

## **Impact of Natural Disasters, Terrorism and Political News on KSE-100 Index**

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### **Abstract**

*This paper discusses the impact of news related to natural disaster, terrorism and political on the Karachi Stock Exchange (KSE-100) index. This study is based on Event Study Methodology. It focuses on 21 different news events: 10 political, 9 terrorism and 2 natural disasters. It attempts to determine the statistical relationship and effect of these events on the KSE -100 index by using an 11 day stock market window. This paper concludes that news events have a strong impact on the KSE-100 index and among political, terrorism and natural disaster events; news related to terrorism has the most profound influence on trend of KSE-100 index. It also shows that the bigger the news event the greater is the impact on KSE-100 index. It also supports the notion that good news has a positive and bad news has a negative impact on the KSE-100 index. This study also reveals that the Karachi Stock Exchange is “informationally efficient.”*

**Keywords:** Good and bad news; Political, Terrorism and natural disasters news; KSE-100 index

**JEL classification:** G14, H80, H84

### **1. Introduction**

Stock exchange is one of the key financial markets of every country and considered as one of the imperative sources for the corporations to raise capital. It has also made it easier for the investors including individual and

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institutions to invest in the highly liquid securities traded in the stock exchange in contrast to invest in less liquid investments like real estate. Due to its high liquidity characteristics, it is easy for investors to buy and sell their securities quickly. It has become the key indicator of economic expansion and strength of a country. It is widely believed that the performance of stock market largely depends upon the arrival of information and news related to different events. Chen and Siems (2004) describe the effect on news in these words. "...global capital markets today are tightly intertwined; news spread rapidly (especially bad news), with quick spill over or contagion effects" (p. 363). Furthermore, Goonatilake and Herath (2007) investigated the impact of news on DJIA, NASDAQ and S&P 500 and found the association between the news and stock market fluctuations. In addition, the efficient-market hypothesis (EMH) asserts that financial markets are "informationally efficient". There are three main versions of this hypothesis: "weak", "semi-strong", and "strong". Weak EMH maintains that prices on traded assets (e.g., stocks, bonds, or property) already reflect all past publicly available information. Semi-strong EMH claims both that prices reflect all publicly available information and that prices instantly change to reflect new public information. Strong EMH argue that prices instantly reflect even hidden or "insider" information. There is evidence for and against the weak and semi-strong EMHs, while there is powerful evidence against strong EMH. Oncu and Aktas (2006) maintain:

*An implication of EMH is that market prices reflect all available information and expectations, and that any new information is properly incorporated into prices without any delay. A stock market's speediness to incorporate new information into prices is referred to informational efficiency. Market's ability to reflect new information properly is referred to market rationality (p. 233).*

Therefore, the news of different types of events happening in the country and around the world have a major impact on the performance of stock market no matter it is directly linked to it or not. If the country's economic, political and law and order situation is unsatisfactory, it will also have a deteriorating impact on the performance of stock market and vice versa. Therefore, stock exchange is a key indicator of country progress and economic development. News regarding political events has both constructive and deteriorating impact on the stock market depending on its nature and consequences. When the political condition of the country is stable, then it

will have a positive impact on the stock market performance and attract more investors to invest their capital and vice versa. Sandler and Enders (2002) define terrorism as “the premeditated use, or threat of use, of extra normal violence to obtain a political objective through intimidation or fear directed at a large audience.” Barth *et al* (2006) conducted a research report on “Impacts of Economic Terrorism: From Munich to Bali” and stated that approximately 20,000 terrorist activities and incident had been occurred in the world during the past 35 years and concluded that “terrorism is associated with adverse effects on overall economic activity” of a country (p. 3).

The basic objective of this paper is to examine the impact of news related to politics, terrorism and natural disasters on the KSE-100 index. This study is based on Event Study Methodology. It focuses on 21 different news events including 10 political, 9 terrorism and 2 natural disasters and determine the statistical relationship and effect of these events on the KSE -100 index by analyzing the 11 days stock market trend. This paper concludes that news has the strong impact on the KSE-100 index and among political, terrorism and natural disaster news; news related to terrorism has profound influence on trend of KSE-100 index. It also proves that bigger the news in terms of its consequence, the more will be the impact on KSE-100 index. Finally, it also claims that (1) Good news has an optimistic impact on the KSE-100 index; (2) Bad news has a pessimistic impact on the KSE-100 index. In the end, this study also supports the EMH that KSE is nearly efficient and security prices fully reflect the available information and news.

