

## Stock Market Reaction to Political Event ‘Sit-In’ (Evidence from Pakistan)

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### Abstract

*The purpose of the study is to investigate the reaction of Karachi stock exchange (KSE) 100 Index during political event (Sit-in) using event study methodology. All the listed firms in Karachi Stock Exchange both under the head of financial and non-financial sectors are the population for this study. A sample of KSE 100 index companies from both financial and non-financial sector is selected for the study. Stock return's data on a daily basis are used to calculate Average Abnormal Returns (AABR) and Cumulative Average Abnormal Returns for the time window of 41 days (CAABR) 20 days before and 20 days after the event (Sit-in) date. The returns of 120 days before the projected time window are taken as the benchmark. The results indicate that AABR and CAABR for market model are statistically significant. Furthermore these returns are negative for most of the days for both AABR and CAABR using market model. And the market is inefficient which fails to fully reflect public information. The results also show that the investors who invest their money in financial sector may earn excess abnormal returns than Non-financial sector. Results reveal that Karachi stock exchange show inefficient behavior to political event (Sit-in).*

**Keywords:** Market efficiency, Dharna (Sit-In), Average abnormal return, Cumulative average abnormal return, Market model, Karachi Stock exchange.

### Introduction

Stock market is a place where the buying and selling of publicly owned securities takes place. It performs essential character in exchanging of funds from those who have excess to those who have shortage of income and perform the task of financial intercession between these two parties.

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Stock market has a strong connection with the international and domestic stability of a country. The local, countrywide and worldwide ambiguity and unstable financial position affect the stock exchange market in a country. Uncertain political environment may also negatively affect the market consistency and veracity. The economic conditions like inflation, recession and price movement have directly affected the share market. Karachi share market is the biggest share market in Pakistan, Because of its high market capitalization, and high turnover. Cultural crises, target killings, immaterial protests have very badly affected the stock market and low productive behavior have decreases the attention of investor's from further investment in the country (Khan et al., 2013). Whenever work done for considering the total risk for any specific market the political risk was one of the important factors to keep in mind, it will provide help to know the most controlled factors as well as those factors which poses the most danger to the stock returns and volatility for which the investor may be aware in the future (Fitzsimons et al 2012). Political uncertainty is one of the significant factors that influence the functions of a country's stock market. In any country, this uncertainty is so critical since its connected damage can cost a major amount both on the macro and micro level economic systems. In general, the political risk can come in many forms such as new legislation, change of government, a revolution, a takeover or even civil war (Nguthi 2013). While political risk has many forms, like uncertain government situation and then their attentions towards changes in policies within and outside the country, this study focuses on one specific kind of political event, which is related with the Sit-in against the government.

Efficient market hypothesis stated that markets are balanced and prices of stocks fully demonstrate all available information. The prices of the securities are quickly adjusted to the new information available to market. While according to the behavioral finance this type of efficient market cannot explain the exploratory anomalies. Market anomalies are the unexpected happening or abnormality in smooth pattern of share market (Latif et al 2011). In this study we focused on the events which have occurred due to political instability in Pakistan specifically sit-in against government of Pakistan in 2014 named Azadi March.

The Azadi March, also called Tsunami March was the huge community Sit-in that ever held in Pakistan which started from 14 August 2014 to 17 December 2014, Organized by the Pakistan Tehreek-e-Insaf (PTI) party in opposition to Prime Minister Nawaz Sharif, over the claims of his governmental rigging in the 2013 general election. PTI chairman Imran Khan announced strategy for a protest march starting from Lahore to Islamabad in August with a crowd of protesters in a PTI Jalsa and next in Bahawalpur on 27 June 2014, (Express Tribune

Retrieved 16 August 2014). The study investigates the impact of sit-in against government of Pakistan in 2014 on stock market returns.

Based on the news reports and previous history of Pakistan stock markets, the impact of political uncertainty on stock prices in Pakistan has much more importance. To fulfill the gap and provide the roadmap for protection against losses in stock market due to uncertain political environment in Pakistan, the need has arisen to conduct this study.

Based on the literature the objectives for the study are; to investigate the impact of recent political incident (sit-in) on stock returns in Pakistan and to investigate which company's return are more affected by the recent sit-in event. The study considered all financial and non-financial firms listed on KSE 100 index for the time period of January, 2014 to January, 2015.

