Impact of Political Instability and terrorism on Stock returns: Evidence from Pakistan

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ABSTRACT

Stock markets are considered one of the key sources for the growth of economy. These financial markets are the strength of an economy. Terrorism and political instability negatively affect the stock market returns. Stock markets are considered one of the key sources for the growth of economy and for the development of financial institutions of any country. The current study aims at analyzing the impact of terrorism and political instability on stock returns in Pakistan stock exchange market. In this research, monthly stock returns of KSE 100 Index from 2002 to 2019 and KMI 30 Index from 2012 to 2019 are taken as dependent variable while political instability and terrorism has taken as independent variables. Number of control variables such as inflation, financial crisis, foreign direct investment, domestic Growth rate, and some governance variables as control of corruption, voice and accountability, regulatory quality and rule of law are used to investigate the issue at hand. The objectives of the study are to check the impact of terrorism and political instability on stock returns. The study reveals that there is negative and significant relationship between stock returns, terrorism and political instability. All variables used in the study have significant impact on stock return except voice and accountability which show insignificant impact on stock return for model one while Foreign direct investment, Global financial crisis and Inflation have insignificant relation with KMI 30 Index and other all variables have significant relation with KMI 30 Index. This study has practical implications in risk management practices. Moreover, the results of the study may be useful for shareholders, investors and policy makers.

INTRODUCTION

Stock exchange is considered as one of the most important financial institutions of any country. Stock markets are vital for any registered organization to generate funds for the business (Khan et al. 2018a,b; Khan et al. 2020a,b). These markets provide ease to all types of investors like individuals and all financial institutions to invest in more liquid securities which are beneficial for them. Research studies have given more importance to the investigation of long run financial decisions. These financial markets are the strength of an economy. Pakistan financial exchange evidently shows development potential. The Karachi stock exchange (KSE) trading market was granted "The best performing stock market of the world for the year 2002". The growth of any financial or capital market is depending on the good or bad news of any incident. Bad news negatively affect stock prices and stock returns and good news have positive effect on stock prices and stock returns (Barth, Li, McCarthy, Phumiwasana, & Yago, 2006). Securities prices and returns reflect information related to any event (Aktas & Oncu, 2006).

Stock markets reflect these events by variation in their prices and returns. The news of any terrorism in any region can also have indirect impact on the stock market of neighboring countries (Nikkinen & Vähämaa, 2010). Global Terrorism Database (GTD) explains that "terrorism is violence, an unlawful activity that is caused by non stat holders to attain political or economic benefit. It causes fear among people of the specific area". Terrorist attacks impact on financial markets as stock, bond and commodity market has been examined empirically by Chesney, Reshetar, and Karaman (2011). They indicated that all those attacks that occurred in 25 countries in eleven years and applied different methods as event study, non-parametric approach and GARCH-EVT method to analyze this relation. The aftereffects of this investigation show that a non-parametric methodology is the most suitable strategy among the three for examining the effect of terrorism on monetary markets.

Political instability in the existing world has a greater effect on the stock market. The economy of any country is dependent on its political stability. If political system of any country is uncertain then investors will not take any decision confidently regarding investment and they would have the fear of losing their wealth. Political instability events affect the country inside and outside, which brings downward trends in financial markets. Investors do like to invest in political stable country. It can be said that political instability has negative influence on stock (Asteriou, 2016).

The objective of this study is to analyze proof of stock value bunching on the South Pacific Stock Exchange, situated in Fiji, and investigated its factors. Stock prices group at the decimal of 0 and 5, with practically 50% of costs choosing these two decimals. After researching the determinants of value bunching on the South Pacific Stock Exchange found the value level and volume of exchange have a factually huge beneficial outcome on value grouping in Fiji. Number of authors studies the relationship between political events and stock markets and stated that reduction in political

instability risk can bring higher stock returns and portfolio (Diamonte, Liew, & Stevens, 1996; Lehkonen & Heimonen, 2015).

Events such as a terrorism and political instability can cause riskiness up to some extent on financial markets and economy of any country. Stock exchanges are considered as one of the key elements for economic growth. It is the need of current period to find the basic factors which may influence on the stock market and ultimately economic development of any country. terrorism and political instability are those factors that are needed to be discussing in detail for the development of the financial sector. Current study also considers some governance variables as control of corruption, voice and accountability, regulatory quality, rule of law and some macroeconomic variables are also included in current study as foreign direct investment, gross domestic products and inflation. Current study is going to do the comparison of KSE 100 index and KMI 30 Index to analyze that which index is highly affected by terrorism and political instability.