## **2. Literature Review**

### **2.1. Political News and its Impact on Stock Exchange**

The political news always has a great impact on country’s economic, social and political activities. Khan *et al* (2009) conducted the study about the impact of news related to Pak-U.S. relations on the KSE-100 index by applying the event methodology and concluded that the association between political news and the KSE-100 index was highly significant. Moreover, Fornari *et al* (2002) examined the impact of schedule and unscheduled news on Italian financial market between the year 1994 and 1996 and found that unscheduled news produced more volatility in the Italian financial market than the schedule news (p. 611). Chan and Wei (1996) revealed that the favorable and unfavorable news were correlated with the positive and negative returns

of the Hang Seng Index. In the same way, Chan, Chui and Kwok (2001) analyzed the impact on political news on Hang Seng Index and concluded that impact of political news was more than the economic news. Zach (2003) investigated the impact of political events on one of the major Israel Stock Exchange namely Tel Aviv Stock Exchange Index from 1993 to 1997 by applying different statistical techniques on the sample including statistical test- location, statistical test- spread, regression analysis, cross-sectional analysis, and News-intensive periods and found that political events had more significant impact on the returns instead on the days when there were no significant political events occurred (p. 243). Niederhoffer (1971) found that the world events exert a discernible influence on the movement of the S&P 500. Returns following the world events tend to be larger in absolute value than returns on other days (p. 193). Franck and Krausz (2009) analyzed the impact of institutional reforms, political events and wars on the Israel Stock Market between 1945 and 1960. They found that likelihood of war did not have any effect on the stock market but it would increase the risk at the time of skirmishes. Furthermore, domestic political instability also increased the stock market risks (p. 141). In the Pakistan's context, Khan and Ahmed (2009) examined the relationship between events happening from December 2007 to October 2008 and their impact on aggregate stock market trading volume and daily stock returns and maintained that political events noticeably fluctuate the stocks returns and trading volume of KSE-100 index (p. 373). Chan and Wei (1996), and Kim and Mei (2001) concluded that political news produced more stock volatility in the Hong Kong. Niederhoffer *et al* (1970), Peel and Pope (1983) and Gemmill (1992) found that stock market prices were significantly affected by the elections both government and congressional in different developed countries. They found changing in governmental administration caused by elections tends to effect financial policies or legislation, thereby significantly affecting stock prices (Chen, *et al*, 2005, p. 167). On the other hand, Aktas and Oncu (2006) tested the Efficient Market Hypothesis with the case study of the refusal of controversial bill allowing deployment of U.S troops in Turkey by Turkish Parliament and its impact on the Turkish Stock Exchange performance and maintained that in response to unfavorable political events, stock prices are expected to behave differently in the efficient market since the new information will have different economic impact on individuals firms (p. 78).

Chuang and Wang (2009) examined the impact of major political changes related to U.S, U.K, France and Japan from the year 1979 to 2001 on

the stock exchange indexes including Nikkei 225, SBF-250, FTSE 30 and Dow Jones 30. They concluded that political changes negatively affected all the countries indexes with the significance level of 5% and suggested that political changes basically provided the opportunity for progress according to the democracy but they had an inverse relationship with the stock return in the developed countries (p. 948). Kaminsky, and Schmukler (1999) argued that “in the chaotic financial environment of Asia in 1997–1998, daily changes in stock prices of about 10 percent became commonplace. They found that market movements were triggered by local and neighboring-country news, with news about agreements with international organizations and credit rating agencies having the most weight. In addition, the evidence suggests that investors over-react to bad news” (p. 537). In the context of political election, Pantzalis *et al* (2000) had used UIH to investigate the behavior of the stock market indexes across 33 countries around the election days during the sample period of 1974-1995 and found a positive impact of these elections on stock market indexes resulting positive abnormal returns (p. 1575). Jones and Banning (2009) analyzed the impact of U.S elections on the stock exchange performance and found little relationship between both of them. They concluded that elections and election cycle didn't play much role in forecasting stock market returns (p.273). Similarly, Gorjaev and Zobotkin (2006) study regarding the Russian Stock markets supported the argument that economic and political events always influence the Stock Market trends (p. 380).

## **2.2. Studies related to Terrorism Impact on Stock Exchange**

Several studies support the argument that the terrorism incidents always influence the stock exchange performance. Chen and Siems (2004) applied the event methodology to measure the impact of 9/11 on global and U.S share prices as well as to compare it with political, economic and natural disasters impact and found that the 9/11 had less effect on financial markets as compare to former terrorist events (p.349). Elder and Melnick (2004) analyzed the impact of Palestinian terrorist attacks on the Israel's Stock and Foreign Exchange markets by using daily times series data from 1990 till 2003 and establish the argument that the attacks had a permanent effect on both Stock and Foreign Exchange markets but location of terrorist attacks had no effect in either of the markets (p. 367; also cited in Sathye *et al* 2008, p. 6). In an other study, Eldor and Melnick (2004) investigated the impact of terrorism on stock and foreign exchange markets in Israel by using the data of 639 terrorist

attacks classified into location, type, target, and casualties from the year 1990 to 2003 and argued that terrorist events had a permanent pessimistic impact only on the stock markets. Johnston and Nedelescu (2006) revealed that International Monetary Fund Report (2001b) regarding impact of September 11 attacks on the Standard and Poor's 500 and NASDAQ indexes maintained that the both indexes dropped to 11.6 percent and 16.1 percent respectively between 17<sup>th</sup> and 21<sup>st</sup> September. In addition, the 9/11 attack had a significant impact on the world major financial markets causing sharp declines and fall. European Stock Market also had a severe decline after 17<sup>th</sup> September. Correspondingly, Dow Jones STOXX index had dropped by 17.3 percent during 11<sup>th</sup> and 21<sup>st</sup> September after the 9/11 terrorist attack (p. 12). Arin, Ciferri and Spagnolo (2008) investigate impact of terrorists' events on the behavior of six financial markets including Indonesia, Israel, Spain, Thailand, Turkey and U.K and concluded that the effects of terrorism not only on the stock market, but also on the stock market volatility. In addition they found that the magnitude of terrorist effects is larger in emerging markets (p. 164).