### **Literature Review**

Bittlingmayer (1998) stated that political events are the major volatility's causes. The results of their study proposed that the connection between volatility and output are due to the combined effects of political factors.

Perotti and van Oijen (1999) investigated privatization as one of the political risk and its impact on stock market. They proposed that a constant privatization curriculum correspond to key political tests and slowly determine unpredictability over political promises to a market-oriented policy as well as to regulatory and private property rights.

According to the study of Zach (2003) political events has Statistically significant relationship with the Stock market of Israel.

Clark, Masood, and Tunaru (2008) studied political risk's impact on the stock market, by collecting a sample data from 1947 to 2001 while using a survey based methodology; incorporating input of 200 famous individuals in Pakistan. These researchers asked the participants to pinpoint all those events that had negative impact on Pakistan stock market since the country's formation. The results of the study show that the probability of affecting the stock market by major political events is high; the risk premium per year of between 11.725% and 16.725% is for up to average 1.5 events. Amusingly, they found that due to no time trend; the political uncertainty is neither increasing nor decreasing.

Beaulieu et al (2012) investigated political risk's impact on the volatility of stock returns in Canada. For this concern 102 Montreal Stock Exchange and Toronto Stock Exchange listed companies were taken as sample and analyzed four major events for the period of Jan 1990 to Dec 1996. The results show that political risk had an important role in the provisional volatility of stock returns which is connected with a possible sovereignty of Quebec. They also concluded that the changes in stock return volatility is linked with the degree of a firm's disclosure to political risk.

Kim et al (1994) studied Hong Kong's political risk and its impact on stock returns. They used event study methodology for which they focused the equity market of Hong Kong for the period of 1989 to 1993. They took the data of stock return on the basis of daily, weekly and quarterly, daily data were taken for period of 1998 to 1993, while weekly and quarterly data were taken for the period of 1969 to 1993. Three political issues were analyzed, the one was democracy and human rights in china the second was Hong Kong political future and the third one was china's most favored nation trading with the US. The findings of the study reveal that political development in China and Hong Kong has significant impact on Hong Kong's stock prices.

Mukherjee and Leblang (2007) examined the correlation between government intentions and interest rates and Stock prices in the USA and UK. The results of the study show that during the government of Democratic Party and Labor Party investor expect high interest rate in USA and UK. Furthermore; business community look forward to low interest rate during the government of Republican Party and Conservative Party in USA and UK respectively. Investors forecasting about changes in interest rate become the main reason of volatility in Stock Markets.

Chau, Deesomsak, and Wang (2014) examined the regions of Middle East and North African (MENA) for the reaction of stock markets to political uncertainty. The data has been taken for the time span of 1<sup>st</sup> June, 2009 to 29<sup>th</sup> June, 2012 on daily bases which was consist of closing prices for Islamic and conventional stock for six MENA countries, consist of Jordan, Oman, Kuwait, Lebanon, Bahrain, and Egypt. The results show heterogeneous reaction of the Islamic and Conventional stocks to the political disorder. Islamic indexes show significant increase in the volatility in the time period of political uncertainty. While conventional markets show insignificant behavior to the political disorder. Second they also concluded that the market from MENA countries have become closer with global market after the political rebellion. In general the political uncertainty has significant impact on financial volatility of MENA market.

Bailey, Heck, and Wilkens (2005) also investigated the political event's impact on the returns of the US-based international equity mutual funds. For this purpose Iraq's attack on Kuwait in August 1990 was taken as a key political event. For the measurement of abnormal returns in the specified event window they were used dummy variables and event study methodology. For that the 33 days window time was taken by them, in which eleven days are before event and twenty one days are after the event analysis is considered. The results of the study show; abnormal returns of investors were positive before the event window to the attack on Kuwait and most of the foreign stock markets show

negative reaction in the abnormal returns to the Iraq attack on Kuwait. Furthermore, the reaction of US international mutual funds in the form of abnormal returns were negative which was not as severe as that of the market index.

According to the study of Laverde, Varua, and Garces-Ozanne (2009) the key and significant determinants of Colombia's financial market returns are political risk and crime rates. Market activities are reduced by political risk, showing that the ambiguity connected with the elections for the selection of president causes decline in trading volume. Khan, Aman, and Khan (2015) investigated Karachi stock exchange instability during national election for period of 1997 to 2013. They were calculated average abnormal returns (AABR) and Cumulative average abnormal returns (CAABR) for the time window of 41 days. The stock return's average abnormal return (AABR) and cumulative average abnormal return (CAABR) are computed for a time window of 41 days. The results were show both positive and negative abnormal return in the projected time period for both AABR and CAABR. The results also show that Karachi stock exchange reveal inefficient behavior around these national elections.

