahir, 2012).

Theories Involved

Wilkinson has explained three various types of terrorism such as revolutionary terrorism, sub revolutionary terrorism and repressive terrorism. Revolutionary terrorism is the use of systematic tactics of terroristic violence with the goal of getting about political revolution. The study presented further four major attributes of revolutionary terrorism such as it is always a group phenomenon, revolution and terror are justified by some revolutionary ideology or program, leaders are able to organize people for terrorism and alternative institutional structures participate in the political system and develop its own policy-making bodies and codification of behavior.

Sub-revolutionary terrorism is defined as terror used for political reasons other than revolution or governmental repression. Whereas revolutionary terrorism seeks total change, Wilkinson argues that sub-revolutionary terrorism is aimed at more limited goals such as forcing the government to change its policy on some issues, warning or punishing specific public officials, or retaliating against government action seen as reprehensible by

terrorist. Therefore, in this respect, under the typology of sub-revolutionary terrorism pressure groups such as Fathers for Justice and Green Peace may be deemed as 'terrorist organizations'.

Repressive terrorism is defined as 'the systematic use of terroristic events of violence for the goal of information, putting down, quelling, or restraining certain groups, individuals or forms of behavior deemed to be undesirable by the oppressor. Therefore, the political definition of terrorism under the typology of repressive terrorism relies heavily upon the services of specialized agencies whose members are trained to torture, murder, and deceive. The terror tools are then moved against clear opposition groups and can be later directed against much wider groups like Nazi Germany, where the Schutz staffel, the specialized agency, deployed terroristic apparatus against the opposition group, the Jews (Jawlard, 2002).

Denisia (2010) has explored in his study that nowadays the problem of foreign direct investment has attracted more attention at domestic and international level. The main research on the motivations underlying FDI was developed by Dunning, Hymer or Vernon. Economists trust that FDI is a significant part of economic development in all countries, especially in the emerging ones. The opinion reached after several empirical studies on the relationship between FDI and economic development from a macro perspective that they increase employment, productivity, competitiveness, and technology spillovers in emerging countries, FDI means higher exports, access to international markets and international currencies and is an important source of financing, substituting bank loans.

The Eclectic theory, the ownership consists of intangible assets, enhances incomes or minimized costs. While TNCs face some extra costs in various countries so a company should have some specific characteristics which reduce operating costs. These benefits are the clear profits of the company. The monopoly of the firm contributes in benefits which support to receive higher marginal profitability or lower marginal cost than other companies. The location is used by a firm rather than giving to other foreign companies. Location benefits are the main factors to determine who will become host countries for the activities of transnational corporations.

Internalization offers a framework for assessing various ways in which the firm will exploit its powers from the sale of goods and services to different contracts that might be signed between the companies. As cross-border market internalization benefits are higher, more the firm will want to engage in foreign production rather than offering this right under license, franchise. Ownership Location Internationalization parameters are various among firms and depend on economic, political, social characteristics of the host country. Therefore, the objectives and strategies of the firms' magnitude and pattern of production will depend on the challenges and opportunities offered by various kinds of countries.

Shefrin and Statman (2000) have explored in their study that optimal portfolios of Behavioral portfolio theory (BPT) investors resemble combinations of bonds and lottery tickets. The study suggested that BPT efficient frontier and the mean-variance efficient frontier don't happen together. The study further explained that BPT is presented in a single mental account version (BPT-SA) and a multiple mental account version (BPT-

MA). BPT-SA investors have allocated their portfolios into a single mental account, while BPT-MA investors have separated their portfolios into several mental accounts. BPT-MA portfolios, where layers are associated with aspirations and are explored with two layer portfolio where the low aspiration layer is designed to avoid poverty while the high aspiration layer is designed for a shot at riches.

Problem Statement

Previous research studies have empirically shown that terrorism affects FDI negatively in Pakistan. Most of these studies used sector-wise data of FDI and Terrorism fatalities (2000-2013). This study is unique as it will include more variables for analysis such as CPI, exchange rate and interest rate. Krishna et al. (2003) has explored that both FDI and FPI are not related to each other and they are independent. Marcin et al. (2013) stated that when there is stability economically in the country so FDI is more important than FPI, as during insecurity and economic distress, both in source and host countries, then FPI are more important than FDI. Pfeffer (2008) explained in his study that FPI solve the liquidity problems and it will maintain the FDI investment position. The study suggested that combination of both FDI and FPI will have high yield and liquidity position so therefore, we combine FDI and FPI. FPI has not been fully explored so there is a gap in the literature that more contribution regarding these investments can be made. This paper will examine the effect of terrorism on foreign investment in Pakistan (2003-2014).

Research Question(s)

This research study seeks to find answers to the following questions;

1. What are the various indicators of terrorism?
2. What is the effect of terrorism on Foreign Investment in Pakistan from 2003-2014?
3. What is the effect of CPI on Foreign Investment in Pakistan from 2003-2014?
4. What is the effect of exchange rate on Foreign Investment in Pakistan from 2003-2014?
5. What is the effect of interest rate on Foreign Investment in Pakistan from 2003-2014?
6. What are the various measures adopted to minimize the risk associated with terrorism and boost up Foreign Investment in Pakistan?

Research Objectives

The main objective of this research is to examine and assess the pros and cons of foreign investment in relation with terrorism, CPI, exchange rate and interest rate which has ultimately affected the growth of the Pakistan economy. This will be achieved through analyzing foreign investment in Pakistan for the period (2003 – 2014). This research aims to achieve the following objectives;

1. To identify effect of terrorism on Foreign Investment in Pakistan.
2. To identify effect of CPI on FI in Pakistan.
3. To identify effect of exchange rate on FI in Pakistan.