Barros *et al* (2009) studied the impact of Basque terrorism on the Basque stock market. They took the data from July 2001 to 15<sup>th</sup> November 2005. They investigated the level of violence so called Kale Borroka (street fighting) in this area, the police action and repressive policy measures by the government against this violence and impact of this violence on the Stock Market. They had found that they could reduce the violence by banning the radical party Herri Batasuna and the occurrence of violence had a negative effect on the stock market index. Ahmed and Farooq (2008) investigated the impact of 9/11 terrorist attacks on the volatility of KSE-100 index and found that this incident had a significant impact on the KSE. Their study also negated that volatility was not due to the implementation of regulatory reforms by the SECP as they had found the same qualitative results by dividing the 9/11 period into pre and post reforms period (p. 71). Furthermore, Chen and Wei (2005) investigated U.S capital market response to 7 major terrorist and 7 military attacks from 1915-2001 through event methodology. They applied their analysis to some other capital markets as well, but focus on the impact of only two events: the 9/11 terrorist attacks and Iraq's invasion of Kuwait in 1990. They found that the U.S. capital markets rebound and stabilized quicker after these two events compared to other markets, and U.S. markets are more resilient now than in the past, which they explain by the strength of the banking and the financial sectors in the U.S. One of the main conclusions of their study is that the U.S. financial markets are efficient in

absorbing the shocks caused by the terrorist attacks and can continue to function in an effective way (p. 399).

### **2.3. Natural Disasters and Stock Exchange**

To explain the impact of natural disaster incidents on stock markets, Worthington and Valadkhani (2004) investigated the effect of natural disasters on the Australian equity market by studying the impact of 42 natural disasters including storms, floods, earthquakes, cyclones etc on the *All Ordinances Index* from the December 31, 1982 to January 1, 2002 by applying ARMA model and concluded that bushfires, cyclones', earthquakes had a major impact on market returns as compared to severe storms and floods (p. 2177). In another study, Worthington and Valadkhani (2005) compared the effects of natural, industrial and terrorist disasters on the Australian Capital Markets by applying Box and Tiao Intervention analysis on 10 market sectors: consumer discretionary, consumer staples, energy, financial, health care, industrial information technology, materials, telecommunication services and utilities and found that "the sectors most sensitive to disaster of any type are the consumer discretionary, financial services and material sectors. The most significant single event during the past eight years would appear to be the September 11 terrorist attacks" (p. 331). Shelor *et al* (1990) investigated the impact of California Earthquake on the firms' value dealing in Real Estate industry. They found that this event had negative impact on the firm's stock returns that were operating in the area hit by the earthquake. To sum up, various studies discuss in the literature related to different countries support the argument that news has a significant impact on the stock markets.

### **2.4. Conceptual Framework**

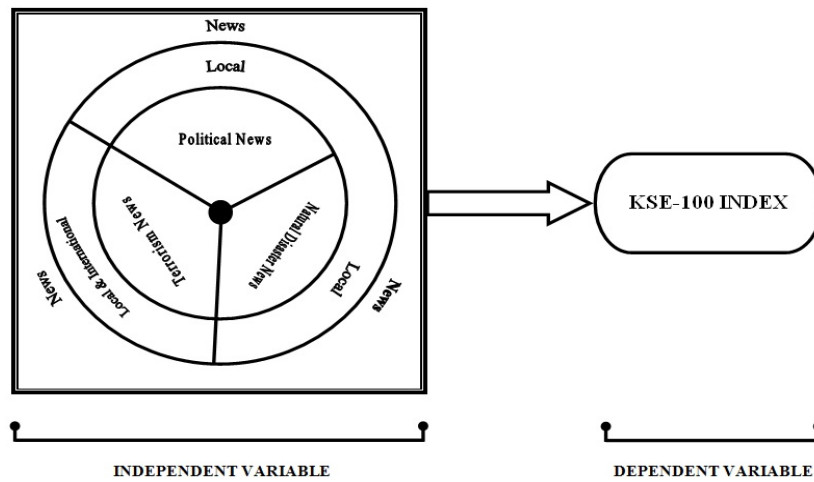
The proposed conceptual model of this study is presented in Figure1. The independent variable is News and dependent variable is KSE-100 index. News is categorized into political, terrorism and natural disasters. One dimensional arrow is demonstrating that political, terrorism and natural disaster news have an impact on the KSE-100 index.