Another study was conducted by Khalid and Rajaguru (2010) to explore the connection of political uncertainty and stock markets. Due to this consideration the data from Pakistan used for the period of January 1999 to September 2006. They concluded that changes ensured due to some domestic and international events in the market volatility and found some impact of political events domestically and internationally on financial market.

### Research Methodology

An event study methodology is used to find market reaction to a political event Sit-in (Dharna), the study plan to examining the market response that would follow immediately to the announcement of new unanticipated significant political event in the context of Karachi stock market.

#### *Event window*

The present study had taken an event window of 41 days in total together with the event date, i.e., the date on which Sit-in started. So, the total event window has two parts. First part consists of stock prices before the starting date of Sit-in and the second part consist of stock prices after the starting date of Sit-in. The event date, i.e., the date when the Sit-in started was considered as  $t=0$ , middle of the event window. First part of the event window is composed of 20 days stock prices (-20) before the event and the second part of the event window was composed of 20 days stock prices (+20) after the event. Thus, the total event window is (-20) –

$t - (+20)$ , where -20 represent pre starting phase,  $t$  represent the event starting date and +20 represent the post starting period.

#### *Data collection and Methodology*

All the listed firms in Karachi Stock Exchange both under the head of financial and non-financial sectors are the population for this study. A sample of KSE 100 index companies from both financial and non-financial sector are selected for the study as purposive sample.

This study used stock return data on a daily basis to calculate surplus stock returns and to examine the impact of sit-in for each firm listed in KSE 100 index. The excess return on a daily basis and average excess returns are calculated by using Cumulative Excess Returns (CER) model.

Daily closing prices are collected over the period of Jan 2014 to Jan 2015. The starting and ending dates are taken from the newspapers. An event study approach is used to examine the impact of set-in on stock returns. The study used only secondary data which was collected from Business recorder, Official website of Karachi Stock exchange and Newspapers and talk shows.

Two variables are used for the study are Stock Returns and Market Returns. The market model is used for the current study as it also used by (Khan et al., 2015) for conducting the study on the Karachi stock exchange instability during national election.

#### *Theoretical Framework*

The efficient market hypothesis states that at any given time and in a liquid market, security prices fully reflect all available information (Fama, 1970). The theory describe that all market participants receive and act on all of the relevant information as soon as it becomes available. The semi strong form of efficient market theory believes that there is perfect information in the stock market. This means that whatever information is available about a stock to one investor is available to all investors. Since everyone has the same information about a stock, the price of a stock should reflect the knowledge and expectations of all investors. Random-walk behavior of the stock price means that the past changes of the sock prices or market cannot be used to forecast its future changes. But according to the above research papers some kind of political events may bring changes in the future prices of the stocks. This gap is providing the basis for developing the following hypotheses.

#### *Hypothesis*

Hypothesis for Objective 1:

$H_0$ : Political event (sit-in) had no significant impact on the performance of KSE 100 index.

Hypothesis for Objective 2:

H<sub>0</sub>: Political event (Sit-in) had no significant impact on the stock return of both financial and non-financial sector companies listed in KSE 100 index.

### Data Analysis

The data collected from different resources was subjected to statistical procedures by applying the methodology mentioned in the study. The quantitative analyses help in finding the authenticity of our estimation.

Table 1: Average Abnormal Returns (AABR) and Cumulative Average Abnormal returns (CAABR) for Overall KSE 100 index.