4. To identify effect of interest rate on FI in Pakistan.

Significance of the Study

This study is important to point out the significant of foreign investment for investors and for the growth of economy of Pakistan. The study will provide valuable guidelines for investors in Pakistan. The results of present study will help investors and State Bank of Pakistan to pursue sustainable investment policies measures to promote foreign investments that would help to enhance the economic growth. Most importantly, the policy makers in Pakistan will consider that to what kind of investment is better while implementing investment policies for the growth of economy. This study will also recommend ways to cope up with growing terrorism.

Theoretical Framework

The purpose of this study is to find out the impact of total fatalities, CPI, exchange rate and interest rate on foreign investment in Pakistan. The literature is suggesting that terrorist events make ambiguity and increases risks which have adverse effect on FDI because investors lose their confidence level due to terrorism events. As Foreign investment is the combination of both FDI and FPI in this study. Earlier researchers have used the time series data and OLS models (Muhamamd & Naeem, 2009; Shahbaz et al., 2013). Building on the published literature, this study also uses time series data for FI, Total fatalities, CPI, exchange rate and interest rate in Pakistan. The study will check some tests for the significance of the model that there is no serial correlation, no heteroskedasticity and residuals are normally distributed. The data of foreign investment is taken from State Bank of Pakistan website, terrorism data from South Asian Terrorism Portal while CPI, exchange rate and interest rate data is obtained from International Monterey Fund website (2003-2014).

This theoretical structure will facilitate us to build up the model having relationship between terrorism, CPI, exchange rate and interest rate and foreign investment. Theoretical situation on these variables are reviewed as well as the empirical tests of the relationship. Terrorism includes data of civilians, security force personnel, terrorists and injured people of both bomb blasts and suicide attacks in a country, foreign investment is measured by both FDI and FPI in \$ in Pakistan.

Hypotheses

This research paper first of all tests the normality and linearity of time series data used in study. For this purpose Ordinary Least Square (OLS) model is used and model is based on multi regression. For goodness of OLS model will also provide information about the serial correlation, heteroskedasticity and residuals of the given data. The model overall should be significant. Independent variables are total fatalities, CPI, exchange and interest rate whereas dependent variable of this study is foreign investment in Pakistan. Total fatalities is measured by civilians, security force personnel, terrorists and injured people of both bomb blasts and suicide attacks in a country, foreign investment is measured by both FDI and FPI in dollar in Pakistan. Sample of this study which is used to evaluate relationship from 2002-2014 that consist of twelve years. Secondary data is used to conclude results on the basis of finding of study. The data of foreign investment is

taken from website of State Bank of Pakistan, data of terrorism events from South Asian Terrorism Portal and data of CPI, exchange rate and interest rate from International Monetary Fund 2003-2014.

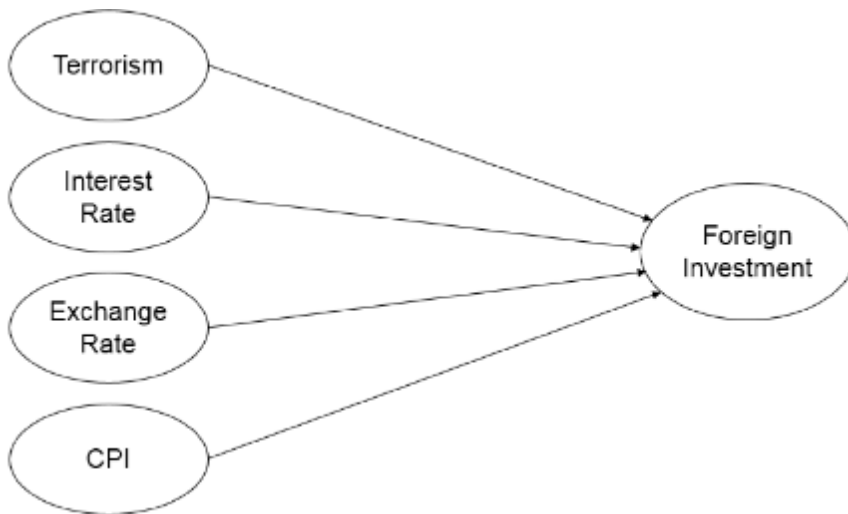
Null hypothesis to be tested in this research study are:

H₁: Terrorism has no effect on foreign investment in Pakistan

H₂: CPI has no effect on foreign investment in Pakistan

H₃: Exchange rate has no effect on foreign investment in Pakistan

H₄: Interest rate has no effect on foreign investment in Pakistan



Methodology

Data

One of the important and key reasons of motivation for the study was to determine the impact of terrorism on FI. As terrorism increases the risk and it will affect the investment decisions and policies, the higher risk may be indicative of higher payoff FI. It permits us to find the impact of terrorism on FI in Pakistan. We combined Both FDI and FPI, they are components of Balance of Payment under the account of Capital and Financial accounts. We have acquired the time series data on foreign investment from the website of State Bank of Pakistan. The data of CPI, exchange rate and interest rate is obtained from international monetary fund website. This study analyzes the total fatalities, CPI, exchange rate and interest rate with FI on basis of quarterly data. (2003-2014).

Methodology

The previous literature review supports to select the Ordinary Least Square model. Many previous studies have followed the same method and other techniques are also used like Dickey Fuller & Augmented Dickey Fuller. Ordinary Least Square (OLS) model is used by Awais. M (2013) and Kinyanjui. S (2014) so therefore, this study also applies the same

model OLS. The OLS model that is ordinary least square which is also called least square errors regression also or just least squares. It is one of the most basic and most commonly used prediction techniques among people and researchers like in statistics, finance, medicine, economics, and psychology. It measures the accuracy which differentiates it from other forms of regression. It was invented by the world's well known mathematician in 1795 and rediscovered by Adrien Marie Legendre in 1805. It is easy to implement and apply to problems. It can be easily analyzed mathematically and interpreted from others techniques. When the distributions of random variables have same variance and zero mean then the least squares method is the best unbiased linear estimator of the model coefficients (Gauss-Markov Theorem). This study applied log to normalize the data and analyzes the impact of terrorism, CPI, exchange rate and interest rate on foreign investment in Pakistan. We have applied multi regression through OLS model for the equation to determine the impact of terrorism, CPI, exchange rate and interest rate on Foreign Investments in Pakistan.

