

Terrorism Activities Influence on Financial Stock Markets: An Empirical Evidence from United Kingdom, India, France, Pakistan, Spain and United States

Global Journal of Social Sciences Studies

Vol. 6, No. 1, 1-12, 2020

e-ISSN: 2518-0614



Corresponding Author

Shazaib Butt¹

Omar Masood²

Kiran Javaria³

¹Royal Docks School of Business and Law, University of East London, Stratford Campus, Water Lane, United Kingdom.

¹Email: s.butt@uel.ac.uk

²School of Accountancy and Finance, University of Lahore, Islamabad, Pakistan.

²Email: masood_omar@hotmail.com

³Email: kiranmaryam23@gmail.com

ABSTRACT

The study investigates the impact of terrorism activities on five economies (Developing and Developed) financial stock markets. Spain, United Kingdom, India, Pakistan, America and France were chosen for the analysis. The variables considered were terrorist activities and market return of the financial stock markets. Daily time series data for the period from 1st Jan 2001 to 31st Dec 2018 was analyzed by applying simple linear regression model to estimate the effects of terrorist activities on financial stock market returns of the selected countries. The results suggest that the market return is affected by the terror events and the model is overall statistically significant. The results of this study are consistent with findings of Freytag *et al.* (2009) and Basuchoudhary and Shughart (2010). Significant influence of terrorist activities on financial market returns offer financial markets stakeholders not only an understanding of the direction of market swing following terror factors on stock market but also offers guidance towards investment decision making and timing. Study further discussed how terrorism activities influence the overall market return.

Keywords: Terrorism activities, Financial stock market, Linear regression model, Quantitative analysis, Deductive approach.

DOI: 10.20448/807.6.1.1.12

Citation | Shazaib Butt; Omar Masood; Kiran Javaria (2020). Terrorism Activities Influence on Financial Stock Markets: An Empirical Evidence from United Kingdom, India, France, Pakistan, Spain and United States. Global Journal of Social Sciences Studies, 6(1); 1-12.

Copyright: This work is licensed under a [Creative Commons Attribution 3.0 License](https://creativecommons.org/licenses/by/3.0/)

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

History: Received: 21 October 2019/ Revised: 26 November 2019/ Accepted: 30 December 2019/ Published: 10 February 2020

Publisher: Online Science Publishing

Highlights of this paper

- The study investigates the impact of terrorism activities on five economies (Developing and Developed) financial stock markets.
- The results suggest that the market return is affected by the terror events and the model is overall statistically significant.

1. INTRODUCTION

The change in economic circumstances will affect the stock prices that will have a direct reflection on the discounted value of existing and future performance of the firm. Literature discusses that positive and negative changes in the stock prices can possibly be connected to events see [Schwert \(1981\)](#) and [Freytag et al. \(2009\)](#). The benefit of the event study method lies in its inherent ability to make out such untoward changes as its basis lies in the overall assessment of investors who have at their hands such means as to be able to assess individual firm market value. Investors can easily, inexpensively and quickly change their decision of buying and selling stocks. Whenever information about a military attack or some terrorist activity is reported, which in themselves result in great upheavals and disturbances, cause the person who have invested their capital in those places immediately try to leave the place along with their capital. The term terrorism has been defined by different researchers but [Sandler and Enders \(2008\)](#) describe terrorism as the “Premeditated, threatened or actual use of force or violence to achieve a political goal through fear, coercion or intimidation”. This definition brings within its fold the four features of terrorist activity as given by [Shughart \(2006\)](#) firstly using violence for political purpose, secondly a well-devised way for an action; thirdly such behavior which is not within the accepted rules of warfare and fourthly an effort to produce great fear and sense of insecurity among the people, particularly, the civilians.

Terrorism cause biggest threat to economy. The greatest of them all is the loss of human lives and that also of innocent people. A right-minded person would never commit such a heinous crime. Then the psychological aspect of these atrocious acts on the minds of the public cannot be overloaded. According to [Tavares \(2004\)](#) and [Crain and Crain \(2006\)](#) these terrorist acts cause a disruption of economy, slow down the progress. Foreign investors hesitate in investing in such adverse circumstances ([Abadie and Gardeazabal, 2008](#)). Without any doubt terrorism has now become a most major security issue in the world today. With increase in these events government consider the counter terrorism measures on the priority of their agenda. As a result, most of the governments reacted to limit the individual freedom and civil rights but they also increase the portion of anti-terrorist spending in their budget. According to a report issued by United Kingdom’s security service MI5, the total annual expenditure on anti-terror activities and intelligence is scheduled to raise from £2.5 billion 2007/08 to £3.5 billion by 2010/11. Present study aim is analyze the impact of terrorist attacks on the financial markets. The response of the markets after the happening of such threatened events.