## **3. Methodology**

Event Study Methodology is applied in this study to analyze the impact of each event on KSE-100 index. Purpose based sampling technique is

used for the selection of news events. Three different types of 21 news including 10 political, 9 terrorism and 2 natural disaster events (see Table 1) were identified and determined the impact of them on the KSE -100 index by analyzing the 11 days trend. The occurrences of these events have been identified from the headlines appearing in the newspapers “*The News*” and “*the Dawn*” respectively. These two newspapers are among the elite and most trusted newspapers of Pakistan and have vast circulation across the Pakistan. Statistical technique independent t-test is applied to analyze the impact of political, terrorism and natural disaster news on stock exchange after testing the equality of variances by Levene’s Test. If the variances turned out to be unequal, in independent sample t-test, where variances were assumed to be unequal had been used to compare the pre and post event mean values.

Figure 1

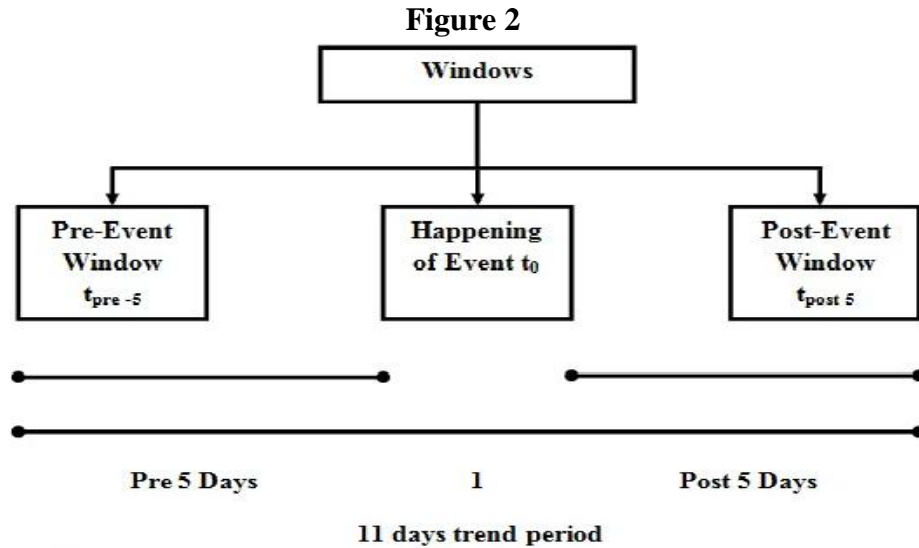


### 3.1. Event Windows

Event Windows are divided into three parts: The five days has been selected for the Pre-Event Window, one day for the Event, and five days for the Post Event (Figure 5). Therefore, the trend of total eleven days has been studied because of following reasons: (1) larger time span creates more noise in the trend that may affect the results (2) accurate results are not possible with shorter time span because impact is more dispersed. (3) The 11 days trend presents more accurate variation in KSE-100 index. In the pre and post



event windows, those days are not included when the stock market was closed either for a weekend or on account of public holiday.



### 3.2. Hypotheses

This study proposes following hypothesis to analyze the impact of political, terrorism and natural disaster news on KSE-100 index.

**H1:** News has a significant impact on the KSE 100 Index

**H2:** Political News has a significant impact on the KSE 100 Index.

**H 3:** Terrorism News has a significant impact on the KSE 100 Index.

**H 4:** Natural Disaster News has a significant impact on the KSE 100 Index.

**H 5:** International news has a significant impact on the KSE-100 index.

**H 6:** News related to assassination of prominent political personalities has a negative impact on KSE-100 index.

**H 7:** Good news has a positive impact on the KSE-100 index.

**H 8:** Bad news has negative impact on the KSE-100 index.

### 3.3. Research Questions

The study addresses three research questions: **RQ 1:** Which type of news including political, terrorism or natural disaster has more impact on the KSE 100 index? **RQ 2:** To what extent the bigger news in terms of its consequence has a profound impact on KSE-100 index? **RQ 3:** How far the news related to failed assassination attempts on prominent personalities affects the stock market trends? **RQ 4:** Which type of bad news, local or international, has more negative impact on KSE-100 index?

## 4. Findings and Results

This section presents answers to the research questions as well as validating hypotheses on the basis of quantitative analysis.

### 4.1. Hypothesis 1

Table 1 determines that majority of news regarding politics; terrorism and natural disaster incidents have a significant impact on the KSE-100 index. For instance, political news 2, 3,4,5,6, and 9, terrorism related news 11, 13, 14,15,16,17 and 18, and natural disaster news 20 and 21 have a significant impact on KSE-100 index. This validates the hypothesis (H1) as well as supports the EMH. Therefore, these findings support that the KSE is informational efficient.