Current study provides information about stock returns that how and up to what extent they are affected by terrorism, political instability, voice and accountability, rule of law, control of corruption financial crisis and by regulatory quality. This study evaluates the immensity of impact concerning terrorism and political instability on stock returns in Pakistan. Current study is beneficial for the investors and economic policy makers of the Pakistan. Defined relationship is helpful for investors to understand the clear picture of the effect of terrorism, control of corruption, voice and accountability, regulatory quality, rule of law, and political instability on stock returns during incident period. Moreover, it also helps investors to analyze the influence of terrorism and political instability on the fluctuation of stock returns. It is helpful for the investors to make healthy decisions regarding their investment. Economic policy makers can take help from current study to boost up economy. Government can take actions to prevent the effect of terrorism and political instability from shoot up.

LITERATURE REVIEW

Growth of any country is influenced by the terrorism. It is observed by Gries, Krieger, and Meierrieks (2011) they explored linkage between the terrorism and the economic growth by applying Hsiao Granger Method to detect the causality problem in time series. They find that Terrorism causally impacts the development of an affected nation. Their outcomes show that economic performance impacts the terrorist, while assaulted economies are for the most part impervious to terrorism. Kollias, Papadamou, and Stagiannis (2011) conducted research on terrorism and equity market by applying event study and GARCH model to investigate the impact of two major terrorist attacks on London and on Madrid in 2005 and 2007. Their empirical results show that both equity markets reacted similarly after the event, but their recovery is different. This is happen because of size, structure and the liquidity of the market. Both equity markets

significantly negatively affected at the day of terrorist event. London equity market speedily overcomes the loss as compare to Madrid equity market.

Li and Schaub (2004) explored the association between the economic globalization and the transitional terrorism by using data set of 112 countries from the time period 1975 to 1997. In general, Foreign Direct investment, trade and portfolio investment of a country do not directly increase the number of terrorist events. Blomberg et al. (2004) used data that gives informational index on the occurrence of worldwide terrorism over four decades, they have tried to look at some essential realities with respect to the outcomes of terrorism on financial movement. They have discovered that the rate of terrorism may have a monetarily huge negative impact on growth. For advanced economies, as caught by the OECD test, the proof of a negative relationship between the rate of terrorism and monetary development. The outcomes recommended that the macroeconomic consequences of terrorism are possibly very huge, affirming the requirement for an intensifying of open approach endeavors towards inspecting how to best moderate the related risk.

Drakos (2010) explored whether terrorist movement applied a huge effect on day to day securities returns for an example of 22 countries in which a huge portion of overall terrorist movement took place in the period 1994–2004. The empirical specification depended on adaptable adaptations of the World CAPM taking into account autoregressive conditional heteroscedasticity. The hypothetical inspiration was given by inquire about concerning the investors sentiment in which terrorist activity was accepted to affect on financial specialist state of mind.

Nikkinen and Vähämaa (2010) had examined the financial markets of developed economies and resulted that there is a great drop in share prices for the short time period when terrorist activity occurs. Five more active financial markets of the world from the period 1995 to2005 faced more than 31 terrorist attacks within the region and found that at the day of such incident the price of share decline up to 34% around the region and the 92% where that incident happened. He concluded that the financial market reaches to its previous condition after 2 to 3 days of that event (Caporale, Plastun, & Makarenko, 2019).

Political instability is one of the major problems specially for developing economics as Pakistan. It can cause massive problems and can stop development of the country. Political instability envelops the flimsiness of government systems, networks inside the country. It can disturb business and market exercises with a direct antagonistic impact on speculation techniques. Political instability can build vulnerability about government changes in the nation where political polarization generally high. The administration changes may not influence financial exchange desires in the event that the following government doesn't follow the arrangements of its forerunners, at that point it can upset business exercises and can effect on investors behaviors.