There are only two analyses and three tests:

1. Trend analysis
2. Regression analysis
3. Serial Correlation LM Test
4. Heteroscedasticity Test
5. Normality Test

For the purpose of empirical analysis through OLS methodology the following equation will be estimated.

Equation

$$\text{Log(FIit)} = \beta_0 + \beta_1 \log(\text{Tit}) + \beta_2 \log(\text{IRit}) + \beta_3 \log(\text{Exit}) + \beta_4 \log(\text{CPIit}) + E$$

Where: β_0 = intercept, β_n = effect of independent variables, FI = dependent variable foreign investment in Pakistan, T = independent variable terrorism, IR = interest Rate, EX = exchange Rate, CPI = consumer price index, and E = error term

Results

The results are outcomes of variables and applied multi regression through OLS model. Multi regression used to check relationship of impact of terrorism, CPI, exchange rate and interest rate on foreign investment in Pakistan. Analysis is interpreted-based on results of the variables.

Trend Analysis

It is the graphical analysis of time series quarterly data from 2003-2014. It will identify that in which quarter of a year data has upward trend and downward trend. We can easily find the movement of the data about its direction. Following graphics are presenting each variables trend movement with its explanation.

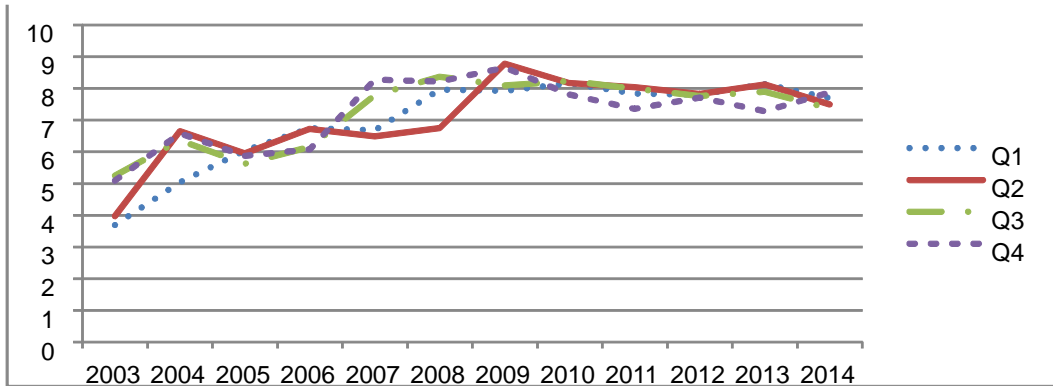


Figure 5.1 Total Fatalities in Pakistan

Given figure 5.1 shows the graphical representation of Total Fatalities. It is shown that highest total fatalities are between 2007 and 2009, in quarter four of 2007 was higher than other quarters and again quarter two of 2009 was in highest peak, then slowly decreased till quarter first of 2014. Where government estimated that terror war cost was more than 35 billion dollar (Dawn News, 2009). This fluctuation results a decrease in foreign investment in 2009, and lowest are in 2003 which was favorable for the increase in Foreign Investments growth.

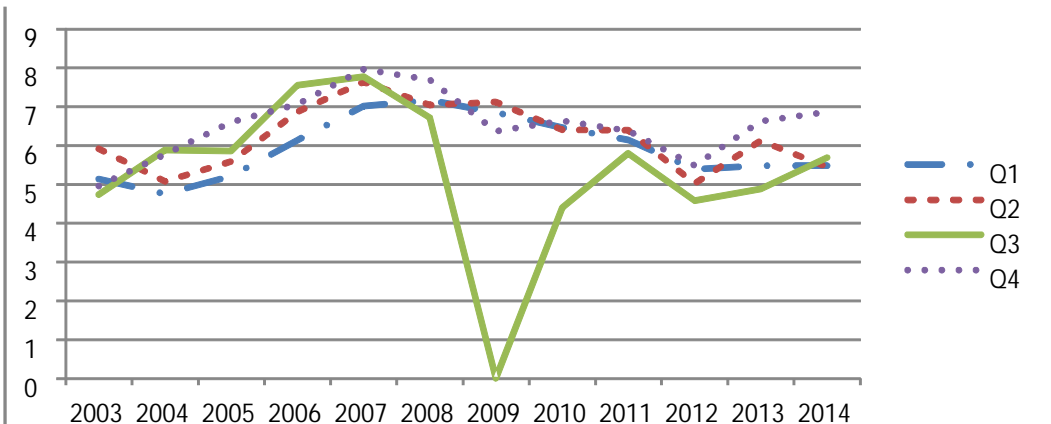


Figure: 5.2 FI in Pakistan

It is shown in the given Figure 5.2 that there was almost consistency in increasing of foreign investment in Pakistan but suddenly decreased in third quarter of 2009 because of highest peak of total fatalities in the same year. As after 2009 the total fatalities gradually decreased so foreign investment consistently increased specially in quarter four till 2014 (Board of Investment of Pakistan).