### 4.2. Hypothesis 2

Table 1 reveals that political news has a significant impact on the KSE-100 index. Political news namely 2, 3,4,5,6, and 9 support this hypothesis. For instance, news item 2-“17<sup>th</sup> Amendment passed” is statistically significant with respect to its impact on the KSE-100 index as  $t(8) = -11.455$ ,  $p < 0.05$  and there is an upward trend in the KSE-100 index as Post Event KSE trend mean value rises sharply as compared to the mean value of Pre-Event KSE trend.

### 4.3. Hypothesis 3

The news related to terrorism incidents including 11, 13, 14,15,16,17 and 18 supports the hypothesis that terrorism news has significant impact on KSE-100 Index. For example, News item 11- “9/11 attacks” has a significant impact [ $t(8) = 4.377$ ,  $p < 0.05$ ] on KSE-100 index and causes a radical change of - 94.73 points between Pre-Event and Post Event mean values. Similarly,

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**Table 1: News Impact on KSE-100 Index**

Sr. #	Date (MM/DD/Year)	News	t-statistics	Pre and Post Trend	N	Mean	Mean Difference	Standard Deviation	Std. Error Mean
<b>Political News</b>									
1	4/30/2002	Musharraf wins presidential referendum	t(8)= .532, p>0.05	Pre-Event KSE Trend	5	1875.546	-11.922 ↓	17.31702	7.74441
				Post-Event KSE Trend	5	1863.624		47.05458	21.04345
2	8/21/2002	17th Amendment passed	t(8)= -11.455, p<0.05	Pre-Event KSE Trend	5	1850.678	73.684 ↑	10.87865	4.86508
				Post-Event KSE Trend	5	1924.362		9.40972	4.20816
3	1/31/2004	Dr. A.Q khan confesses transfer of nuclear technology	t(8)= -2.937, p<0.05	Pre-Event KSE Trend	5	4768.088	96.908 ↑	61.84861	27.65954
				Post-Event KSE Trend	5	4864.996		40.24234	17.99692
4	3/9/2007	Suspension of Chief Justice, Supreme Court, Pakistan	t(8)= -3.591, p<0.05	Pre-Event KSE Trend	5	11077.42	277.462 ↑	162.51102	72.67714
				Post-Event KSE Trend	5	11354.882		58.59666	26.20522
5	11/3/2007	Emergency rule declared by Musharraf	t(8)= 5.313, p<0.05	Pre-Event KSE Trend	5	14117.132	-591.668 ↓	224.25341	100.28917
				Post-Event KSE Trend	5	13525.464		108.29324	48.43021
6	12/15/2007	Emergency lifted by Musharraf	t(8)= -2.342, p<0.05	Pre-Event KSE Trend	5	14570.18	139.014 ↑	37.41026	16.73038
				Post-Event KSE Trend	5	14709.194		127.33851	56.94751
7	8/18/2008	Musharraf Resigns	t(8)= -1.227, p>0.05	Pre-Event KSE Trend	5	10041.19	256.646 ↑	163.58857	73.15903
				Post-Event KSE Trend	5	10297.836		438.34182	196.03242
8	9/6/2008	Zardari elected as new President	t(8)= -.634, p>0.05	Pre-Event KSE Trend	5	9252.052	17.112 ↑	51.766	23.15046
				Post-Event KSE Trend	5	9269.164		30.94945	13.84102
9	7/17/2009	Supreme Court acquits Nawaz from hijacking charges	t(8)= -3.204, p<0.05	Pre-Event KSE Trend	5	7644.108	144.48 ↑	84.64496	37.85438
				Post-Event KSE Trend	5	7788.588		54.7982	24.5065
10	4/19/2010	18 Amendment passed	t(8)= -.043, p>0.05	Pre-Event KSE Trend	5	9539.992	4.786 ↑	139.17009	62.23875
				Post-Event KSE Trend	5	9544.778		203.3307	90.93225
<b>News Related to Terrorism</b>									
11	9/11/2001	9/11 attacks	t(8)= 4.377, p<0.05	Pre-Event KSE Trend	5	1244.464	-94.728 ↓	8.57663	3.83559
				Post-Event KSE Trend	5	1149.736		47.63036	21.30094
12	12/14/2003	1st assassination attempt on Musharraf	t(8)= -.466, p>0.05	Pre-Event KSE Trend	5	4280.934	11.676 ↑	27.51126	12.30341
				Post-Event KSE Trend	5	4292.61		48.83127	21.83801
13	12/26/2003	2nd assassination attempt on Musharraf	t(8)= -4.24, p<0.05	Pre-Event KSE Trend	5	4349.862	116.496 ↑	60.75975	27.17259
				Post-Event KSE Trend	5	4466.358		9.09326	4.06663
14	4/12/2006	Suicide attack on Nishtar Park gathering	t(8)= 4.152, p<0.05	Pre-Event KSE Trend	5	11789.122	340.862 ↑	161.42254	72.19035
				Post-Event KSE Trend	5	12129.984		87.43127	39.10045
15	4/28/2007	Assassination attempt on Aftab Ahmed Sherpoa	t(8)= -2.400, p<0.05	Pre-Event KSE Trend	5	12155.56	201.864 ↑	84.7578	37.90484
				Post-Event KSE Trend	5	12357.424		167.85995	75.06925
16	7/6/2007	3rd assassination attempt on Musharraf	t(8)= -2.950, p<0.05	Pre-Event KSE Trend	5	13864.608	182.87 ↑	73.71522	32.96645
				Post-Event KSE Trend	5	14047.478		117.37129	52.49004
17	12/27/2007	Benazir Bhutto's assassination	t(8)= 4.595, p<0.05	Pre-Event KSE Trend	5	14663.622	-793.29 ↓	139.40778	62.34505
				Post-Event KSE Trend	5	13870.332		360.0252	161.00816
18	9/20/2008	Suicide attack on Marriot Hotel Islamabad	t(8)= 3.885, p<0.05	Pre-Event KSE Trend	5	9215.224	-27.846 ↓	13.9479	6.23769
				Post-Event KSE Trend	5	9187.378		7.89293	3.52982
19	7/1/2010	Terrorist Attack on Data Darbar Complex	t(8)= .428, p>0.05	Pre-Event KSE Trend	5	9736.646	-24.346 ↓	55.24925	24.70822
				Post-Event KSE Trend	5	9712.3		114.71041	51.30005
<b>News Related to Natural Disasters</b>									
20	10/8/2005	Massive earthquake	t(8)= 4.536, p<0.05	Pre-Event KSE Trend	5	8484.154	303.974 ↑	103.91846	46.47375
				Post-Event KSE trend	5	8788.128		107.97428	48.28757
21	7/22/2010	Flood	t(8)= 4.324, p<0.05	Pre-Event KSE Trend	5	10187.412	183.686 ↑	63.26922	28.29486
				Post-Event KSE trend	5	10371.098		70.86203	31.69046