| Days    | AABR    |          | CAABR   |          |
|---------|---------|----------|---------|----------|
|         | AABR    | T-values | CAABR   | T-values |
| Day -20 | 0.0020  | 1.3215   | 0.0020  | 1.3215   |
| Day -19 | 0.0166  | 7.5815   | 0.0186  | 8.3157   |
| Day -18 | 0.0030  | 1.3968   | 0.0216  | 6.3713   |
| Day -17 | -0.0076 | -4.0227  | 0.0140  | 3.2250   |
| Day -16 | 0.0154  | 7.3051   | 0.0295  | 5.5955   |
| Day -15 | -0.0011 | -0.5818  | 0.0283  | 4.7252   |
| Day -14 | -0.0043 | -1.9898  | 0.0240  | 3.7485   |
| Day -13 | 0.0032  | 1.5990   | 0.0272  | 4.0340   |
| Day -12 | -0.0048 | -2.4812  | 0.0224  | 2.9301   |
| Day -11 | -0.0032 | -1.5522  | 0.0191  | 2.4917   |
| Day -10 | -0.0126 | -6.7491  | 0.0065  | 0.8705   |
| Day -9  | -0.0223 | -7.4003  | -0.0157 | -2.1844  |
| Day -8  | 0.0008  | 0.4440   | -0.0150 | -2.1013  |
| Day -7  | 0.0073  | 2.9414   | -0.0077 | -1.0181  |
| Day -6  | 0.0062  | 3.5879   | -0.0015 | -0.1963  |
| Day -5  | -0.0031 | -1.3358  | -0.0046 | -0.5777  |
| Day -4  | -0.0419 | -12.0367 | -0.0465 | -5.5750  |
| Day -3  | 0.0041  | 1.3606   | -0.0424 | -4.8256  |
| Day -2  | 0.0401  | 14.1422  | -0.0023 | -0.2644  |
| Day -1  | 0.0074  | 3.2469   | 0.0050  | 0.5904   |
| Day 0   | -0.0030 | -1.5798  | 0.0021  | 0.2369   |
| Day 1   | -0.0212 | -6.4677  | -0.0191 | -2.0101  |
| Day 2   | 0.0115  | 4.3171   | -0.0076 | -0.8274  |
| Day 3   | 0.0052  | 3.3895   | -0.0024 | -0.2571  |
| Day 4   | -0.0100 | -4.9475  | -0.0124 | -1.2919  |
| Day 5   | -0.0294 | -8.0062  | -0.0417 | -4.0097  |
| Day 6   | 0.0025  | 1.2844   | -0.0392 | -3.5702  |
| Day 7   | 0.0345  | 11.6881  | -0.0047 | -0.4671  |
| Day 8   | 0.0084  | 3.5607   | 0.0037  | 0.3687   |
| Day 9   | 0.0401  | 13.9092  | 0.0438  | 4.5590   |
| Day 10  | 0.0160  | 4.8703   | 0.0597  | 5.8037   |

|        |         |         |        |        |
|--------|---------|---------|--------|--------|
| Day 11 | -0.0215 | -9.9824 | 0.0382 | 3.6603 |
| Day 12 | 0.0002  | 0.0861  | 0.0384 | 3.6677 |
| Day 13 | -0.0179 | -7.6148 | 0.0205 | 1.9615 |
| Day 14 | -0.0007 | -0.2996 | 0.0198 | 1.8793 |
| Day 15 | -0.0030 | -1.9026 | 0.0169 | 1.5580 |
| Day 16 | 0.0115  | 5.5091  | 0.0284 | 2.6018 |
| Day 17 | -0.0007 | -0.3334 | 0.0277 | 2.5300 |
| Day 18 | -0.0042 | -2.1399 | 0.0235 | 2.1126 |
| Day 19 | 0.0057  | 2.4747  | 0.0292 | 2.6812 |
| Day 20 | -0.0022 | -1.0278 | 0.0270 | 2.3976 |

*Significance level at 5%*

Table 1 represent average abnormal and cumulative average abnormal returns as well as the significance level for the considered time window of -20 days i.e. 20 days before and +20 days i.e. 20 days after the event day for overall KSE 100 index. The results show that the AABR was statistically significant to the Sit-in according to T-statistic. Market model for average abnormal return (AABR) reveal that eleven days before and fourteen days after the event are statistically significant. The CAABR was also statistically significant according to t-statistic in bold. Market model for cumulative average abnormal return (CAABR) reveal that thirteen days before and twelve days after the event are statistically significant.