The researcher investigated the relationship of political instability and economic growth, per capita Gross Domestic Product on a sample of 113 countries for the time period 1950 to 1982. Defined relationships explained that political instability and GDP are jointly attached to each other. The fundamental consequence of this paper is that in countries and timeframes with a high affinity of government breakdown, development is essentially lower than something else(Alesina, Özler, Roubini, & Swagel, 1996). To check the connection between inflation and macro economy the empirical research has been conducted to check the relation between stock return and inflation in which ten industrialized countries are included which revealed that the negative relationship of stock return is due to the positive inflation on the other side when there is high inflation due to the lower real equity return and lower real dividend and cost of equity capital is also increases due to the increased in the inflation and negative stock return is also associated with higher inflation rate (Ammer, 1994).

Akinci, Akinci, and Yilmaz (2014) examined the relationship between financial development and economic growth in OECD countries. The study had shown the bidirectional relationship between financial development and economic growth. The interrelationship of government expenditures and economic growth examined for 30 OECD countries by using the annual data from 1970-2005. The study found a long-run relationship between government expenditures and economic growth. Chen, Xie, You, and Zhang (2018) explored the relationship among stock prices, return and political corruption in china. Used corruption data for the analysis and result found that all firms which are in more corrupted region faced significant decrease in stock prices and returns as compared to the firms which are located in less corrupted area. Results also explained that creak down on corruption enhances the stock prices and returns.

Empirically investigation has been made on the regulatory quality impact on African stock market by using pooled mean group model on the sample data of 20 years from 1996 to 2016.The results suggested that regulatory quality positively affects the performance of stock exchange. At the point when solid and sound regulatory quality of money related markets are authorized, there will be a more prominent desire for the development and advancement of stock exchange to persevere through the repercussion of future financial emergency (Umar & Nayan, 2018). Canova (2009) study is conducted on the collapse of economies in the response of financial crisis 2008 in US. Keynesian model of financial regulation had built in response of this crisis. The result of the study indicated that US economy faced downward trend in stock market. Moreover, study done by Khan et al. (2018c) also argued that global financial crisis 2008 proved to be harmful for economy of Pakistan.

Cross sectional study is conducted on more than 150 countries. Unobserved component methodology is used to construct six aggregate governance indicators as voice and accountability, political instability and violence, government

effectiveness, regulatory Quality, rule of law, and corruption. Results found that these indicators matters for financial market development (Kraay, Zoido-Lobatón, & Kaufmann, 1999).

RESEARCH METHODOLOGY

Current research used data of Pakistan Stock Exchange. Data period for the study moves over the period of 2002 to 2019 for the KSE 100 index (Karachi stock exchange) and the Data for the KMI 30 index is used from 2012 to 2019. Data that is more recent is utilized for presenting current picture of stock markets of Pakistan. Data is based on convenient sampling. Macroeconomic variables data is taken from world development indicator. Data of governance variables have taken from world governance indicator. The empirical analysis is done with the help of multiple regression analysis technique which is also applied by previous studies (Khan et al. 2020c,d)

The study examines the affect of terrorism and political instability on stock return. Stock return is included as dependent variable. The independent variables considered in this study are political instability and terrorism. GDP , global financial crisis, inflation, FDI, voice and accountability, regulatory quality, rule of law and control of corruption are added as control variables. The purpose of current study is to evaluate the impact of terrorism, voice and accountability, rule of law, control of corruption, regulatory quality and political instability on stock returns. This impact will be evaluated by using following objectives:

i.   To evaluate the impact of terrorism on stock returns in Pakistan.

ii. To examine the impact of political instability on stock returns in Pakistan.

iii. To investigate the impact of rule of law on stock returns in Pakistan.

iv. To inspect the impact of voice and accountability on stock returns in Pakistan.

v.   To explore the impact of control of corruption on stock returns in Pakistan.

vi. To check the impact of regulatory quality on stock returns in Pakistan.

vii. To analyze the impact GDP on stock returns in Pakistan.

viii. To evaluate the impact Inflation effects on stock returns in Pakistan.

ix. To evaluate the impact FDI on stock returns in Pakistan.