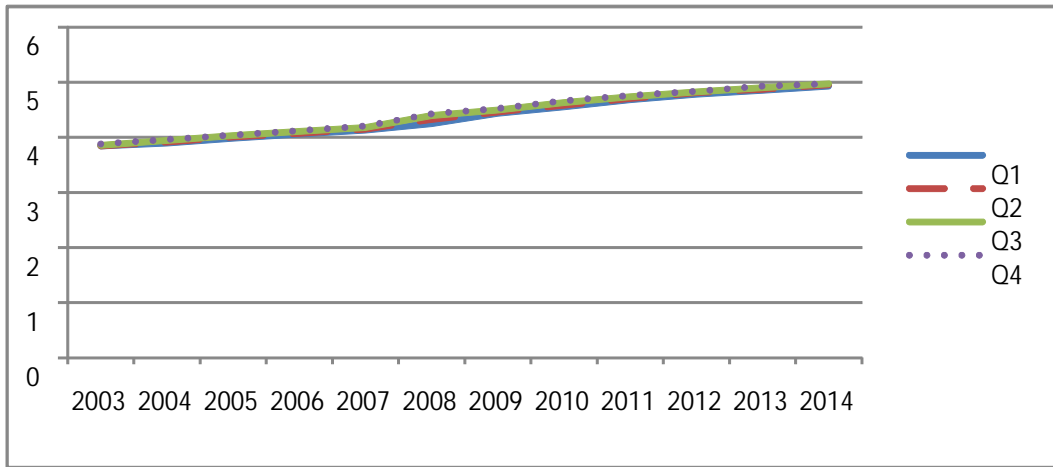


Figure: 5.3 CPI in Pakistan

It is shown in the given Figure 5.3 that there is almost consistently increasing CPI in quarter four of each year. CPI is increasing from 2009 to till 2014.

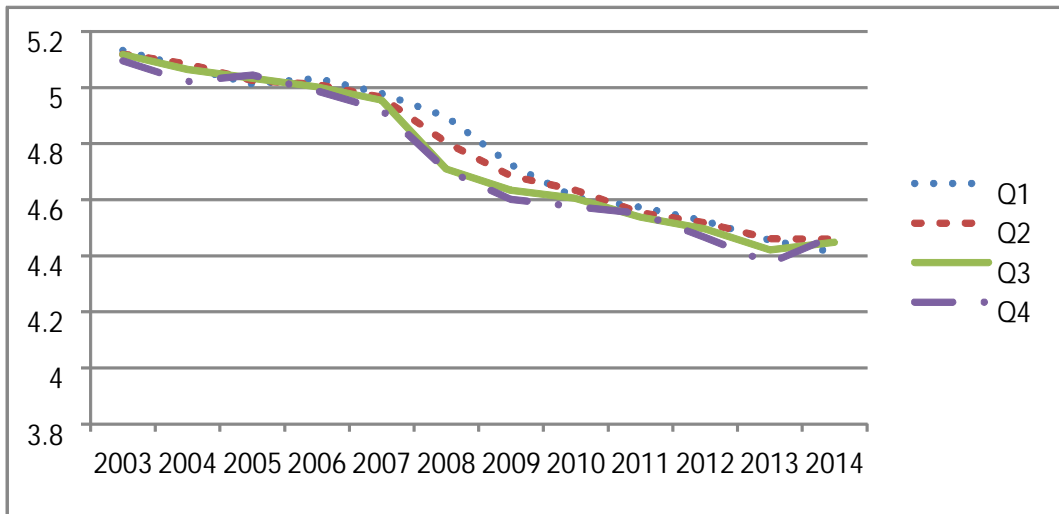


Figure: 5.4 ER in Pakistan

It is shown in the given Figure 5.4 that exchange rate was increasing first quarter of 2003 but in fourth quarter of 2009 decreased due to terrorism events and then was increasing till 2014 in Pakistan.

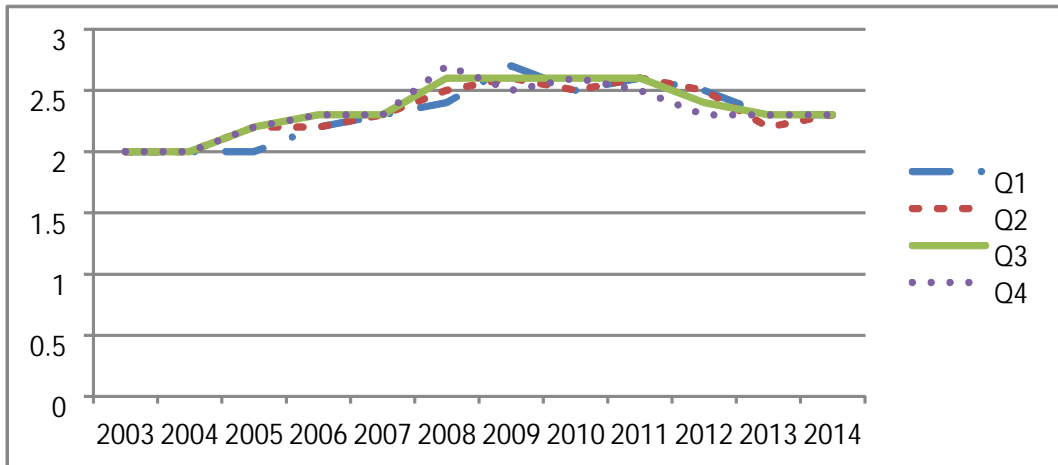


Figure: 5.5 IR in Pakistan

It is shown in the given Figure 5.5 that interest rate are consistently increasing in first and fourth quarters of each year but in fourth quarter of 2009 decreased due to terrorism events in Pakistan.

Regression Analysis

It is used to find numerical results of the data and interpret them accordingly to the outcomes of variables. As we run multi regression through OLS model so the results are shown in the following tables with interpretation and also Serial Correlation LM. Test is applied on the data to check whether the data has serial correlation or not. Heteroskedasticity Test is used to determine the Heteroskedasticity in the data. Normality Test is applied to check whether residuals are normally distributed or not.

