

The Impact of Terrorism Activities on Karachi Stock Exchange in Pakistan

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ABSTRACT

The basic purpose of this paper is to examine the impact of terrorism on Karachi stock exchange in Pakistan. Terrorism attacks throughout the world have disrupted the flow of nation and stock prices. Karachi stock exchange used as dependent variable and terrorism, foreign direct investment, gross domestic product, inflation, money supply and industrial production as independent variables. The secondary data used form the sources of Karachi stock exchange, world development indicators and Asia terrorism portal. The time period of data collection (2003-2014) .The data was analyzed by using correlation, descriptive statistics and regression techniques run on E-views. The research findings show that terrorism has negative impact on Karachi stock exchange of Pakistan. When terrorism occurred than foreign direct investment, gross domestic product, and inflation has insignificant and negative relationship with Karachi stock exchange (KSE). This study examines only banks impact/effect of terrorism on Karachi stock exchange in Pakistan by taking twelve years data. The further research can be conduct by taking different segment, more year data and other countries. This study envisions the on the whole impact of terrorist actions, not just a single activity, on the health but also effect all over the factors of the economy. For studying this impact, a Terrorism scale has been developed for this study, based on the impact of every terrorist activity in the country.

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1. Introduction

The study evaluates the impact of terrorism on the Karachi stock exchange in Pakistan. This paper discusses in relative to the violence such seeing with the purpose of how the violence has damaged the human race tranquility and country and how this bloodsucker is engulf our humanity and monetary market. It additional emphasizes human being's point which forces a human being to obligate terrorism. It in addition describes diverse definitions of violence and the contact of violence more than the urbanized and emergent countries. It additional discusses concerning the position of economic markets such like collection substitute the same as how it preserve show profitable for together the manufacturing and on the whole economical strong point. Terrorism has impacted the trade and industry circumstances in residential and fewer industrial countries. This extra describes the impact of terrorism Karachi stock exchange such as how it has overcome the well-built financial situation and nonviolent condition of limited populace and businessmen.

Terrorism is rising day by day; although physically powerful preparation and strategies, unmoving it is extremely difficult control its ancestry. The unpleasant incident of 9/11 have shocked the humanity and seeing as at that time at hand are precautionary measures and organism devised to reduce terror actions. However, terror campaign is powerfully organized with the humanity financial system and therefore it is the similar case by means of Pakistan. These terror campaign attacks are anticipated to obliterate the honesty and

financial system of Pakistan; on the other hand, opinionated agendas are too concerned among them.

Terrorism influence directly or indirectly in almost every field of global nation. Terrorism is the use of violence or threat to use violence against the noncombatants. It may take from of suicide bombing, remote control bombing, kidnapping and hijacking. This study investigated that how much Karachi stock exchange is unstable due to terrorism and terrorism also affects other macroeconomic variables. Terrorism is the purposeful use or risk of use of aggression and violence by groups or individual to add some political or social objectives from side to side threats of universal public as well as the direct victims.

The terrorism was firstly heard throughout the French uprising in late 1700. It is definite as designed and purposely prepared murder. The condition, consign otherwise equipments possibly will differ since country to country, although the motto as well as intensions are forever matching of terrorists. Pakistan have become injured party of terror campaign many time, desperate bombing attacks, intention killing, avenue crime and numerous extra types of crime are happen.

Several economies are less than severe constraints payable to terrorism including Iran, Jordan, Pakistan Yemen Kuwait and United States.

According to Hoffman (2008), the assault on humanity trade inside by Al-Qaeda container be termed seeing that the particular important feature that changes the complete world.

There are a lot of acts that are under the violence such as violence of Madrid and Indonesia, secondly the assault to facilitate has been prepared on Yemen in US Cole and attacks of humanity trade inside in United States. Appropriate in the direction of everyone these financial systems of countries is exaggerated. Stock exchange is a building /organization that trade stocks of companies for money and vice versa.

The main purpose of this paper to determine the contact of terrorism going on Karachi stock barter because stock exchange is an important pillar and play a very important part in economic development and overall growth of a country. The researches of include premeditated the force of different activist attacks on main financial variables similar to sightseeing, overseas direct savings and extra macroeconomic presentation of countries at the moment the researchers are focusing on contact of violence on supply contacts since stocks are single of the main and inconveniently experimental indicators of one changes within the trade and industry movement.