The motivation behind present study is to understand the stock market of different developing and developed nations and how these economies badly affected by the terror activities in the economy. Terror attacks can inflict the heart-breaking damage to human life and destruction of human property. Now it is a bare truth that its resulting loss is not confined to the human loss, but the disastrous results capture the overall economy. Financial Stock markets are responding to these activities and the fluctuations in the markets are so visible that it can change the mind of foreign and local investors. The financial markets play a vital role in the development of the economy. The confidences of the investors in the markets are badly shaken due to the terror attacks. And the decreased level of confidence of the foreign and local investor will lead toward the adverse movement of the markets. So present study determine the market reaction due to these terror attacks and what are the measure investors and policy makers should utilize to remain stable in such a worst condition.

2. LITERATURE REVIEW

2.1. Theoretical Foundation of Rational criminal Theory

Becker (1968) developed a “Rational criminal” theory stating that all the individuals spend their time in a rational way; that is, a method through which they can maximize their utility; between the legal and criminal activities. According to his theory each individual considers the following things before doing any crime (a) risk of being caught, chances and magnitude of the punishment (b) consider the stigma and moral cost related with the criminal activities. while he concluded that a person is more likely to indulge in criminal activity who is getting the maximum marginal benefit from the concerned activity. Indeed, all the evidence stated that an ill-educated person with a lower wage is more likely to perform property crimes relative to murder and other violations that are unconcerned with the persons’ economic activity.

2.2. Reasons of Terrorism Spreading Activities

Krueger and Malečková (2003) conducted a study to analyze that whether poverty and low education has any contribution to promote the terrorist activities. Berrebi (2007) conducted the same study to investigate the correspondence between the terrorism, education and income level and he concluded that being married remarkably decreases the chances of involvement in terrorist activities. De Mesquita (2005) demonstrated these finding by presenting a model to the interdependence between terrorist activities, government and terrorist volunteers. And he concluded that terrorist volunteers are not ill-educated, but absence of economic opportunity has positive relation with terrorism. Study to described the role of ethnic conflict, freedom of speech, political freedom and economic organizations in promoting transnational terrorism in the origin countries. Study concluded that there is a proof that Political rights, freedom of speech, of group, of constitutional elections can decrease the effects of ethnic terrorism. While economic opportunity can also decrease the chances of occurring terrorist activities. Freytag *et al.* (2009) demonstrated the role of socio-economic factors in terrorism. They noted that socio-economic situations affect the terrorist activities through opportunity cost of terrorism.

2.3. Economic Cost of Terrorism Activities

Tavares (2004) conducted a precise and organized research to find the economic cost of the terror incidents at the country level. The study assumed that effect of terror attacks on GDP is quantifiable and by comparing it with the other aggregate shocks will allow them to measure the cost of terrorism. Lenain *et al.* (2002) demonstrate the three possible ways through which the terror might influence the macro economic activity. Firstly, the decline in the insurance coverage can be observed and it is an indication of the increased risk, greater trading cost that lead toward lesser dealing in international trade and higher defense and security expenditure.

Economic Consequences: Hillman (2007) examined and refine the arguments about supreme values in the rent seeking economies, likewise in Arab oil exporting countries and in Radical Muslim Gaza Strip. Researcher concluded that the expected economic prosperity has no impact on the emergence of terror and political violence. Freytag *et al.* (2009) conducted a study to find the relation between terrorism and socio-economic conditions. The analyses showed the interesting picture. Unexpectedly the impact of GDP per-capita has a positive association with the terror activities (besides European countries) in the simple form while the relation converts into a negative associated when GDP per-capita is in quadratic form. The affiliation between the investment and terror incidents is extremely negative, excluding the Islamic countries where this association is positive. Similarly, the human capital is significantly negatively associated with the terrorism activities excluding the Islamic countries.