Table. 5.2

Variables Name	Coefficient	t-statistic	P-value
Total Fatalities	0.38	2.31	0.02
CPI	5.08	2.32	0.02
Exchange Rate	10.42	3.07	0.00
Interest Rate	2.13	2.69	0.01

Note: $R^2 = 0.42$, $Adj. R^2 = 0.36$, Durbin-Watson= 1.60, Sig. (F-stat)= .00

Serial Correlation LM. Test		
Obs*R-squared	Probability	0.146535
Heterosedasticity Test		
Obs*R-squared	Probability	0.821856
Normality Test		
Jarque-Bera	Probability	0.178478

Note: Independent Variables: Total Fatalities, CPI, Exchange Rate and Interest Rate

In table 5.2 coefficient of total fatalities show that 38.74 percent variation is explained in the dependent variable (foreign investment) by total fatalities. Therefore, the results suggest that total fatalities significantly affect FI at 95 percent confidence level. The coefficient shows that it has positive relationship with foreign investment and it is statistically significant at less than 0.05. T-value is more than 1.96 theoretically value so it means that there is relationship between total fatalities and foreign investment. If total fatalities are increased by one percent so foreign investment will be increased by 38.74 percent on average quarterly.

In table 5.2 coefficient of consumer price index shows that 508.22 percent variation is explained in the dependent variable (FI) by CPI. Therefore, the results suggest that CPI significantly affects FI at 95 percent confidence level. The coefficient shows that it has positive relationship with foreign investment and it is statistically significant at less than 0.05. T-value is more than 1.96 theoretically value so it means that there is relationship between CPI and foreign investment. If consumer price index is increased by one percent so foreign investment will be increased by 1042.17 percent on average quarterly.

In table 5.2 coefficient of exchange rate shows that 1042.17 percent variation is explained in the dependent variable (FI) by Exchange Rate. Therefore, the results suggest that Exchange rate significantly affects FI at 95 percent confidence level. The coefficient shows that it has positive relationship with foreign investment and it is statistically significant at less than 0.05. T-value is more than 1.96 theoretically value so it means that there is relationship between exchange rate and foreign investment. If exchange rate is increased by one percent so foreign investment will be increased by 1042.17 percent on average quarterly.

In table 5.2 coefficient of interest rate shows that 213.70 percent variation is explained in the dependent variable (FI) by interest rate. Therefore, the results suggest that interest rate significantly affects foreign investment at 95 percent confidence level. The coefficient shows that it has positive relationship with FI and it is statistically significant at less than 0.05. T-value is more than 1.96 theoretically value so it means that there is relationship between interest rate and foreign investment. If interest rate is increased by one percent so foreign investment will be increased by 213.70 percent on average quarterly.

The results are shown in above table that is by using of OLS model in Eviews software.

R-square is showing that 42.32% variation of foreign investment is explained by total fatalities, CPI, exchange rate and interest rate. Adjusted R-square is used to correct R square to more closely reflect the goodness of fit the model. The Durbin-Watson shows that there is no issue of multicollinearity in the data. The F-statistic is also showing that overall model is good fit. The Obs*R-squared probability of Serial Correlation LM Test is 14.65 percent which is greater than 5% so it means that there is no serial correlation in the data. The Obs*R-squared probability of Heteroskedasticity Test is 82.18 percent which is greater than 5% so it means that there is no Heteroskedasticity. The Jarqu-Bera probability is 17.84 percent which is greater than 5% so it means that residuals are normally distributed so we can say that OLS model is good fit (Dr. Hussain, 2015).

Discussion

As we can see that terrorism doesn't have negative effect on foreign investment. The other variables like CPI, exchange rate and interest rate have positive relationship with foreign investment. The foreign investment may not be affected negatively by terrorism events because there are lots of other causes like political, corruption, government policies, investors' behavior and unskilled managers. Irrational investors who are ignoring the rational analysis, which effect on investors investment decisions. This also distort the price of shares and affect the risk and return characteristics of the stock and affect the asset pricing mechanism and exaggerate the fickle nature of the stock markets. Terrorism has not any significant effect on many countries and terrorist attacks have small effect on stock markets. There was no evidence that 9/11 had a lasting negative influence on FDI. It means that every terrorism attack can't influence foreign investment. The threshold of investment decision will be used for investment.

As inflation rate is increased so FDI is also increased. The result of CPI has positive relation with foreign investment in the study. Therefore, when inflation increases so foreign investment also increases. The study explained that exchange rate and FDI have positive relationship. As Pakistan is emerging country and have more natural resources and cheap employees so the international firm checks the local currency for investment in Pakistan. When the rupees appreciates and increases so the firm gets more money from the investment. Therefore, it is shown in the study that exchange rate affects foreign investment positively. Interest rate policy is changed by the government of Pakistan that encourages the foreign investors to investment in Pakistan so result is showing that interest rate has positive relationship with foreign investment.

Whether to select FDI or FPI for investment? According to Pfeffer (2008) has explained in his study that investment decision is related to the investors needs like his/her need is high yield or less liquid asset. The study further explored that world investor's want the combination of both FDI and FPI, because they will have high yield and liquidity position. When sell FPI so it will solve the liquidity problems and it will maintain the FDI investment position. Marcin. H, Rober. K & Krzysztof. O (2013) when there is stability economically in the country so FDI is more important than FPI. But during insecurity and economic distress, both in source and host countries, then FPI are more important than FDI. Therefore, we can conclude that the combination of FDI and FPI is nowadays essential in Pakistan because its economy is in distress and insecurity situations throughout the country. It will enhance foreign investment inflows and will

facilitate investment opportunities. Therefore, the investors should not only consider the terrorism as the main reason of adverse effect on foreign investments in Pakistan.