The researches comprise set up with the aim of the moderate attacks be significant events which container source general fighting, upset the everyday schedule of public, harmfully transform the financial system and eventually reason main fluctuations scheduled the collection advertise profits indicator. It will show for investment decisions on stock exchange and motivation as well urges the administration to catch appropriate steps toward defeat the side effect of terrorist attacks to save from harm investments on stock market in Pakistan.

The paper is organized as follows: previous studies are explained in the section-2. In the segment 3, the information and methodology and variables are discussed. Section-4 results are elaborated finally section-5 conclusion and findings are discussed.

2. Research of Previous studies

The study is conduct to check the contact of terrorism on Karachi stock exchange. The literature is conducted to look the collision of terrorism on Karachi stock exchange. We do not find much verification about the quantification of the impact of revolutionary actions of economic markets using such high regularity data and with particular reference to Pakistan. For the advantage of readers, the assessment of some of the related studies has been made which as under:

Hassan and Hashmi,(2015) conclude that Karachi stock exchange is almost insensitive to terrorism attacks. The attacks which can cause the country wide violence have serious implications for Karachi stock exchange. This study showed the negative affiliation among violence and Karachi stock exchange in Pakistan. The ten biggest attacks of the last decade out of a total of 941 attacks of this period were used in examined this research.

Hassan et al. (2014) found that the contact of terrorism is negative on the stock exchange index 100. The data used in this study consists of daily stock index of KSE 100 index and record on terrorist event from January 2001 to December 2010. Event study methodology has been used in this study. Greater the violence created by the event, more would be its impact on stock exchange.

Bashir et al. (2013) studied that there is harmful relationship among the terrorist activities in addition to Karachi stock exchange.

When enlarge in the amount of violence activities attacks inside Pakistan than stock exchange decrease. The data of five years January 2005 to December 2010 for this study is

collected from yahoo finance and Karachi stock exchange. The GARCH methodology is used in this study.

Qaiser et al.(2012) researched that violence has an poor outcome on the Karachi stock exchange prices money market). Currency has moreover depreciated significantly due to raise in terrorism. Information of exchange price and Karachi stockpile index worth on every day basis beginning 200- 2010 be obtained from situation stockpile of Pakistan website. OLS (ordinary least square method) regression analysis was used in this study as methodology.

Tahir Suleman, (2012) examined the result of terrorism attack news on profits and instability for the Karachi stockpile Exchange. The studies take up the EGARCH reproduction prospect by Ng and Engle (1993) while it allows high-quality and bad information to include a different collision on stability. The consequences specify that terrorism attack intelligence has harmful impact happening the income of every one the segment indices. However, gossip of these proceedings increased the precariousness of KSE100 indicator and economic sector index.

Aurangzeb D. and Dilawer T, (2012) narrated that the impact of terrorism on stock exchange is negative. When the increase in terrorism than Karachi stock exchange decrease. They collect data of 30 companies covering period 2004 to 2010. In this study quantitative approach are used. Data also taken from KSE 100 index (Karachi stock exchange)

Kollias et al. (2011).The location and target of attack is one of the most essential factors in determining the impact of terrorist occurrence on stock market returns. The Result shows the negative relationship between terrorism and stocks market returns. A terrorist event targeted in a less population city or near residential local may has lesser impact on stock returns while an attack targeted at community area or at important supporting places may has separate repercussions on stock income.

Gull et al. (2010) explained that the terrorism activities in Pakistan have adversely and significantly affected the performance of Karachi stock exchange. The Karachi stock exchange is more affected by terrorist events. The data is collected for three financial markets separately i, e. banking, KSE and FOREX market. For the purpose of analysis multiple regression models is used.

Nguyen A,(2009)determine how more than a few activist acts have exaggerated collection markets in two nations Iran Pakistan and This article use a GARCH (1,1) representation to determine how these attacks have exaggerated two particular stock markets. single in Pakistan plus the additional in Iran.