Table 1: Description of Variables

Variables	Abbreviation	Measurement	Data sources
Political instability	PIST	WGI	World governance indicator

Terrorism	TERR	Dummy	GTI(Global Terrorism Index)
Inflation	INF	CPI (consumer price index) ÷ GDP	World development indicator
Economic growth	GDP	Annual growth rate	World development indicator
Voice and accountability	VA	WGI	World governance indicator
Regulatory quality	RQ	WGI	World governance indicator
Rule of law	RL	WGI	World governance indicator
Control of Corruption	CC	WGI	World governance indicator
KSE 100 index Stock returns	KSE 100 index	Stock return= $\frac{ending\ price-beginning\ prices\ of\ security}{beginning\ prices\ of\ security} \times 100$	Pakistan Stock Exchange
KMI 30 Index Stock returns	KMI 30 index	Stock return= $\frac{ending\ price-beginning\ prices\ of\ security}{beginning\ prices\ of\ security} \times 100$	Pakistan Stock Exchange
Foreign Direct Investment	FDI	Absolute value of inflows	World development indicator
Global financial crisis	GFC	Dummy	2008-2009=1 2002 to 2006 =0 2010 to 2019= 0

EQUATIONS

To examine the impact of terrorism and political instability on stock return, following econometric equation are specified

$$ST\ KSE\ 100_t = a_t + \beta_1 TERR + \beta_2 Pist + \beta_3\ RL + \beta_4 VA + \beta_5 CC + \beta_6\ RQ + \beta_7 GDP + \beta_8 INF + \beta_9 FDI + \beta_{10}\ GFC + \mathcal{E}_t$$

$$ST\ KMI\ 30_t = a_t + \beta_1 TERR + \beta_2 Pist + \beta_3\ RL + \beta_4 VA + \beta_5 CC + \beta_6\ RQ + \beta_7 GDP + \beta_8 INF + \beta_9 FDI + \beta_{10}\ GFC + \mathcal{E}_t$$

Where,

ST	=	stock returns
t	=	time period ,
B	=	is systematic risk
TERR	=	terrorism
PIST	=	political instability
VA	=	voice and accountability
CC	=	control of corruption
RQ	=	regulatory quality
GDP	=	gross domestic product
INF	=	inflation
FDI	=	foreign direct investment
GFC	=	global financial crisis

$\mathcal{E}_{t=}$ represents the random error term

RESULTS AND FINDINGS

Descriptive statistics is the data transformation into a format which is easier to understand and interpret. Descriptive statistics is used to explain the type and behavior of the data. Descriptive statistic includes descriptive details of all dependent, independent and control variables. In following detail, mean describe the average of the data or shows the central tendency of the data, median is the middle figure of the data, maximum and minimum values of the data help to identify the outliers, standard deviation tells about the uncertainty of the data and deviation of variables from their mean value, skewness shows that whether your data is positively or negatively **skewed** and zero skewness shows that data is normally distributed, which means that on both side (right and left) data shows symmetrical behavior. Kurtosis shows that whether the distribution of data is peaked or flat. If the value of kurtosis is equal to 3 then it indicates that data is normally distributed and this type of data behavior is called as mesokurtic. If the value of kurtosis is greater than 3, it indicates that data is in peaked nature and values are concentrated around the mean, this type of pattern is called as leptokurtic. But when value of kurtosis is less than 3 it means that data is flat and values are dispersed around the mean and this typeof data distribution is called platykurtic.

Table 2 Descriptive Statistics

Variable	Mean	Median	Maximum	Minimum	St. Dev.	Skewnes	Kurtosis
CC	-0.871	-0.89	14.525	-1.09	0.242	2.421	9.559
FDI	1.282	0.977	3.668	1.599	1.011	1.225	3.303
GFC	0.171	0	1	0	0.371	1.778	4.180
GDP	4.290	4.702	7.667	1.606	1.968	-0.305	2.576
INF	7.665	7.521	20.286	3.765	4.840	0.815	3.469
KSE	1.098	1.229	4.573	1937.969	13950.97	0.614	1.891
PIST	-2.166	-2.42	3.215	-2.81	0.659	1.936	6.774
RL	-0.772	-0.79	2.679	-0.97	0.202	3.003	11.986
RQ	-0.614	-0.635	12.885	-0.91	0.175	2.075	8.888

TERR	0.986	0	1	0	0.057	-3.880	16.058
VA	-0.735	-0.835	0.8	-1.17	0.446	2.370	8.347
Obs	216	216	216	216	216	216	216