Table 2: Average Abnormal Returns (AABR) and Cumulative Average Abnormal returns (CAABR) for financial sector of KSE 100 Index

|         | AABR    |          | CAABR   |          |
|---------|---------|----------|---------|----------|
| Days    | AABR    | T.Values | CAABR   | T.Values |
| Day -20 | 0.0049  | 1.1190   | 0.0049  | 1.1190   |
| Day -19 | 0.0121  | 2.5872   | 0.0169  | 4.8274   |
| Day -18 | 0.0037  | 0.9284   | 0.0207  | 3.6014   |
| Day -17 | -0.0103 | -3.9432  | 0.0104  | 1.5045   |
| Day -16 | 0.0213  | 4.4454   | 0.0317  | 4.4158   |
| Day -15 | -0.0042 | -1.8896  | 0.0275  | 3.7867   |
| Day -14 | -0.0128 | -2.2906  | 0.0146  | 1.3365   |
| Day -13 | 0.0061  | 1.3517   | 0.0207  | 1.4156   |
| Day -12 | -0.0066 | -1.6097  | 0.0141  | 0.8192   |
| Day -11 | -0.0013 | -0.2722  | 0.0128  | 0.8087   |
| Day -10 | -0.0027 | -0.6819  | 0.0101  | 0.5875   |
| Day -9  | -0.0028 | -0.5073  | 0.0074  | 0.3576   |
| Day -8  | 0.0014  | 0.4531   | 0.0087  | 0.4345   |
| Day -7  | 0.0100  | 1.1804   | 0.0188  | 0.9904   |
| Day -6  | -0.0004 | -0.0897  | 0.0184  | 1.0823   |
| Day -5  | -0.0022 | -0.3006  | 0.0161  | 0.8295   |
| Day -4  | -0.0319 | -2.9806  | -0.0157 | -0.9315  |



|        |         |         |         |         |
|--------|---------|---------|---------|---------|
| Day -3 | 0.0100  | 1.2586  | -0.0057 | -0.4754 |
| Day -2 | 0.0552  | 13.8887 | 0.0495  | 3.9039  |
| Day -1 | -0.0005 | -0.1138 | 0.0490  | 3.4645  |
| Day 0  | -0.0109 | -4.1131 | 0.0381  | 2.8308  |
| Day 1  | -0.0176 | -3.6429 | 0.0205  | 1.3710  |
| Day 2  | -0.0016 | -0.2616 | 0.0190  | 1.3692  |
| Day 3  | 0.0081  | 1.7212  | 0.0271  | 1.9226  |
| Day 4  | -0.0118 | -1.8958 | 0.0153  | 1.1307  |
| Day 5  | -0.0226 | -2.4235 | -0.0073 | -0.4545 |
| Day 6  | -0.0003 | -0.0520 | -0.0076 | -0.4178 |
| Day 7  | 0.0344  | 6.5917  | 0.0268  | 1.6545  |
| Day 8  | 0.0057  | 1.7228  | 0.0325  | 1.8595  |
| Day 9  | 0.0297  | 3.9797  | 0.0622  | 4.2935  |
| Day 10 | 0.0107  | 2.0698  | 0.0730  | 4.5872  |
| Day 11 | -0.0312 | -9.3619 | 0.0418  | 2.4793  |
| Day 12 | 0.0025  | 0.4366  | 0.0443  | 2.6405  |
| Day 13 | -0.0221 | -9.6568 | 0.0222  | 1.2817  |
| Day 14 | -0.0103 | -3.2129 | 0.0119  | 0.6753  |
| Day 15 | -0.0028 | -1.1759 | 0.0091  | 0.5205  |
| Day 16 | 0.0073  | 1.5439  | 0.0164  | 0.8964  |
| Day 17 | 0.0053  | 1.5312  | 0.0217  | 1.1607  |
| Day 18 | 0.0006  | 0.0908  | 0.0223  | 1.0235  |
| Day 19 | 0.0145  | 2.7672  | 0.0369  | 1.6415  |
| Day 20 | -0.0014 | -0.3111 | 0.0354  | 1.5519  |

*Significance level at 5%*

Table 2 represent average abnormal and cumulative average abnormal returns and their significance level of KSE 100 index for the considered time window of 20 days before and after the event day for the financial sector. The results mention that the AABR was statistically significant to the particular event as evident from T-statistic values in bold. The CAABR was also statistically significant according to t-statistic.