Berrebi and Klor, (2005) conducted a related study to approximation the contact of violence on the stock exchange prices of Israeli companies using the same event method study. Results of the study shows that, companies which have participation or deals in stock of protection, security or antiterrorism security company measurers explain a positive result but other companies explain a negative tendency. So it was accomplished that terrorism attacks do have a negative impact on stocks and fairness markets.

Chen and Siems, (2004) shows that the effect of the 9/11 catastrophe and other major attach of terrorist assaults impact on the worldwide and us stock prices and evaluate its force on the economic actions and political actions with the help affair study methods. The end after the result that, after 9/11, financial market was relentlessly or ruthlessly stopped and

stock prices showed a negative breakdown but previous to that event it was in a improved condition.

Madrid and London,(2004) sequence of nonstop suicide attacks and blasts in Pakistan. The examined the outcome of terrorism attack volatility and information of return for the Karachi Stock Exchange and shows the negative impact of terrorism and Karachi stock exchange.

Sadaf et al. (2012) the purpose of this study observed the progress analysis of Karachi stock exchange .This yearly data of inflation industrial production and money supply as independent variable and Karachi stock exchange (100 Index) as dependent. The used descriptive statistics regression analysis and the period of data collection 1993 to 2012.The practical result show the positive result of money supply and industrial production and negative relationship with stock market return.

Shahbaz et al.(2013) research was also conducted in Pakistan in which researcher found that economic enlargement, inflation, financial development and savings increase stock marketplace development on the other hand trade openness decline it (Shahbaz, Ur Rehman et al(2013).It was also revealed in a study undertook in Pakistan that foreign direct investment have positive impact and interest rate have negative impact on stock market performance (Zafar, 2013).

Blomberg and Mody, (2007) in this study focus the impact of violence on trade and foreign direct investment between forty three host countries and twelve basis countries. This study result show negative impact on types of violence and foreign direct investment. That also shows host country violence has a weakly major positive connection with foreign direct investment.

Khan et al.(2012) the purpose of this to investigate the relationship between stock market and macro economic variables. The time period of data collection from 2001 to 2010.In this study showed that inflation insignificant influence at stock exchange prices and used the method of multiply regression model for analysis.

Aroni, (2011) this study proved that money supply and inflation has irrelevant and positive relationship between stock market prices. The collected data from 3 years and used regression model analysis.

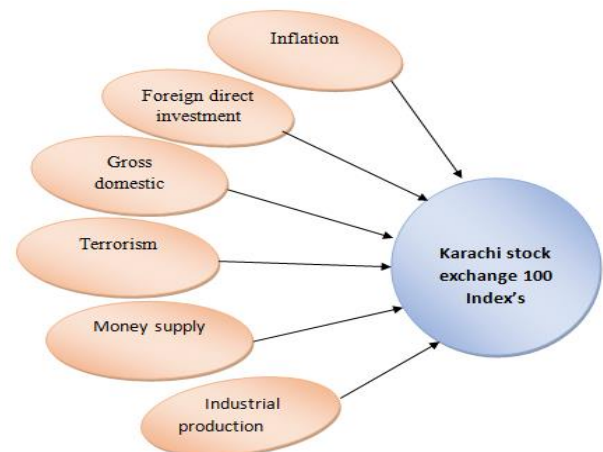
3. Data and Methodology

We used secondary data to investigate the impact of terrorism, foreign direct savings, gross domestic product, inflation, money supply, industrial production on Karachi stock exchange. We collect secondary data from the sources of official web site on Karachi stock exchange, world development indicators and Asia terrorism portal .The time period of data collection on twelve years from (2003-2014). For this purpose we analyzed data by different analysis like descriptive statistics, correlation and regression analysis.

3.1 Theoretical and Conceptual Frame Work

This study explains the impact of terrorism on Pakistan stock exchange. Terrorism means the use of violent acts frighten the people in an area as a way of trying to achieve a political goal. The Karachi stock exchange is the biggest stock exchange of the country. It was established on 18th September 1947 with a total paid up capital of 37million rupee. When the terrorism increase then the Karachi stock exchange decrease .In this study terrorism (including different terrorist attacks) is independent variable, FDI (foreign direct investment), GDP (gross domestic product), Inflation, M2 (money supply), IP (industrial production) and KSE is

dependent variable and other variables used as independent variables. The different terrorist attacks have an adverse relation to stock exchange. This state that when increase in terrorist attacks then KSE tends to decrease and also check the contact on FDI on Karachi stock trade.