Table:2 Descriptive Statistics shows the descriptive statistics for all study variables of 216 observations for the period of 2002-2019. The table illustrated that on average the CC-0.871 its maximum value is 14.525 and minimum value -1.09 with the std. dev of .242 .The highest mean is of inflation which is 7.665876 and its maximum value is 20.28612 and minimum value 3.765 with the std.dve of 4.840.The mean value of FDI is 1.282 and its maximum value is 3.668 while minimum value is 1.599 with std.dev of 1.011.The mean value of GFC is 0.171 and its maximum value is 1 while minimum value is 0 with std.dev of .371 during the study period. . The mean value of GDP is 4.290 and its maximum value is 7.667 while minimum value is 1.606 with std.dev of 1.968 during the study period. The mean value of KSE is 1.098 and its maximum value is 4.573 while minimum value is 1937.969 with std.dev of 13950 during the study period. The mean value of St. Kmi 30 is 3.249 and its maximum value is 52876 while minimum value is 11991 with std.dev of 10306 during the study period. The mean value of PIST is -2.166 and its maximum value is 3.215 while minimum value is -2.81 with std.dev of .659 during the study period. Mean values of RL, RQ, TERR, VA are -0.772,-0.614, 0.986, -0.735 with respect to the standard deviation of 0.202, 0.175, 0.057, 0.446. In above descriptive statistic table, skewness indicates that GDP growth rate and terrorism are negatively skewed and all the other variables are positively skewed.

CORRELATION ANALYSIS

Correlation is the relationship between two variables and it is one of the most important as well as persuasive statistical tools in the data analysis technique which could be linear, nonlinear or nonexistent. It is the numerical measure which shows the strength of relationship between two variables and can be perfect positive correlation or perfect negative correlation or no correlation. T he values +1 shows perfect positive correlation while -1 shows perfect negative correlation.This table shows correlation matrix between all explanatory variables.

Table 3 Correlation Analysis

	CC	FDI	GFC	GDP	INF	KSE	PIST	RL		RQ	TERR	VA	Km I30

	CC	FDI	GFC	GDP	INF	KSE	PIST	RL	RQ	TER	VA	kmi30
CC	1											
FDI	-0.193	1										
GFC	-0.120	0.652	1									
GDP	-0.357	0.193	-0.284	1								
INF	-0.583	0.474	0.590	-0.249	1							
KSE	0.492	-0.368	-0.277	0.028	-0.461	1						
PIST	0.756	-0.200	-0.269	-0.120	-0.562	0.020	1					
RL	0.895	-0.428	-0.293	-0.413	-0.553	0.459	0.803	1				
RQ	0.821	0.007	0.114	-0.533	-0.202	0.363	0.526	0.729	1			
TER	0.039	0.033	0.111	0.131	0.219	0.298	-0.194	0.009	0.228	1		
VA	0.233	-0.217	-0.105	-0.565	0.114	0.242	0.048	0.455	0.480	0.203	1	
kmi30	0.142	0.149	-0.076	0.239	-0.081	0.321	0.142	0.140	0.291	0.187	0.169	1

NOTE: (KSE is the Karachi stock Exchange 100index returns, CC is the corruption, FDI is foreign direct investment, GFC is the Financial Crisis, GDP is the Gross domestic product rate %, INF is the inflation, PIST is the political instability, RL is the rule of law, RQ is regulatory quality, Terr is the terrorism, VA is the voice and accountability, ST.Kmi 30 is the stock returns of KMI30 index)

Table: 3 show the correlation matrix between all explanatory variables. The correlation between corruption and FDI, GFC, GDP and INF is negative while the correlation between corruption and KSE, PIST, RL, RQ, TERR, VA and st.kmi30 is positive. The relationship between FDI and KSE, PIST, RL and VA is negatively correlated but positively correlated with GFC, INF, RQ and TERR. The relationship of GFC with GDP, KSE, PIST, RL, St.Kmi30 and VA is negatively correlated but positively correlated with INF, RQ and TERR. The relationship of GDP with INF, PIST, RL, RQ and VA is negatively correlated but positively correlated with KSE, RQ, St.Kmi30 and TERR. The relationship of INF with KSE, PIST, RL, St.Kmi30 and RQ is negatively correlated but positively correlated with VA and TERR. The relationship of KSE with PIST, RL, VA, TERR, St.Kmi30 and RQ is positively correlated. The relationship of PIST with RL, VA and RQ, St.Kmi30 is positively correlated but negatively correlated with TERR. The relationship of RL with VA, RQ, St.Kmi30 and TERR is positively correlated. The relationship of RQ with VA, St.Kmi30 and TERR is positively correlated. The relationship of TERR with VA and St.Kmi30 is positively correlated. Results of correlation analysis indicate that there is no any issue of multicollinearity in the data of selected variables.