Benmelech and Berrebi (2007) conducted a study to find the association between human capital of the suicide bombers and the results of their suicide attacks. In the proposed study they confirm it that human capital is a crucial factor in producing the suicide terrorism. The empirical analysis was done by using regression model and they concluded that suicide attacks in Israel have a positive association with both standard of living and education.

2.4. Terrorism in Developing and Developed Economies

Hobijn (2002) conducted a study to compare historical and expected expenses on national security by the local governments and the federal and the other projects that are being conducted by the government. In his study, he addresses three basic questions starting with the amount of expenditure that the government will have to spend on the security issues. He seeks to answer this question by comparing the historical and expected expenditure conducted by the federal and local government on the security issues with the expenditure conducted on the other programs. He analyzed that after the disastrous event of September 2001, US government and private sectors have adopted extra security measures and the cost of carrying out these measures have increased the expenditure and it has made a great impact on the economic condition of the concerned country. Moreover, a small change has been found in the productivity of labor. Lenain *et al.* (2002) evaluated that increased level of terrorism activities has forced to spend more on the homeland security and on military operations; this phenomenon has been more observed in US while in a lesser extent in the OECD countries.

2.5. Reasons of increase in Terrorism Activities

In the recent study, Krueger and Maleckova (2002) examined the major causes of terrorism by using the micro data. A public opinion has been taken through different surveys and they find that west bank and Gaza supported the terror attack being conducted in Israel. Exceptionally, they uncover that these violent attacks are not at all associated with ill-education and economic status. Another study, describing the features of the terrorist individual demonstrate that higher income and better education would not lead toward the lower terrorism activities.

Most of the studies regarding the incidences and causes of terrorism has been performed globally. Like Blomberg *et al.* (2004) executed a research that carry two folded aspects. Initially they established and developed a theoretical model to find the link between the economic condition and the terror activity. On the other hand, for considering the model, they organized and collected cross country data. Finally, they concluded by finding that states which are entangled in the recession (one phase of trade cycle) would face increased number of terror incidents. The intensity of terror shocks varies from group to group and state to state as the people have different state of mind and maybe they are dissatisfied from the political situation. While owing the constitutional means are more inclined to performs such attacks. By demonstrating the multiple equilibria, model concluded with two likely outcomes; decreased economic activities will lead to the increased terrorism activities and the economic prosperity will lead to the decreased terror attacks.

2.6. Influence of Terrorism Activities on Financial Stock Market

Neumayer (2004) conducted a study with an objective of analyzing the effective policies and other regulatory outcomes to safeguard the financial markets from the terror attacks. They collected the data of New York (in 2001) and Madrid (in 2004) and all the terror activities that occur in these countries. Their results demonstrated that expanded sound and liquid (incorporating the contingency plans from a view point of businessmen) markets are more effective and efficient to absorb the stocks of the terror attacks. In any case, the paper clearly shows the responses of the crises management authorities and analyzes the effectiveness of these responses and these

responses affect the financial markets and save the markets to absorb the shocks up to some extent. Further they concluded the primary function of state bank that is lender of the last resort were much effective in controlling the aftermath panic from the market after terror activity.

2.6.1. Terror Activities Influence on Pakistan Stock Market

Aslam *et al.* (2015) conducted a study to investigate the connection between terror activities and the response of the financial stock markets. And more over how these terror shock affect the development of the financial markets. They select the country Pakistan as their sample for this case study because in Pakistan terrorism is increasing day by day and this country is also playing a major role in war against this terrorism. The objective of the paper was to dissect the effects of terrorism on the development of the stock markets of Pakistan because the performances of the stock exchange represent the economic health and goodness of the performance of an economy. By utilizing Terrorism Impact Factors an interesting and unique score was developed for the research paper, a deeper understanding was produced to analyze the linkage that exist between the terror shocks and KSE index. Moreover, the researchers examined the quantitative significance of selected terror attacks on stock exchange of Pakistan (Karachi Stock Exchange). The empirics of the study concluded while considering the long-term effect of terror activities, financial markets respond in a negative manner. Whereas, in the short run no significant affect is estimated between terrorism and stock return. The results clearly indicated that the terror shocks definitely change the investor's state of mind and mood up to a large extent and ultimately this shift the economic situation of the country. Therefore, it is rightly to say that terror is a prominent set-back to the development and health of the economy.