3.2 Research model:

$$KSE = \alpha + \beta_1 INF + \beta_2 FDI + \beta_3 GDP + \beta_4 TRM + \beta_5 M2 + \beta_6 IP + \varepsilon$$

Where Y= KSE= Karachi stock exchange

α =Constant

INF=Inflation

FDI=Foreign Direct Investment

GDP= Gross domestic product

TRM=Terrorism

M2= Money supply

IP= Industrial production

ε =Error term

3.3 Explanation of variables

The various variables are used to observe the impact of violence on Karachi stock exchange. They are two types of variables dependent and independent variables. One dependent and five independent variables used this paper now we explain one by one all variables.

Dependent variables: (KSE-100 indicator)

Strong,(2005).Stock bazaar index: to facilitate each and every one individual who are paying attention in the stock market moreover investors, academics or administration officials, a stock bazaar indicator was imaginary as an instrument in categorize to be real competent to estimate the assessment of collection investment advisors and managers. An indicator is a position of the most important firm's collection in the financial system.

According to Rafique et al. (2014), the stock market presentation is considered from side to side movement in the indexes. The variation in the index is pretentious by macroeconomic, international variables social, political, and the firm's detailed variables.

Independent variable: Inflation: McConnell et al. (2012) explained inflation as an augment in the common fee levels. Purchasing power decreases while inflation occur every unit of earnings can purchase services and fewer merchandise. The argued with the aim of customer Price indicator is the major determine of price rises.

Talla (2013) use customer price indicator as inflation. He argued to facilitate inflation can influence stock market also absolutely otherwise harmfully.

He adds than expected and unexpected inflation determines the way of the connection between inflation and supply market. While demand increased, organizations tend to raise their prices.

Foreign direct investment (FDI) is a asset prepared in a corporation or person at home single motherland in big business welfare into an additional nation, at home the shape of whichever establish industry operation or acquire company property within the new nation such since rights or scheming significance within a overseas corporation. Overseas instantly investment is famous since selection reserves during which a shareholder only buy equities of native-base companies.

Industrial production: Industrial construction is determined of production of the manufacturing segment of the country. The trade segment include industrialized taking out, and utilities .while these segment supply single a little piece of sickening house manufactured goods (GDP), they be extremely responsive to significance tariff and customer command.

Money supply: Walter (1989) explained that financial collections preserve used to determine at all nation's money supply. M1 is the large amount hardly explained financial cumulative; that is the amount of dollar exchange, nonbank traveler's checks in movement and checkable deposited. M1 contains all the apparatus because M1 in accumulation to during the night repurchase contracts, for the night Eurodollar submits, universal reason as well as agent capital market finance balances, capital market put down financial records, and investments and little moment deposits M1 include money and glance deposits through near cash refer just before funds deposits mutual funds, money market securities, and additional instance deposits..

Terrorism: The U.S. system of national policy define terrorism since the dishonest utilize of power and fighting aligned with personnel or possessions to terrorize or persuade a government, the resident inhabitants or every sector thereof, during furtherance of supporting or community objectives.

Gross Domestic Product (GDP):GDP the economic assessment of every one the completed supplies and military produced inside a nation's boundaries within a precise moment phase. However GDP is frequently designed happening a yearly source, it preserve exist intended happening a periodical base seeing that well. GDP include each and every one confidential and community, expenditure, government outlay, reserand export less importation to take place inside a definite country.

4. Empirical Results and Interpretation

Table-1show descriptive statistic of selected variables is terrorism, inflation (INF), foreign direct investment (FDI), gross domestic product (GDP),money supply and industrial production , the value of mean, maximize, minimize, and standard deviation is derived as under.

Table 1.