AUTOCORRELATION

It is known as serial or lagged correlation. By this analysis we can measure the relationship between the current value of variables and its previous values. Correlation is one of the main assumptions of OLS technique. According to this assumption there should not be correlation among disturbance terms of two different time periods. Table 4.3 shows Durbin-Watson stat value is 0.152737 which is less than 2 that indicates there is autocorrelation between variables**.**

Detection of Autocorrelation

In E.views Breusch-Godfrey Serial Correlation LM Test is applied to detect autocorrelation

H_1 There is autocorrelation

Table 4 Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	603.3018	Prob. F(2,203)	0.0000
Obs*R-squared	184.8934	Prob. Chi-Square(2)	0.0000

Table 4 showsthat P value is 0.000 which is significant its mean there is autocorrelation.

Removal of Autocorrelation

In E.views Cochtane-Orcutt Method is used to remove autocorrelation

Table 5 Cochtane-Orcutt Method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	80800.59	23429.66	3.448645	0.0007
CC	37786.19	2067.715	18.27437	0.0000
FDI	3175.775	573.4342	-5.538167	0.0000
GFC	2679.826	1747.400	1.533608	0.1267

INF	-984.7503	61.77183	15.94174	0.0000
PIST	-18438.52	1110.091	-16.60992	0.0000
RL	43450.22	3587.638	12.11109	0.0000
RQ	11612.40	3052.822	3.803826	0.0002
TERR	-52830.69	28650.42	-1.843976	0.0467
VA	-14.01421	549.5874	-0.025500	0.9797
AR(1)	0.998034	1.375363	0.725651	0.4689
AR(2)	-0.002384	1.375342	-0.001734	0.9986
SIGMASQ	481154.2	18071.02	26.62573	0.0000

R-squared	0.867516	Mean dependent var	19085.07
Adjusted R-squared	0.857357	S.D. dependent var	13950.97
S.E. of regression	717.2876	Akaike info criterion	16.07344
Sum squared resid	1.04E+08	Schwarz criterion	16.29220
Log likelihood	-1721.931	Hannan-Quinn criter.	16.16182
F-statistic	6240.760	Durbin-Watson stat	1.994925
Prob(F-statistic)	0.000000		

Inverted AR Roots	1.00	.00

Table: 5 shows the value of Durbin Watson stat is 1.994925 which indicates that autocorrelation has been removed. Table shows the estimated reported results. It is the statistical procedure for determining a relationship between dependent variable and an independent variable. It shows the estimated value of r-square which is approx. 0.867516 Which shows that 86% of the variation in dependent variable is explained in by the given independent variables. The value of adjusted R-square is 0.917357.

The value of F-statistics is 6240.760whichshow the validity of model. Its value is 6240.760which is above its probability f-statistics value of 0.000000 which means overall model is good. The Durbin-Watson statistics value is1.99which is close to 2 this implies that there is no auto correlation in this model. Significance level should be 0.05.Table shows that there is significant negative relationship between inflation and stock returns these results are supported by Kim and Shukla (2006) hence the objective of the study is achieved here. So hypothesis is accepted. Result shows that there is insignificant relationship between Global Financial crises and stock returns. Result shows that there is significant positive relationship between rule of law and stock returns which are similar to the findings of (Kim & Shukla, 2006).

Result shows that there is significant positive relationship between foreign direct investment and stock returns. Result shows that there is significant positive relationship between corruption, regulatory quality and stock returns these results are similar to the previous study's results by (Kim & Shukla, 2006) so objectives are achieved and hypothesis is accepted. Result shows that there is significant negative relationship between political instability and stock returns, results are supported by (Asteriou, 2016; Asteriou & Siriopoulos, 2000; Irshad, 2017).Result shows that there is significant negative relationship between terrorism and stock returns some previous studies also support results (Chaudhry, Roubaud, Akhter, & Shahbaz, 2018; Markoulis & Katsikides, 2020; Nikkinen & Vähämaa, 2010).Result shows that there is insignificant relationship between voice and accountability and stock returns.