2.6.2. Terror Activities Influence on Spain Stock Market

The detailed study of Neumayer (2004) attempts to analyze the movement of the global financial stock markets. They choose terror attacks to the response of the authorities. They selected two major terror events; first one is the disastrous event of 9/11 and the second one is the event of 11 March 2004 in Madrid (Spain); to analyze their impact on financial markets. They argued that flexible, timely and precise reaction of the authorities is important to allow the global financial markets efficient in getting the effect of these terror attacks. Due to the globalization environment, further the reaction of the authorities and the joined efforts among prosecuting and intelligence agencies, financial markets, regulators and government is crucial to develop the financial systems stronger against these terrorist attacks. Different undergoing studies did not get any clue that terrorist activities have a negative effect on the stock markets because the financial markets are so flexible and efficient in few countries so that they gather the impact of these terror activities into their return.

2.6.3. Terror Activities Influence on United Kingdom Stock Market

According to previous studies, the magnitude and time period of response of the market indices after the terrorist attack. They examined the impact of Berlin (attack in 2016), New York (2001), NYSE (2016), Madrid (2004), Brussels (2016), London (2005), Paris (2015) and Boston (2013) on the stock exchange indices of Euronext Index (BEL), USA (S&P), France (CAC), Japan (NIKKEI), UK(FTSE), Spain (IBEX) and Germany (DAX). They have used both event study methodology and graphical analysis to analyze the impact of terror shock on the financial stock market indices. Their results stated that both the time period and magnitude of the terror event have a moderate effect and their affect reduced over years. They concluded that the selected events have a short term and relatively smaller impact on the financial markets. Whenever, a new information about assault circulate in the

market it definitely leads toward the extra contagion and uncertain affect in the immediate decline in the stock prices. Their results are in accordance with the results of other researchers like.

2.6.4. Terror Activities Influence on Indian Stock Market

Aslam *et al.* (2015) analyzed the effect of 410 terror attacks on the development of 5 Asian stock exchanges. They collected the data into two data sets. They considered five Asian countries possessing the developed stock exchange and also having a larger number of comparatively intense terrorist incidents. The data has been collected from Bangladesh, India, Indonesia, Philippines and Sri Lanka. In this study 410 terror events are considered in the specimen Asian countries from January 1997 to December 2011. They used regression model to calculate the effects of these terror events. Their empirical results clearly indicated that stock markets have been significantly affected by the terror events. The magnitude of these effects was different with respect to target and country type. PSEI, DSE and JKSE performed in a negative manner after the terror incident or attack. Attacks in Sri Lanka and Bangladesh significantly affected the CSE and DSEG indices. In attacks type the bomb blasts and suicide attacks specially bring a negative environment on DSEG and CSE in the second day of attack. Their further analysis brings to light that those attacks who target the business sector and defense/security forces, negatively knock the returns of Asian stock exchanges. Likewise, the more austere the terror attack (i.e., more injuries and fatalities) is the greater negative impact on the returns of stock market.

2.6.5. Terror Activities Influence on France Stock Market

Chesney *et al.* (2010) examined analytically the effect of terrorism shocks on the behavior of commodity markets, bonds and stock markets. In this study they used two types of data sets. In the first data set, prices of daily stock market indices are being collected. They gathered the data of daily stock prices from Data Stream and for each index they considered the daily prices encompassing the period between 4th January, 1994 to 16th September 2005. The selected prices data include 3054 data points. They calculated the logarithm of the percentage index return. For this study they gathered the data about terror incidents that happened in 25 countries over 11 years period. To get the results they used filtered GARCH approach, event study methodology and non-parametric methods on the data.

2.6.6. Terror Activities Influence on United States of America Stock Market

Lacker (2004) stated that many key market elements were damaged or destroyed in the attack; that had significant operations surrounding the World Trade Center; that caused a wide spreading closure of New York financial markets suffer a great and noticeable loss of human life, consisting over 74% of the complete civilian casualties in the World Trade Center attack. The government and the local securities markets were largely and badly absorbed the effect of the loss of small brokers, largest interdealer broker and cantor Fitzgerald whose offices were situated in the World Trade Center. Previous studies shows that when the securities and payment transaction are done through manual processing. This change in method significantly delayed the clearing and settlement procedures. It also raises the uncertainty of the trader that their ongoing trades will complete or not. Chen and Siems (2004) used event study methodology to capture the impact of fourteen terror attacks dating back to 1915. In addition to the selected 14 events the researcher also encompasses the attacks of Iraq on Kuwait and the 9/11 attacks on the World Trade Center and the pentagon.