news item 17- “Benazir Bhutto’s assassination,” and 8- “Suicide attack on Marriot Hotel Islamabad” have a negative impact on the KSE-100 index as  $t(8)=4.595$ ,  $p<0.05$  and  $t(8)=3.885$ ,  $p<0.05$  respectively ( see Table 1).

#### **4.4. Hypothesis 4**

The news related to natural disasters also has an impact on the KSE-100 index. News items 20-“Massive earthquake” and 21-“Flood” had an impact on the KSE-100 index as  $t(8) = -4.536$ ,  $p<0.05$  and  $t(8) = -4.324$ ,  $p<0.05$  respectively (Table 1). However, both news incidents reflected that the KSE-100 index went up because of the two factors: (1) these events had provided an opportunity for the cement, manufacturing and other related sectors to rebuild the infrastructure again in the disaster areas; and (2) the KSE was not significantly affected because the earthquake (2005) and flood (2010) largely devastated the non-industrial areas of Pakistan.

#### **4.5. Hypothesis 5**

The news item 11 -“9/11 attacks” has a significant impact on the KSE-100 index as  $t(8) = 4.377$ ,  $p<0.05$ . The September 11 terrorist attacks have brought a declining trend of (-94.73) points between the Pre-Event and Post-Event mean values. This international news likely brought fluctuations in KSE-100 index because of two reasons: (1) it destabilized U.S. Pakistan relations due to Pakistan’s support of Taliban regime at that time, and (2) U.S. declared war against terrorism altered the geo-strategic situation of the region. This shows that international news related to Pakistan has a significant impact on the KSE-100 index (Table 1).

#### **4.6. Hypothesis 6**

The news item 17- “Benazir Bhutto’s assassination” had a major impact on the KSE-100 index as  $t(8)=4.595$ ,  $p<0.05$  that caused a decline in the Post Event KSE trend mean value to 13870.332 from 14663.622 because Benazir was a renowned political leader of Pakistan and her killing caused a law and order problem in the country. This declining trend is consistent with the belief that assassination of a prominent political personality has a negative impact on the stock market (Table 1).

#### **4.7. Hypothesis 7**

The good news including news items 2, 3, 6, 7, 8, 9, and 10 (see Table 1) have a positive impact on KSE-100 index because (1) they increased the investors’ confidence, and (2) stabilized the country politically that boosted

the economic activities in the Pakistan. The quantitative findings support the argument that good news has significant impact on the stock market.