	Mean	Max	Min	St.Dev
KSE	27.8483	55.4100	-40.5900	28.659
INF	10.0816	20.0800	2.9100	4.3532
FDI	1.5483	3.6700	0.3900	1.1659
GDP	4.4491	7.6700	1.6100	2.0624
TRM	13.808	534.00	8.0000	172.76
M2	43.2845	49.190	37.490	3.8553
IP	6.3566	15.9700	1.5200	4.2157

Mean value of Karachi stock exchange (KSE) is 27.848 that show most value is round about 27.848.Table-1 show that FDI has lowest mean value that is 1.5483 and terrorism (Trm) has highest value that is 138.08.Maximize value of (KSE) is 55.4100 that show most value is round about 55.4100. Table -1 show that (FDI) minimize value is 0.3800.Maximum value of standard deviation for terrorism is

172.76 that is deviate 33.96 from the value of mean. The difference between minimum values of means and standard deviation is -0.3824 for (FDI).

Table-2. Correlation.

	KS E	INF	FDI	GDP	TRM	M2	IP
KSE	1	-0.6909	-0.1717	0.5701	0.1276	0.4128	0.1699
INF		1	0.2783	-0.6313	-0.1352	-0.303	0.1104
FDI			1	0.0809	-0.4613	0.4984	0.5928
GDP				1	-0.1381	0.6908	0.5928
TRM					1	-0.5327	-0.4843
M2						1	0.7020
IP							1

The above table provides the explanation of correlation analysis which shows the correlation between dependent variable Karachi stock exchange (KSE) and selected independent variables for the study. KSE has the 100 percent correlation while inflation has the negative correlation with Karachi stock exchange 69 percent and FDI have positive correlation with KSE. The gross domestic's product is negatively correlated with inflation at a level of 63 percent. Money supply has positive relation with industrial production.

Table-3. Regression Analysis.

Variables	Coefficient	T-Statistics	Prob
C	10.2060	0.1239	0.9013
INF	-5.0538	-2.8369	0.0046*
FDI	-0.6574	-0.1640	0.8697
GDP	-3.8737	-0.9616	0.3362
TRM	-0.0446	-1.8886	0.0589*
M2	1.4746	0.8075	0.4194
IP	2.8774	1.5048	0.1324**
R2	0.7322		
Prob	0.0000		

Above table shows the explanation of regression analysis that reveal the relationship and impact of the terrorism on KSE. Results explain that inflation has more positive impact and insignificant correlation between Karachi stock exchange .The relationship between Terrorism (TRM) and (KSE) show that insignificant and negative impact and (IP) Industrial production shows significant and strongly positive impact on Karachi stock exchange .The value of R- square at 0.7322 which shows 73.22% of variability. The results give the one star at 5 percent significant level, two stars at 10 percent and three stars are at 15 percent significant level.

5. Conclusions

The basic aim of such is to investigate the impact of violence on Karachi stock exchange (100) Index. The data is taken twelve years from 2003- 2014. The data is analyzed by using correlation and regression run through E-views 9.5.The results conclude that terrorism has important impact on Karachi stock exchange on Pakistan.

The inflation is negative and significant impact on Karachi stock exchange.FDI result shows its relation negative and insignificant with Karachi stock exchange.

GDP has negative and significant relation with Karachi stock exchange. M2 has positive and significant relation with Karachi stock exchange.

IP has positive and strongly significant relation with Karachi stock exchange. Greater the violent behavior formed by the event, further would be its shock on stock exchange. When terrorism occurred than foreign direct investment (FDI), gross domestic product (GDP), and inflation has insignificant and negative relationship with Karachi stock exchange (KSE). Furthermore, the free efforts and the actions of government also contribute their role in minimizing the impact of a terrorist attack on Karachi stock exchange. To conclude, it can be real comprehended that terrorism has grown-up its roots worldwide.

Future Research

In this study investigates the impact of terrorist attacks on Karachi stock exchange (KSE 100 index). Though, the economic and political news have also a significant blow for capital market. So, future research can be undertaken by making a combined impact issue of both terrorism as well as economic and political news. The sectorwise action of the superior sectors of KSE 100 index should also be analyzed to give direction to investors for portfolio diversification.

In the basis of the study, its practical results and conclusions the state and government should to work on the institutional development on relation of terrorism. Challenging terrorism plan structure of international fear shall be formulated, improved and made accessible to the common public under this association.

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