3. RESEARCH METHODOLOGY

3.1. Data

Research methodology section explained the data set used to be analyzed for present study. There are various methods, approaches used by present study. Firstly researcher utilized the deductive method approach for present study as present study is based on hypothesis testing. The data regarding the terror activity is taken from Global Terrorism Index¹. To calculate the Daily Average Return we collected the opening and closing index of the selected stock markets. Financial markets are broad-ranging term that covers all market places where equities, currencies, derivatives and bonds are traded by buyer and seller. So, the population of study includes all global big and small financial stock markets. Sample of study is five economies stock market indices which include Spain, United Kingdom, Pakistan, India, France and United States of America. Data of these countries are collected from New York stock exchange, Bolsa de Madrid (Spain), London stock exchange, Karachi stock exchange, Bombay stock exchange and France stock exchange. The study is based on the sample of six countries, three of them are developed countries and while the remaining two countries are developing countries. In developed countries this study collected a sample from Spain, USA, France and United Kingdom. All these countries are high in human development and the level of income is high in these countries. To examine the effect of terrorism on the South Asian region we selected Maldives, Pakistan and India as these countries are most affected by the terror events. The data of this study has been collected from the Global terrorism data Base and the data of the exogenous variable (market return) has been collected from yahoo finance.

3.2. Statistics

In this research, regression analyses have been used to analyze the impact of terror incidents on financial stock markets and to estimate the results the time series E Views econometric software is being used. In this study regression analysis is being used as these researchers also used the same unit to analyze impact of terror attack on financial markets like Berrebi (2007), Freytag *et al.* (2009), Neumayer (2004). Data is time series in nature and collected from first January 2001 to 31st December 2018. The econometrics model of study is:

$$\text{Market Return} = \alpha + \beta (\text{Terrorism Activities}) + \mu$$

Where;

Y = Dependent variable (Market Return); α = intercept of the regression model; β = Regression coefficient; X = independent variable and μ = Disturbance term of the regression.

4. EMPIRICAL ANALYSIS OF STUDY

4.1. Test of heteroskedasticity

In this research thesis Breusch-Pagan-Godfrey test has been used to test the heteroskedasticity. As this measure is most commonly used to test heteroskedasticity. We have developed the following hypothesis. Null hypothesis: Residuals are Homoskedastic and Alternative hypothesis: Residuals are heteroskedastic

¹The Global Terrorism Database started in 2001 at the service of the University of Maryland. The complete information and data was gathered by the Pinkerton Global Intelligence Services (PGIS). General Public can freely and openly access this data base and gather information about terrorist attacks. The National Consortium established for the Study of Terrorism and Responses to Terrorism (START) design the GTD so that people can collect the information through internet and all the information can be assessed in a short time.

Table-1. Test of heteroskedasticity.

Models	India (Bombay Stock Exchange)	Spain (Bolsa de Madrid)	Pakistan (Karachi Stock Exchange)	France (France Stock Exchange)	USA (New York Stock Exchange)	UK (London Stock Exchange)
P-value	0.180	0.244	0.640	0.947	0.108	0.130
F-staistics	5.343	4.663	0.218	3.063	4.788	4.711

Bombay Stock Exchange (India Results): F- Statistics shows that overall model is significant in nature Table 1. The observed P value is 18% which is greater than 5% which means residuals of the model are homoscedastic. So, we accept null hypothesis and reject the alternative hypothesis which means residuals are not heteroskedastic meaning that homoscedasticity exists in the data.

Bolsa de Madrid (Spain Results): F- Statistics shows that overall model is significant in nature Table 1. The observed P value is 24% which is greater than 5% which means residuals of the model are homoscedastic. So, we accept null hypothesis and reject the alternative hypothesis which means residuals are not heteroskedastic meaning that homoscedasticity exists in the data.

Karachi Stock Exchange (Pakistan Results): Karachi stock exchange is being selected to analyze the impact of terror activities on the stock market of Pakistan Table 1. P value is 64% that is greater than 5 which clearly state that the model is free from heteroskedasticity. Homoscedasticity exist in the model and it is also desirable to have it. So, we reject alternative hypothesis and accept the null hypothesis.