#### **4.8. Hypothesis 8**

Table 1 depicts that news item 5 “Emergency rule declared by Musharraf” in Pakistan has a significant influence on the KSE-100 index as  $t(8) = 5.313$ ,  $p < 0.05$ . It caused a declining trend of -591.668 points difference between the Pre-Event mean value (14117.132) and Post Event mean value (13525.464). The rationale behind this decreasing trend was the result of President Musharraf’s move to dissolve the parliament and introduction of amendments in constitution to strengthen his power in the country. Moreover, emergency rule destabilized the political and democratic institutions of Pakistan due to which investors’ confidence diminished that resulted in downwards trend. In addition, News item 11 “9/11 attacks” is statistically significant with respect to its impact on the KSE-100 index as  $t(8) = 4.377$ ,  $p < 0.05$ . There was a sharp declining trend of -94.728 in the KSE-100 index as the Post Event KSE trend mean value (1149.736) decreased as compared to the mean value (1244.464) of the Pre-Event KSE trend. This declining trend was the result of the emerging severe tensions between the U.S. and the Muslim countries, especially with Afghanistan and Iraq. U.S. declared the War on Terror and divided world in to friends and foe. These U.S. moves badly damaged the confidence of investors, business cycles and economies around the world. Therefore, all the international financial markets including the KSE demonstrated a sharp declining trend. Similarly, news items 17 “Benazir Bhutto’s assassination” and 18 “Suicide attack on Marriott Hotel Islamabad” had also caused a negative impact on KSE-100 Index (Table 1). Finally, news 1 “Musharraf wins presidential referendum” had no significant impact on KSE-100 index as  $t(8) = 0.532$ ,  $p > 0.05$ . But, it has caused a decline in the KSE-100 index from 1875.546 to 1863.624 because this incident had strengthened dictatorial regime in Pakistan. Hence, all the bad news including this study support the argument that bad news has a negative impact on the KSE-100 index.

#### **4.9. Research Question 1**

On the basis of the higher mean values difference, three news items were selected from political, terrorism and natural disaster categories respectively resulted that news related terrorism has profound impact on KSE-100 Index as compare to political and natural disaster news. Among the political news, “Emergency rule declared by Musharraf” had created a

significant downward mean value difference of -591.666. On the other hand, the terrorism incident, “Benazir Bhutto’s assassination,” had a momentous impact on the KSE-100 index because the pre and post event mean difference was -793.29. Interestingly, “News item 20-Massive earthquake” in Pakistan had stimulated a positive trend in the KSE-100 (Table 1).

#### **4.10. Research Question 2**

Table 1 reveals that news item 5 -“Emergency rule declared by Musharraf” had caused the decline of -591.668. Similarly, news item 9 “Supreme Court acquits Nawaz from hijacking charges” had increased the KSE-100 index by difference of 144.48 from pre-event mean value 7644.108 to Post-Event Mean value of 7788.588 points. In addition, news related to terrorist incidents including news items, 11- “9/11 attacks,” and 17-“Benazir Bhutto’s assassination” have created a falling trend of -94.728 and -793.29 points respectively. These findings support the assumption that bigger news in terms of its consequence has a strong impact on KSE-100 index.

#### **4.11. Research Question 3**

Table 1 depicts that the news related to failed assassination attempts on prominent political personalities, news items, such as 12, 13, 15 and 16 have no negative impact on the KSE-100 index because KSE is an efficient market that absorb the shocks caused by these news incidents successfully. Therefore, it appears that news related unsuccessful assassination attempts on prominent personalities do not have a negative impact on KSE-100 index.

#### **4.12. Research Question 4**

The local news showed a greater negative impact on KSE-100 index than international news. For instance, a local bad news -Benazir Bhutto’s assassination (pre and post event mean value difference (-793.29) had produced more volatility in KSE -100 Index than the international news related to “9/11 attacks (-94.728) (see Table 1: news items 17 & 11).

### **5. Conclusion**

On the whole, it is concluded that news has the strong impact on the KSE-100 index and news related to terrorism appears to have more influence on the KSE-index as compared to political and natural disaster news. This study has the following results. Firstly, political, terrorism and natural disaster news has a significant impact on the KSE 100 Index. Secondly, the bigger news in terms of its consequence has a profound impact on KSE-100 Index.

Thirdly, this study also validates the view that good news has a positive impact on the KSE-100 index and vice-versa. Finally, this study is consistent with the notion that the Karachi Stock Exchange is “informationally efficient.”

## References

- Ahmed, S., & Farooq, O. (2008). The Effect of 9/11 on the Stock Market Volatility Dynamics: Empirical Evidence from a Front Line State. *International Research Journal of Finance and Economics*, 16, 71-83.
- Aktas, H., & Oncu, S. (2006). The stock market reaction to extreme events: The evidence from Turkey. *International Research Journal of Finance and Economics*, 6, 78-85.
- Arin, K., Ciferri, D., & Spagnolo, N. (2008). The price of terror: The effects of terrorism on stock market returns and volatility. *Economics Letters*, 101, 164-167.
- Barros, C., Caporale, G., & Gil-Alana, L. (2009). Basque terrorism: police action, political measures and the influence of violence on the stock market in the Basque Country. *Defence and Peace Economics*, 20, 287-301.
- Barth, J., Li, T., Mccarthy, D., Phumiwasana, T., & Yago, G. (2006). Economic impacts of global terrorism: From Munich to Bali. *Capital Series*, 1-38.
- Chan, Y., Chui, A., & Kwok, C. (2001). The impact of salient political and economic news on the trading activity. *Pacific-Basin Finance Journal*, 9, 195-217.
- Chan, Y., & John WEI, K. (1996). Political risk and stock price volatility: The case of Hong Kong. *Pacific-Basin Finance Journal*, 4, 259-275.
- Chen, A., & Siems, T. (2004). The effects of terrorism on global capital markets. *European Journal of Political Economy*, 20, 349-366.
- Chen, C., & Wei, Y. (2005). Computational issues for quantile regression. *Sankhy : The Indian Journal of Statistics*, 399-417.
- Chen, D., Bin, F., & Chen, C. (2005). The Impacts of Political Events on Foreign Institutional Investors and Stock Returns: Emerging Market Evidence from Taiwan. *International Journal of Business*, 10(2), 165-188.
- Chuang, C., & Wang, Y. (2009). Developed stock market reaction to political change: a panel data analysis. *Quality and Quantity*, 43, 941-949.