Conclusion

Nowadays foreign investments are the backbone of economy growth in emerging countries. Many previous studies concluded that terrorism events have negative effect on FDI. Terrorism events decrease the foreign investors' confidence which is caused to decrease the foreign investment. When terrorist events target the business sector and security forces are damages of stock markets and bomb blast and suicide attack decrease the stock markets operation. Deaths and injuries have more adverse effect on market returns. As we combined both FDI and FPI and also FPI is increasing nowadays than FDI in Pakistan (Board of Investment of Pakistan) so therefore, Null hypothesis is accepted that terrorism has no effect on foreign investment in Pakistan. The others Null hypothesis are also accepted that CPI, exchange rate and interest rate has no effect on foreign investment in Pakistan. According to Dawn News 2015 FDI is increased to 615 million dollar from Feb-2014-15.

Therefore, all these variables have positive relationship with foreign investment in Pakistan. It is also found in the trend analysis that terrorist events are increased in third quarter of 2009 so that decreased the foreign investment at the same time which reached to minus value. As the terrorism events were short term so the foreign investment increased again from 2009 to 2014. We can conclude that terrorist events have positive significant impact on foreign investment in Pakistan because FPI is increasing that investors have been diversified their portfolio in stock markets and diversified their investment instead of direct investment. Those investors who invested directly in stock markets and diversified their investments so their returns increased and thus foreign investment inflows are also increased in Pakistan.

This is a good sign of foreign investment growth which will boost the economy and development in Pakistan so therefore, we suggest that government should persuade FPI than FDI. There is the requirement for the making of a community that talk directly with security officers, army officers, customs officers, and immigration officers and members of the communities for the betterment of the security and peace. The Federal Government should provide work and jobs opportunities for unemployed and uneducated people in order to prevent them from terrorists activities, armed robbers and in order to empower many frustrated and unemployed able-bodied men who took up arms against the government and multinational NGOs and Foreign nationals. Antiterrorism squad should be created from the Pakistan Army, Air Force, Navy, Police and State Security Service and law enforcement should be implemented.

Policy Recommendation

Government should control corruption, political groups and structures, and involve intelligence work to detect their bank account, websites and investment activities. Even minimize direct and indirect relation of political parties with other countries.

Policy makers should control and provide facilities to IDPs (Internal Displaced Peoples) and implement educational programs that provide awareness about Islam.

Short term and long term strategies are necessary to implement against terror wars that analyze all types of terrorist events, recognize their objectives, social and economic causes of terrorists. DDR (Disarmament, Demobilization and Reintegration) should be applied against terrorist groups and political groups and negotiate them about cease fire and attacks (Mesa, 2008).

The government should minimize \$0.15 million equity investment to \$0.7 million for foreign investors in services sector and make it compulsory that use domestic raw materials also in production because to enhance economic activities.

Policy makers and Foreign investors should follow investment decision threshold that whether to invest or avoid from foreign investment.

Policy makers should encourage investors towards mix of FDI and FPI because of terrorism events impact on foreign investors and liquidity problems. Our study provides important and significant information to policy makers and controllers in making investment policies in Pakistan.

Limitations of the Study

Our researches include quarterly data of foreign investment from first quarter 2003 to fourth quarter of 2014. Due to the shortage of data our study included 48 observations of each variable of foreign investment, total fatalities, CPI, exchange rate and interest rate. This study provides managerial and policy implications in various areas of economics and in foreign investment, insurance planning and national security.

References

- Amar. A, Iqbal & Yasin. M (2013) (2013). Foreign Financial Flows and Terrorism in Developing Countries. Peter J Buckley¹ and M Casson², Journal of International Business Studies.
- Awais. M (2013). Impact of Terrorism on Foreign Direct Investment in Pakistan. Archives of Business Research 1.1 (2013).
- Amna. M, Imran. U & Salman. A (2012). Impact of Foreign Direct Investment on Economic Growth: A Case Study of Pakistan.
- Afza. T & Zeshan. A (2013). Foreign Direct Investment in Pakistan. Measuring Impact of Cost of War against Terrorism, Political Instability and Electricity Generation.
- Aqeel. A, Nishat. M & Bilquees. F (2004). The Determinants of Foreign Direct Investment in Pakistan. The Pakistan Development Reviews (2004): 651-664.
- Agrawal. S (2011). The Impact of Terrorism on Foreign Direct Investment: Which Sectors are More Vulnerable?.
- Arshad K.M & Ali K. S (2011) Foreign Direct Investment and Economic Growth: The Role of Domestic Financial Sector.
- Azhar. U, Ahmad. M & Atique (2004). The Impact of FDI on Economic Growth under Foreign Trade Regimes: A Case Study of Pakistan

- Anaraki. N (2012). Chapter 4, Corruption and Terrorism: Will They Undermine the Arab Spring?
- Arshad. K (2007). Foreign Direct Investment and Economic Growth: The Role of Domestic Financial Sector
- Alie. F & Hongliang. S (2015). Impact of Interest Rates on Foreign Direct Investment: Case Study
Sierra Leone Economy
- Acharya. A (2006). The Bali Bombings: Impact on Indonesia and Southeast Asia.
- Aslam. F & Kang. H (2011-2012). The Impact of Terrorism on Financial Markets: Evidence from Asia
- Annual report (2012). State Bank of Pakistan. Retrieved from the Website May, 2015. www.sbp.org.pk
- Annual report (2011) State Bank of Pakistan. Retrieved from the Website May, 2015. www.sbp.org.pk/reports/annual/arfy11/complete.pdf
- Annual report (2005) State Bank of Pakistan. Retrieved from the website May, 2015. www.sbp.org.pk/reports/annual/arfy05/chp-7.pdf
- Annual report (2008) State Bank of Pakistan. Retrieved from the website May, 2015. www.sbp.org.pk/reports/annual/arfy08/chp-7.pdf
- Annual report (2006) State Bank of Pakistan. Retrieved from the website May, 2015. www.sbp.org.pk/reports/annual/arfy06/qtr-index-eng.htm
- Annual report (2014) State Bank of Pakistan. Retrieved from the website May, 2015. www.sbp.org.pk/reports/annual/arfy14/anul-index-eng-14.htm
- Bandyo. P & Younas. J (2014). Terrorism: A threat to FDI. The Regional Economist www.stlouisfed.org
- Barth. J, Mccarthy. D, Phumiwasana. T & Yago. G (2006). Economic Impacts of Global Terrorism: from Munich to Bali
- Chadha & Vivek. (1997). Impact of War in Afghanistan and Ensuing Terrorism on Pakistan's Economy Company Commander in Low Intensity Conflict. Lancer publishers.
- Chingarande. A, Roseline. T, Denhere. W, Tafirei. F, Onias. Z, Muchingami. L & Victoria. M (2012). The impact of interest rates on foreign direct investment: A case study of the Zimbabwean economy (February 2009-June 2011) Chapter 1. What is Terrorism? Retrieved from Website May, 2015. www.sagepub.com
- Deutsche Bundes Bank Monthly Report (September 2006). German foreign direct investment (FDI) relationships: recent trends and macroeconomic effects.
- Denisia. V (2010). Foreign Direct Investment Theories: An Overview of the Main FDI Theories. Academy of Economic Studies, Bucharest, denamv20@yahoo.com