France stock exchange (CAC 40 France Results): In this study to analyze the impact of terror activities on the financial markets of France we have selected the CAC 40 index. As CAC 40 is a bench mark French stock market index Table 1. Results show that P value is 94%. That is clearly greater than 5%. The results of the Bruesch Pagan test clearly mentioned that the model is free from heteroskedasticity. So, we fail to reject null hypothesis and accept it.

New York Stock Exchange (USA Results): The New York Stock Exchange is an American stock exchange Table 1. And this stock exchange is among the largest stock exchange of the worlds in accordance to their market capitalization. The results of the Bruesch Pagan Godfrey test reveal that the model has homoscedastic and the residual are free from heteroskedasticity. Because the P value (10.8%) is greater the standard value that is 5%. So, we reject alternative hypothesis and accept the null hypothesis.

London Stock Exchange (UK Results): London stock exchange is the primary stock exchange of United Kingdom Table 1. In this research study the opening and closing prices of 100 index of London Stock Exchange is been collected from yahoo finance. The results of the Bruesch Pagan test reveal that the model is free from heteroskedasticity and homo exist in the model. As the P value 13%that is greater than 5% so we fail to reject null hypothesis and conclude that residuals are free from hetero problem.

4.2. Regression Model

The below given table shows the results of the Auto regressive regression model as the dependent variable has appeared as independent variable in the model.

Table-2. Regression model.

Regression Model Least Square									
Observation: 4481 after Adjustment									
Sample: 2001 to 2018									
Dependent Variable: Market Return									
Models	India			Spain			Pakistan		
	t-statistics	P-value	R ²	t-statistics	P-value	R ²	t-statistics	P-value	R ²
	-52.81	0.023	0.63	-11.30	0.002	0.62	-10.50	0.038	0.64
Models	France			USA			UK		
	t-statistics	P-value	R ²	t-statistics	P-value	R ²	t-statistics	P-value	R ²
	-8.268	0.026	0.68	-16.09	0.000	0.69	-19.26	0.000	0.81

India Regression Results: The value of R² represent that 63% variation in the dependent variable is due to change in independent variable Table 2. Remaining 39% variation in the dependent variable is due to other factors. Secondly the independent variable of the model is individually significantly influencing the dependent variable (market return). T statistics value is -52.81 which shows that there is negative influence of terror activities on stock return. As the P value against the independent variable (terror activity) is 2.36% meaning that less than 5%. It shows that terror activity is negative and significant (independent variable) influence on dependent variable that is market return.

Spain Regression Results: R² value is 62%. That shows the variation in the dependent variable due to the independent variable Table 2. Here the variation in dependent variable is 62% that comes from the terrorist activities while the remaining 38% is due to other factors. Secondly, the terrorist activities are individually significantly influencing the market return as the P value is less than 5%.

France Regression Results: In this regression mode the value of R² is 68.70% which shows that the model is best fitted and we can say that 68.70% changes in the dependent variable is coming from the change in independent variable Table 2. Secondly, the P value is 2.420% which is less than 5% which shows that terrorism activities that are the independent variable of this study_ is significantly affecting the market return.

Pakistan Regression Results: R² value is 64%. That shows the variation in the dependent variable due to the independent variable. Here the variation in dependent variable is 64% that comes from the terrorist activities while the remaining 36% is due to other factors. Secondly, the terrorist activities are individually significantly influencing the market return as the P value is less than 5%.

USA Regression Results: The regression model shows that terror activities are individually significant in affecting the market response. The corresponding P value against the terror activities is Less than 5% that clearly assure the significance of the independent variable. Secondly, the model contains a good figure of R² that is 69% which is greater than 60% so, it clearly states the goodness of the good fit of the model. This R² means that 69% variation in the market return is due to the terror activities in the state.

UK Regression Results: In the above table the regression analysis shows that the model is good fitted model as the value of R² is 81.477% which is more than 60%. The value of R² represent that 81.477% variation in the dependent variable (market return) is coming from the independent variable (terror activity). Secondly the independent variable (terror activities) of the model is individually significant. As terror activities are significantly affecting the market return because the P value against the terror activities is less than 5%.