- Eldor, R., & Melnick, R. (2004). Financial markets and terrorism. *European Journal of Political Economy*, 20, 367-386.
- Fornari, F., Monticelli, C., Pericoli, M., & Tivegna, M. (2002). The impact of news on the exchange rate of the lira and long-term interest rates. *Economic Modeling*, 19, 611-639.
- Franck, R., & Krausz, M. (2009) Institutional changes, wars and stock market risk in an emerging economy: evidence from the Israeli stock exchange, 1945–1960. *Cliometrica*, 3, 141-164.
- Gemmill, G. (1992). Political risk and market efficiency: tests based in British stock and options markets in the 1987 election. *Journal of Banking & Finance*, 16, 211-231.
- Goonatilake, R., & Herath, S. (2007). The Volatility of the Stock Market and News. *International Research Journal of Finance and Economics*, 11-53.
- Goriaev, A., & Zabolkin, A. (2006). Risks of investing in the Russian stock market: Lessons of the first decade. *Emerging Markets Review*, 7, 380-397.
- International Monetary Fund. (2001b). *World economic outlook -the global economy after 11 September: A survey by the staff of the international monetary fund*, World Economic and Financial Surveys.
- Jones, S. & Banning, K. (2009). US elections and monthly stock market returns. *Journal of Economics and Finance*, 33, 273-287.
- Johnston, R., B. & Nedelesar, O. M. (2006). The Impact of Terrorism on Financial Markets. *Journal of Financial Crime*, 13(1), 7-25.
- Kaminsky, G., & Schmukler, S. (1999). What triggers market jitters?: A chronicle of the Asian crisis. *Journal of International Money and Finance*, 18, 537-560.
- Khan, A., & Ahmed, M. S. (2009a). Trading volume and Stock Returns: The Impact of Events in Pakistan on KSE 100 Indexes. *International review of Business Research Papers*, 5, 373-383.
- Khan, M. A., Javed, S., Ahmad, S., Mehreen, & Shadzad, F. (2009b). Impact of Pak-U.S. Relationship News on KSE-100 Index. *International review of Business Research Papers*, 5, 273-288.

- Kim, H., & Mei, J. (2001). What makes the stock market jump? An analysis of political risk on Hong Kong stock returns. *Journal of International Money and Finance*, 20, 1003-1016.
- Niederhoffer, V. (1971). The analysis of world events and stock prices. *Journal of Business*, 193-219.
- Niederhoffer, V., Gibbs, S., & Bullock, J. (1970). Presidential elections and the stock market. *Financial Analysts Journal*, 26, 111-113.
- Pantzalis, C., Stangeland, D., & Turtle, H. (2000). Political elections and the resolution of uncertainty: the international evidence. *Journal of Banking & Finance*, 24, 1575-1604.
- Peel, D., & Pope, P. (1983). General Election in the U.K. in the Post-1950 Period and the Behavior of the Stock Market. *Investment Analysis*, 67, 4-10.
- Sandler, T., & Enders, W. (2004). An economic perspective on transnational terrorism. *European Journal of Political Economy*, 20, 301-316.
- Sathye, M., Sharma, D., Liu, S., Chetty, G., & Shadabi, F. (2008). Impact of Terrorism on Australian Stock Market: An Empirical Investigation. *Proceedings of the 3rd Biennial Conference of the Academy of World Business, Marketing and Management Development, Conference of the Academy of World Business, Marketing and Management Development*, 14-17 July 2008, Rio De Janeiro, Brazil, , 1012-1026
- Shelor, R., Anderson, D., & Cross, M. (1990). The impact of the California earthquake on real estate firms' stock value. *Journal of Real Estate Research*, 5, 335-340.
- Valadkhani, A., & Worthington, A. (2005). Catastrophic Shocks and Capital markets: A Comparative Analysis by Disaster and Sector. *Global Economic Review*, 34(3), 331-344.
- Worthington, A., & Valadkhani, A. (2004). Measuring the impact of natural disasters on capital markets: An empirical application using intervention analysis. *Applied Economics*, 36, 2177-2186.
- Zach, T. (2003). Political Events and the Stock Market: Evidence from Israel. *International Journal of Business*, 8, 243-266.