- Dr. A & Tasfoura. D (2012) Impact of Terrorism on Stock returns: Evidence from Pakistan
- Ebabor Osaretin. F (2014). The impact of Terrorism and Violence on Entrepreneurs in Nigeria. www.kiecon.org.
- Enders. W, Sachsida. A & Sandler. T (2011). Impact Transnational Terrorism on U.S. Foreign Direct Investment.
- Emmanuel. A & Oteng. E (2014). The effect of exchange rate volatility on foreign direct investment in Ghana
- Ecnomy Watch (June, 2015). Retrieved from the Website. www.economywatch.com
- FDI in Pakistan, M & M Services. Retrieved from the website May, 2015. www.masoodandmasood.com
- Fayyaz. A. Impact Of Terrorism on Foreign Direct. Retrieved form the Website June 2015. www.businessteacher.org.uk
- Farooq. M, Akram. W, Azim. P & Iqbal. A (2013). Impact of Foreign Direct Investment and Exports on the Economic Growth: A Case Study of Pakistan
- Fernandez-Aris E. and Montiel P. J., 1996, The Surge in Capital Inflows to Developing Countries: An Analytical Overview, *The World Bank Economic Review*, 10, 51-77.
- Gaibulloev, Khusrav& Sandler. T (2008). Impact of Terrorism and Conflicts on Growth in Asia. (1970–2004). Abdi Discussion Paper 113. Tokyo: Asian Development Bank
- Government of Pakistan (2006). Pakistan economic survey 2005-06. Economic Adviser's Wing, Finance Division, Government of Pakistan, Islamabad.
- Google (May, 2015). Retrieved from the Website. Www.google.com.pk what is Suicide Attack?
- Globalization (May, 2015). Retrieved from the Website. www.globalization101.org/differences-between-portfolio-and-direct-investment.
- Haider. M & Anwar. A (2014) Impact of Terrorism on FDI Flows to Pakistan. Available at [ssrn 2463543](http://ssrn.com/abstract=2463543).
- Hendel. U (2011). A Microeconomic Approach to the Impact of Terrorism on Foreign Direct Investment and Output.
- Hill, C.W.L. (2005). *International business: Competing in the global market place*. Fifth Edition, New York, MacGraw-Hill.
- Holland. D & Pain. N (1996). The Determinants and Impact of Foreign Direct Investment in the Transition Economies.
- Hussain. N, sajid. M &Khadim. S (2014). Relationship between Terrorism and Foreign Direct Investment in Pakistan. *Research Journal of Finance and Accounting*.

www.iiste.org

Investopedia (May, 2015). Retrieved from the Website. www.investopedia.com/terms/p/portfolio-investment.asp.

Iripak (May, 2015). Retrieved from the Website. Www.ipripak.org.

Ito. K & Fukao. K (2011). Foreign Direct Investment in Japan

Jworldtimes (May,2015). Retrieved form the Website. www.jworldtimes.com

Jones. G & Libicki. M mg-741-rc (2008). How Terrorist Groups End? Retrieved from the website. www.rand.org

Kinyanjui & Solomon (online may 6, 2014). The Impact of Terrorism on Foreign Direct. Investment in Kenya. International journal of business administration.

Khan and Arsha. M (2011). Foreign Direct Investment in Pakistan. The Role of International Political Relations. Oxford University Press.

Kun. M, Hsiu. H & Chia. C (2005) The impact of exchange rate movements on foreign direct investment: Market-oriented versus Cost-oriented

Kumar. S & Jiangxialiu. E (2013). Impact of Terrorism on International Stock Markets

Evans. K (2002). Global Forum on International Investment Attracting Foreign Direct Investment for Development. Shanghai, 5-6 December 2002

Llussá, Fernanda & Tavares. J (2007). The Economics of Terrorism. A Synopsis, Economics of Peace and Security Journal 2.1 (2007): 62-70.

Linda. S (2006). Exchange Rates and Foreign Direct Investment

Lutz. B & Lutz. J (2014) Terrorism and Its Impact on Foreign Economic Activity in SubSaharan Africa. Www.Academicstar.Us

Lexicon.ft.com/term?term=Foreign-Direct-Investment (2015).

Llanlan. D, Araz. B & Omay. T (2011). The effects of terrorist activities on foreign direct investment

Musharraf. P (November 16, 2002). Promulgated the Anti-Terrorism (amendment) Ordinance 2002, Retrieved from the website May, 2015. www.satp.org

Muhammad. S (2013). Linkages between Inflation, Economic Growth and Terrorism in Pakistan. Economic Modeling 32 (2013): 496-506.

Muhammad. F & Khan. Z (2014). Impact of Terrorism on Foreign Direct Investment and Key Indicators of Development in Pakistan.