5. FINDINGS AND CONCLUSION OF STUDY

The purpose of present study was examined that how the terror activities has influence on stock return of different economies. Researcher has discussed the results of studies in different stock exchange context. *Bolsa de*

Madrid results are aligning with Neumayer (2004) study. The results of study show that Spain is badly affected by the terror attacks. The results of the OLS Regression model suggest that Bolsa de Madrid Stock exchange is being adversely affected by the terror activities in the country. The Value of R^2 represent that 62% variation in the market return is due to the national and international terror activities. Finding shows that when the terrorism occur it always affect the mind of the investor and ultimately decreases the market return. Karachi Stock Exchange (KSE) results are aligning with Alam (2012) study. Terrorist attacks have rigorously bad impact on the stability of the financial stock stocks. Due to such shocks investment specially, foreign investment has been reduced. It means that as the terror attacks would increase; the financial stability and performance of the Karachi Stock Exchange will decline. We can conclude that terrorism has a negative relation with the market return. 64 % variation in the market return is due to the terror activity. And the remaining variation in the market return of the Karachi Stock Exchange is due to other various factors like political instability and economic instability etc. that are not included in the current study. Bombay Stock Exchange results are aligning with Aslam et al. (2015) study. Market return of Bombay Stock Exchange is badly affected by the terror attacks. The coefficient of the simple regression model is – 0.44 which shows that one unit increase in the terror activity will lead to the decrease in market return by 0.44%. It clearly indicates that the Bombay Stock Exchange is getting the adverse impact from the terrorist activities happening in India. Large number of terrorism activities effects the economy of India at general and financial markets at particular. France CAC 40 Stock Exchange Index results are aligning with Berrebi (2007). Terrorism cannot give fruitful results to any nation same the case is with France. Though in the France less terror activities occur but at times when the terrorism occur it always affect the mind of the investor and ultimately decreases the market return. The results of the OLS Regression model suggest that France CAC 40 Stock exchange is being adversely affected by the terror activities in the country. The Value of R^2 represent that 68% variation in the market return is due to the national and international terror activities. London Stock Exchange(LSE) results are align with Berrebi (2007) OLS Regression analysis suggests that LSE is least affected by the terror activities. As due to high security measure the country faces less terror shocks. The coefficient of the model is -0.018 which shows a small change in the market return due to terror activity. Though, the market is getting negative impact from the terror shocks. There are also other factors that affect the market return of the London Stock Exchange like political situation etc. New York Stock Exchange (NYSE) results are aligning with Neumayer (2004) study. The results of the regression model suggest that the return of New York Stock Exchange is negatively related with the terror activities. The coefficient of the regression model represents one unit increase in the terror activity will lead to decrease the market return by 0.65%.

5.1. Concluding Remarks

The basic purpose of this study was to analyze the impact of international and local terror activities on financial markets of the Spain, UK, USA, France, Pakistan and India by using time series data from 2001 to 2018. By using OLS regression analyses this study analyzed that terrorist's attacks can badly impact the economic and financial situation of a country. The decline in the stock markets clearly shows that beyond the personal injuries and loss of life of the victims, terrorism has real economic cost that decreases the firms' profits.

5.2. Implication and Recommendations for Study

Through this research people can generate policies and managerial implications for national security, security trades and portfolio allocation. By considering the activities of terrorist's people can manage their portfolios after getting least effect of these shocks. As we analyzed that the impact of these terror shocks is adverse on the markets.

So, in the light of the finding of this research investors can manage the holding period of their investments. The anti-terrorism policy should be re-designed to cope with the terrorist attacks.