Table 3: Average Abnormal Returns and Cumulative Average Abnormal returns for Non-Financial sector of KSE 100 Index

| Days    | AABR    |          | CAABR  |          |
|---------|---------|----------|--------|----------|
|         | AABR    | T.Values | CAABR  | T.Values |
| Day -20 | 0.0015  | 0.8882   | 0.0015 | 0.8882   |
| Day -19 | 0.0175  | 7.0746   | 0.0190 | 7.2351   |
| Day -18 | 0.0028  | 1.1477   | 0.0218 | 5.5173   |
| Day -17 | -0.0070 | -3.1749  | 0.0148 | 2.9013   |
| Day -16 | 0.0143  | 6.0592   | 0.0291 | 4.6678   |
| Day -15 | -0.0005 | -0.2272  | 0.0285 | 4.0046   |
| Day -14 | -0.0026 | -1.1247  | 0.0259 | 3.4828   |
| Day -13 | 0.0026  | 1.1653   | 0.0285 | 3.7288   |

|         |         |          |         |         |
|---------|---------|----------|---------|---------|
| Day -12 | -0.0045 | -2.0218  | 0.0240  | 2.7926  |
| Day -11 | -0.0036 | -1.5481  | 0.0204  | 2.3275  |
| Day -10 | -0.0146 | -7.1748  | 0.0058  | 0.6888  |
| Day -9  | -0.0262 | -8.0343  | -0.0204 | -2.6736 |
| Day -8  | 0.0007  | 0.3241   | -0.0197 | -2.6128 |
| Day -7  | 0.0067  | 2.6951   | -0.0130 | -1.5812 |
| Day -6  | 0.0075  | 4.0509   | -0.0055 | -0.6460 |
| Day -5  | -0.0033 | -1.3590  | -0.0087 | -0.9998 |
| Day -4  | -0.0439 | -12.1456 | -0.0526 | -5.6335 |
| Day -3  | 0.0029  | 0.8843   | -0.0497 | -4.9206 |
| Day -2  | 0.0370  | 11.5805  | -0.0127 | -1.2920 |
| Day -1  | 0.0089  | 3.4688   | -0.0038 | -0.3950 |
| Day 0   | -0.0014 | -0.6442  | -0.0052 | -0.5213 |
| Day 1   | -0.0219 | -5.6951  | -0.0270 | -2.4940 |
| Day 2   | 0.0141  | 4.8774   | -0.0130 | -1.2107 |
| Day 3   | 0.0047  | 2.8729   | -0.0083 | -0.7688 |
| Day 4   | -0.0096 | -4.5331  | -0.0179 | -1.6065 |
| Day 5   | -0.0307 | -7.6161  | -0.0486 | -4.0492 |
| Day 6   | 0.0031  | 1.4268   | -0.0455 | -3.5968 |
| Day 7   | 0.0345  | 10.0735  | -0.0110 | -0.9490 |
| Day 8   | 0.0089  | 3.2197   | -0.0021 | -0.1798 |
| Day 9   | 0.0421  | 13.5764  | 0.0401  | 3.5742  |
| Day 10  | 0.0170  | 4.4489   | 0.0571  | 4.7416  |
| Day 11  | -0.0195 | -7.9887  | 0.0375  | 3.0730  |
| Day 12  | -0.0003 | -0.1318  | 0.0372  | 3.0405  |
| Day 13  | -0.0171 | -6.1001  | 0.0201  | 1.6531  |
| Day 14  | 0.0013  | 0.5023   | 0.0214  | 1.7417  |
| Day 15  | -0.0030 | -1.6387  | 0.0184  | 1.4564  |
| Day 16  | 0.0123  | 5.2741   | 0.0307  | 2.4243  |
| Day 17  | -0.0019 | -0.8083  | 0.0289  | 2.2679  |
| Day 18  | -0.0052 | -2.5925  | 0.0237  | 1.8566  |
| Day 19  | 0.0039  | 1.5527   | 0.0277  | 2.2250  |
| Day 20  | -0.0023 | -0.9679  | 0.0254  | 1.9653  |

*Significance level at 5%*

Similarly Table 3 represents Average Abnormal and Cumulative abnormal returns and the significance level 20 days before and after the event date for non-financial companies of KSE 100 index. The results stated that the AABR was statistically significant to the particular event according to T-statistic in bold. Cumulative abnormal return (CAABR) for the non-financial sector was also statistically significant to the particular event according to T-statistic values in bold. This shows that the market was statistically significant response to the stated event. Due to these finding we accept the alternative hypothesis and reject the null hypothesis.