HETEROSKEDASTICITY

It is time series statistical model which is used to analyze the effects left unexplained by econometric models. The variance of the error term must not be uniform. In E.ViewsBreusch-Pagan test is applied to detect heteroskedasticity.

Detection of heteroskedasticity

InE.ViewsBreusch-Pagan test is applied to detect heteroskedasticity.

Table 6 Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	17.57455	Prob. F(10,205)	0.0000
Obs*R-squared	99.70183	Prob. Chi-Square(10)	0.0000
Scaled explained SS	106.8151	Prob. Chi-Square(10)	0.0000

Table: 6 shows the value of Prob. Chi-Square is 0.0000 which is significant and indicates that heteroskedasticity exist in the model.

Removal of heteroskedasticity

H_0There is no heteroskedasticity.

Appendix 1 table 7 shows that Heteroskedasticity is removed from data.

Table 8 Descriptive Statistics Of Model 2

Variables	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis
CC	-0.876	-0.89	0.1343	-2.09	0.119	3.421	8.639
FDI	1.223	0.977	2.668	0.234	1.330	4.225	2.903
GFC	0.112	0	1	0	0.985	2.778	5.570
GDP	4.280	4.702	8.667	0.267	2.122	-1.305	3.756
INF	6.165	.521	19.286	3.175	4.332	0.815	2.964
Kmi	1.018	1.229	4.573	1.969	123.54	0.614	2.579
PIST	-1.156	-2.42	01244	-1.81	0.876	0.336	7.654
RL	-0.142	-0.79	0.289	-2.97	0.432	0.003	9.656
RQ	-0.124	-0.635	0.446	-0.91	0.134	1.065	8.998
TERR	0.866	0	1	0	0.087	-2.450	13.048
VA	-0.415	-0.835	0.8	-2.19	0.987	1.370	6.347

Table: 8 Descriptive Statistics of model 2 shows the descriptive statistics for all study variables of 96 observations for the period of 2012-2019. The table illustrated that on average the CC **-0.876 its** maximum value is 0.1343 and minimum value -2.09 with the std. dev of 0.119 .The highest mean is of inflation which is 6.165 and its maximum value is 19.286 and minimum value 3.175 with the std.dve of 4.332.The mean value of FDI is 1.223 and its maximum value is 2.668 while minimum value is 0.234 with std.dev of 1.33.The mean value of GFC is 0.112 and its maximum value is 1 while minimum value is 0 with std.dev of .985 during the study period. . The mean value of GDP is 4.280 and its maximum value is 8.667 while minimum value is 0.267 with std.dev of 2.122 during the study period. The mean value of Kmi is 1.018 and its maximum value is 4.573 while minimum value is 1.969 with std.dev of 123.54 during the study period. The mean value of P.IST is -1.156 and its maximum value is 01244 while minimum value is -1.81 with std.dev of .659 during the study period. Mean values of RL, RQ, TERR, VA are -0.142, -0.124, 0.866 and -0.415 with respect to the standard deviation of 0.876, 0.432, 0.134, 0.087 and 0.987 . In above descriptive statistic table, skewness indicates that GDP growth rate, and terrorism are negatively skewed and all the other variables are positively skewed.

REGRESSION ANALYSIS OF MODEL 2

Table 9 Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	43545.62	3158.595	13.78639	0.0000
CC	32.35941	7460.845	4.337231	0.0000
FDI	-1239.193	1522.762	-0.813780	0.4167
GDP	4671.196	365.3645	12.78503	0.0000
GFC	340.4790	1671.479	0.203699	0.8388
INFL	38.75725	270.1631	0.143459	0.8861
PIST	-26.21093	3783.828	-6.927094	0.0000
RQ	1.322348	5238.735	2.524175	0.0124
RL	93.08179	8956.295	10.39289	0.0000
TERR	-7067.056	2907.684	-2.430476	0.0159
VA	-5403.272	1717.074	-3.146791	0.0019