REFERENCES

- Abadie, A. and J. Gardeazabal, 2008. Terrorism and the world economy. *European Economic Review*, 52(1): 1-27. Available at: <https://doi.org/10.1016/j.eurocorev.2007.08.005>.
- Alam, A., 2012. Terrorism and stock market development: Causality evidence from Pakistan. *Journal of Financial Crime*, 20(1): 116-128.
- Aslam, F., H.G. Kang, W. Mohti, A. Rafique and A. Salman, 2015. The impact of terrorism on financial markets: Evidence from Asia. *The Singapore Economic Review*, 63(05): 1183-1204.
- Basuchoudhary, A. and W.F. Shughart, 2010. On ethnic conflict and the origins of transnational terrorism. *Defence and Peace Economics*, 21(1): 65-87. Available at: <https://doi.org/10.1080/10242690902868343>.
- Becker, G.S., 1968. Crime and punishment: An economic approach. In *The economic dimensions of crime*. London: Palgrave Macmillan. pp: 13-68.
- Benmelech, E. and C. Berrebi, 2007. Human capital and the productivity of suicide bombers. *Journal of Economic Perspectives*, 21(3): 223-238. Available at: <https://doi.org/10.1257/jep.21.3.223>.
- Berrebi, C., 2007. Evidence about the link between education, poverty and terrorism among palestinians. *Peace Economics, Peace Science, and Public Policy*, 13(1): 1-38. Available at: <https://doi.org/10.2202/1554-8597.1101>.
- Blomberg, S.B., G.D. Hess and A. Orphanides, 2004. The macroeconomic consequences of terrorism. *Journal of Monetary Economics*, 51(5): 1007-1032.
- Chen, A.H. and T.F. Siems, 2004. The effects of terrorism on global capital markets. *European Journal of Political Economy*, 20(2): 349-366. Available at: [https://doi.org/10.1016/s0176-2680\(03\)00102-2](https://doi.org/10.1016/s0176-2680(03)00102-2).
- Chesney, M., G. Reshetar and M. Karaman, 2010. The impact of terrorism on financial markets: An empirical study. *Journal of Banking & Finance*, 35(2): 253-267.
- Crain, N.V. and W.M. Crain, 2006. Terrorized economies. *Public Choice*, 128(1-2): 317-349.
- De Mesquita, E.B., 2005. The quality of terror. *American Journal of Political Science*, 49(3): 515-530. Available at: <https://doi.org/10.1111/j.1540-5907.2005.00139.x>.
- Freytag, A., J.J. Krüger, D. Meierrieks and F.G. Schneider, 2009. The origins of terrorism cross-country estimates on socio-economic determinants of terrorism (No. 2009, 009). *Jena Economic Research Papers*.
- Hillman, A.L., 2007. Economic and security consequences of supreme values. *Public Choice*, 131(3-4): 259-280. Available at: <https://doi.org/10.1007/s11127-007-9167-8>.
- Hobijn, B., 2002. What will homeland security cost? *Federal Reserve Bank of New York Economic Policy Review*.
- Krueger, A.B. and J. Maleckova, 2002. Education, poverty, political violence and terrorism: Is there a causal connection? *National Bureau of Economic Research* (No. w9074).
- Krueger, A.B. and J. Malečková, 2003. Education, poverty and terrorism: Is there a causal connection? *Journal of Economic Perspectives*, 17(4): 119-144. Available at: <https://doi.org/10.1257/089533003772034925>.
- Lacker, J.M., 2004. Payment system disruptions and the federal reserve following september 11, 2001. *Journal of Monetary Economics*, 51(5): 935-965. Available at: <https://doi.org/10.1016/j.jmoneco.2004.04.005>.
- Lenain, P., M. Bonturi and V. Koen, 2002. The economic consequences of terrorism. *OECD Working Paper*.
- Neumayer, E., 2004. The impact of political violence on tourism: Dynamic cross-national estimation. *Journal of Conflict Resolution*, 48(2): 259-281. Available at: <https://doi.org/10.1177/0022002703262358>.

- Sandler, T. and W. Enders, 2008. Economic consequences of terrorism in developed and developing countries. *Terrorism, Economic Development, and Political Openness*, 17.
- Schwert, G.W., 1981. Using financial data to measure effects of regulation. *The Journal of Law and Economics*, 24(1): 121-158. Available at: <https://doi.org/10.1086/466977>.
- Shughart, W.F., 2006. An analytical history of terrorism, 1945–2000. *Public Choice*, 128(1-2): 7-39. Available at: <https://doi.org/10.1007/s11127-006-9043-y>.
- Tavares, J., 2004. The open society assesses its enemies: Shocks, disasters and terrorist attacks. *Journal of Monetary Economics*, 51(5): 1039-1070. Available at: <https://doi.org/10.1016/j.jmoneco.2004.05.003>.

Online Science Publishing is not responsible or answerable for any loss, damage or liability, etc. caused in relation to/arising out of the use of the content. Any queries should be directed to the corresponding author of the article.