Madonia. G (2007). Terrorism's Effect on FDI: Analysis of 96 Countries from 1999 to 2003.

Mehmood (2014). Terrorism and the Macro Economy. Evidence from Pakistan Defense and Peace Economics.

- Mesa. L (2008). Violence and Terrorism: A Perspective from Mexico
- Mohammad. H (2015). The Determinants of Foreign Direct Investment in Pakistan: retrieved from the website of www.google.com
- Marcus. A & Sanjo. M (2014). Effects of Terrorism on the International Business in Nigeria
- Muhammad A & Naeem. R (2009) Effects of Economic Factors on Foreign Direct Investment Inflow: Evidence from Pakistan
- Muhammad. B, Muhammad. I, Amjad. A, Muhammad. S, Mansoor. A, Iltaf. H, Tehreem. F (2014). Impact of Exchange Rate on Foreign Direct Investment in Pakistan.
- Mushtaq. N (2013). Impact of Terrorism on Pakistan. Strategic studies 32.
- Masoo. R & Farooqui. R (2012). Economic Impact of Terrorism on Construction Industry of Pakistan.
- Marcin. H, Rober. K & Krzysztof. O (2013) Foreign Direct Investment and Foreign Portfolio Investment in the contemporary globalized world: should they be still treated separately?
- Nabine. D (2009). The Impact of Chinese Investment and Trade on Nigeria Economic Growth.
- Nasir, Shahbaz, Khalid. M & Mahmood. A (2004). Saving-Investment Behavior in Pakistan. An Empirical Investigation the Pakistan Development Review (2004): 665-682.
- Nayak, Dinkar & Choudhury. R (2014). A Selective Review of Foreign Direct Investment Theories. Art net Working Paper Series No. 143, March 2014? Bangkok. Available at www.artnetontrade.org.
- Omay. T, Takay. B & Lalan. D (2011). The effects of terrorist activities on foreign direct investment: nonlinear Evidence
- Persitz. D (2014). The Economic Effects of Terrorism: Counterfactual Analysis of the Case of Israel. Journal of Business and Economics, ISSN 2155-7950, USA
- Pfeffer B., 2008, FDI and FPI – Strategic Complements?, MAGKS Joint Discussion Paper Series in Economics, 12, Universität Marburg.
- Rand Organization (May, 2015). Retrieved from the Website. www.rand.org
- Stanisic. D (2013). Terrorist Attacks and Foreign Direct Investment Flows between Investors and Hosts. dragana.stanisic@cerge-ei.cz
- Salma. B, Akram. U & Anbreen. B (2012). Determinants of Investment in Pakistan.
- Shaukat. F Lahore (2015). Foreign Portfolio Investments. Retrieved from the Website May, 2015. www.hamariweb.com
- S. O Oladip (2013). Macroeconomic Determinant of Foreign Direct Investment in

Nigeria

Sharif. I, Farooq. F & Mushtaq. A (2014). Factors Affecting Portfolio Investment in Pakistan.

Shefrin. H & Statman. M (2000). Behavioral Portfolio Theory. The Journal of Financial and Quantitative Analysis.

SBP (June, 2015). Investment Policy 1997. Retrieved from the website. www.sbp.org.pk and also mentioned in Tahir. M research paper (2012).

Sidratul.M, Muhammad. K, Dr. Najeed. H & Ashfaq. A (2015). Impact of Foreign Direct Investment on Economic Growth of Pakistan

Shumaila N. Nadia .S & Sami. U (2012). Impact of Capital Inflows on Domestic Inflation: A Case Study of Pakistan.

South Asia Terrorism Portal Database. Retrieved from the website May, 2015. www.satp.org

Start (May, 2015). Retrieved from the Website. Www.start.umd.edu. background report.

SHRDC. (2007). Foreign direct investment and human resource development: A case study of South Asia. SAARC Human Resource Development Centre Islamabad, Pakistan.

Shahbaz. A, Javed. A, Dar. A & Sattar. T (2013). Impact of Terrorism on Foreign Direct Investment in Pakistan.

Sami. U, Syed. Z & Parvez. A (2012). Impact of Exchange Rate Volatility on Foreign Direct Investment. A Case Study of Pakistan.

Tasneem. A & Aziz. B (2011). Foreign Direct Investment and Economic Performance of Pakistan: Is there any relation?

Tahir. M (2012). Bilateral Effect of Foreign Direct Investment and Human Resource on Socio Economic Development of Pakistan.

T, Buesa. M & Baumer. T (2013). The Impact of Terrorism on Stock Markets: The Boston Bombing Experience in Comparison with Previous Terrorist Events

Taylor M. P. and Sarno L., 1997, Capital Flows to Developing Countries: Long- and Short-Term Determinants, World Bank Economic Review, 11, 451-470.

The freedictionary (May, 2015). Retrieved from the Website. www.thefreedictionary.com

Yousaf. M, Hussain. Z & Ahmad. N (2008). Economic Evaluation Of Foreign Direct Investment in Pakistan.

UNCTAD (2002). World investment report 2006: Transitional corporations and export competitiveness.

UNCTAD (2006). World investment report 2006: FDI from developing and

transition economies.

Uslu. E & Polat. O (2013). The Impact of Terrorism on Economy in Turkey

Wikipedia (June, 2015). Retrieved from the Website. www.en.wikipedia.org

Wardlaw. G (2002). Political Terrorism Theory, tactics and counter-measures. Retrieved from website. www.ukessays.com.

Zakzaky. M (2015). Terrorism in the World Today, What is Terrorism? Who are the Terrorists? Retrieved from website May, 2015. islamicmovement.org

Zahid. J (2013). Retrieved from the Website. www.tribune.com.pk

Zadema (June, 2015). Retrieved from the Website. www.azdema.gov