R-squared	0.793134	Mean dependent var		19085.07
Adjusted R-squared	0.897911	S.D. dependent var		14113.94
S.E. of regression	4509.596	Akaike info criterion		19.71976
Sum squared resid	4.15E+09	Schwarz criterion		19.90727
Log likelihood	-2117.734	Hannan-Quinn criter.		19.79551
F-statistic	172.9096	Durbin-Watson stat		1.938435
Prob(F-statistic)	0.000000			

Table 9 shows the estimated reported results. It shows the estimated value of r-square which is approx. 0.79Which shows that 79% of the variation in dependent variable is explained in by the given independent variables. The value of adjusted R-square is 0.897911.

The value of F-statistics is 172.9096 which show the validity of model. Its value is 172.9096 which is above than 3 and its probability f-statistics value of 0.000000 which means overall model is good. The Durbin-Watson statistics value is1.938435which is close to 2 this implies that there no auto correlation in this model. Significance level should be 0.05.Table shows that there is insignificant relationship between inflation and stock returns of KMI30 index. Table shows that there is significant **positive** relationship between Gross domestic product and stock returns results are supported by previous study Reddy (2012) hence the objective of the study is achieved here. . Result shows that there is insignificant relationship between Global Financial crises and stock returns. Result shows that there is significant **positive** relationship

between rule of law and stock returns which are similar to the findings of (Kim & Shukla, 2006). Result shows that there is negative insignificant relationship between foreign direct investment and stock returns. Result shows that there is significant **positive** relationship between corruption, regulatory quality and stock returns these results are similar to the previous study's results by (Kim & Shukla, 2006). So, objectives are achieved and hypothesis is accepted. Result shows that there is significant **negative** relationship between political instability and stock returns, results are supported by (Asteriou, 2016; Asteriou & Siriopoulos, 2000; Irshad, 2017). Result shows that there is significant **negative** relationship between terrorism and stock returns some previous studies also support results (Chaudhry et al., 2018; Markoulis & Katsikides, 2020; Nikkinen & Vähämaa, 2010). Result shows that there is significant relationship between voice and accountability and stock returns.

Detection of Autocorrelation

H_0 There is no autocorrelation

Table 10 Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.807208	Prob. F(2,86)	0.0660
Obs*R-squared	7.808454	Prob. Chi-Square(2)	0.0672

Detection of heteroskedasticity

InE.ViewsBreusch-Pagan test is applied to detect heteroskedasticity.

Table 11 Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.511757	Prob. F(7,88)	0.1737
Obs*R-squared	10.30511	Prob. Chi-Square(7)	0.1719
Scaled explained SS	8.560598	Prob. Chi-Square(7)	0.2858

H_0 There is no heteroskedasticity.

CONCLUSION

This study has focused on the examining the impact of terrorism and political instability on stock returns. Terrorism events are discussed by including the events as bombing attacks, assassination and explosion while political instability is discussed by including all events as General Strikes, Demonstrations, Riots, Assassinations, Government's longevity, Governments change and Regime Type for the period of 2002 to 2019. In this research our objective was to find out the effect of political instability and terrorism on stock returns. This study has used KSE 100 INDEX from the time period 2002 to 2019 and KMI 30Index from 2012 to 2019. Stock returns are used as Dependent variable while political instability and terrorism are used as independent variable. Some control variables are also used in this study which are Inflation, GDP, FDI and some governance variables are also used in this research which are rule of law, control of corruption, voice and accountability and regulatory quality. Data is taken from WDI, WGI, GTI, and stock exchange Pakistan. Findings of this study are supported by Efficient Market Hypothesis and Arbitrager pricing theory.

Results of this research indicates that all variables used in this research have significant impact except voice and accountability for model one while for model two FDI,GFC and INF have insignificant relation with KMI30 Index other all variables have significant relation with KMI 30 Index. Our results are consistent to some previous studies. This is the first study to present an empirical analysis to identify the combined impact of terrorism and political instability on stock returns in Pakistan. This research also compared the effect of political instability and stock return on KSE 100 Index and KMI 30 Index returns. To sum up, this study concludes that it is not necessary that terrorism and political instability have the same effect on stock returns in emerging markets, such as it would have in developed markets. It totally depends upon the nature of the data.

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