Table 4: Comparison between Average Abnormal and Cumulative Average Abnormal returns for Non-Financial and Financial sectors of KSE 100 index

|         | Financial Sector |          |         |          | Non-financial Sector |          |         |          |
|---------|------------------|----------|---------|----------|----------------------|----------|---------|----------|
|         | AABR             |          | CAABR   |          | AABR                 |          | CAABR   |          |
| Days    | AABR             | T.Values | CAABR   | T.values | AABR                 | T.values | CAABR   | T.values |
| Day -20 | 0.0049           | 1.1190   | 0.0049  | 1.1190   | 0.0015               | 0.8882   | 0.0015  | 0.8882   |
| Day -19 | 0.0121           | 2.5872   | 0.0169  | 4.8274   | 0.0175               | 7.0746   | 0.0190  | 7.2351   |
| Day -18 | 0.0037           | 0.9284   | 0.0207  | 3.6014   | 0.0028               | 1.1477   | 0.0218  | 5.5173   |
| Day -17 | -0.0103          | -3.9432  | 0.0104  | 1.5045   | -0.0070              | -3.1749  | 0.0148  | 2.9013   |
| Day -16 | 0.0213           | 4.4454   | 0.0317  | 4.4158   | 0.0143               | 6.0592   | 0.0291  | 4.6678   |
| Day -15 | -0.0042          | -1.8896  | 0.0275  | 3.7867   | -0.0005              | -0.2272  | 0.0285  | 4.0046   |
| Day -14 | -0.0128          | -2.2906  | 0.0146  | 1.3365   | -0.0026              | -1.1247  | 0.0259  | 3.4828   |
| Day -13 | 0.0061           | 1.3517   | 0.0207  | 1.4156   | 0.0026               | 1.1653   | 0.0285  | 3.7288   |
| Day -12 | -0.0066          | -1.6097  | 0.0141  | 0.8192   | -0.0045              | -2.0218  | 0.0240  | 2.7926   |
| Day -11 | -0.0013          | -0.2722  | 0.0128  | 0.8087   | -0.0036              | -1.5481  | 0.0204  | 2.3275   |
| Day -10 | -0.0027          | -0.6819  | 0.0101  | 0.5875   | -0.0146              | -7.1748  | 0.0058  | 0.6888   |
| Day -9  | -0.0028          | -0.5073  | 0.0074  | 0.3576   | -0.0262              | -8.0343  | -0.0204 | -2.6736  |
| Day -8  | 0.0014           | 0.4531   | 0.0087  | 0.4345   | 0.0007               | 0.3241   | -0.0197 | -2.6128  |
| Day -7  | 0.0100           | 1.1804   | 0.0188  | 0.9904   | 0.0067               | 2.6951   | -0.0130 | -1.5812  |
| Day -6  | -0.0004          | -0.0897  | 0.0184  | 1.0823   | 0.0075               | 4.0509   | -0.0055 | -0.6460  |
| Day -5  | -0.0022          | -0.3006  | 0.0161  | 0.8295   | -0.0033              | -1.3590  | -0.0087 | -0.9998  |
| Day -4  | -0.0319          | -2.9806  | -0.0157 | -0.9315  | -0.0439              | -12.1456 | -0.0526 | -5.6335  |
| Day -3  | 0.0100           | 1.2586   | -0.0057 | -0.4754  | 0.0029               | 0.8843   | -0.0497 | -4.9206  |
| Day -2  | 0.0552           | 13.8887  | 0.0495  | 3.9039   | 0.0370               | 11.5805  | -0.0127 | -1.2920  |
| Day -1  | -0.0005          | -0.1138  | 0.0490  | 3.4645   | 0.0089               | 3.4688   | -0.0038 | -0.3950  |
| Day 0   | -0.0109          | -4.1131  | 0.0381  | 2.8308   | -0.0014              | -0.6442  | -0.0052 | -0.5213  |
| Day 1   | -0.0176          | -3.6429  | 0.0205  | 1.3710   | -0.0219              | -5.6951  | -0.0270 | -2.4940  |
| Day 2   | -0.0016          | -0.2616  | 0.0190  | 1.3692   | 0.0141               | 4.8774   | -0.0130 | -1.2107  |
| Day 3   | 0.0081           | 1.7212   | 0.0271  | 1.9226   | 0.0047               | 2.8729   | -0.0083 | -0.7688  |
| Day 4   | -0.0118          | -1.8958  | 0.0153  | 1.1307   | -0.0096              | -4.5331  | -0.0179 | -1.6065  |
| Day 5   | -0.0226          | -2.4235  | -0.0073 | -0.4545  | -0.0307              | -7.6161  | -0.0486 | -4.0492  |
| Day 6   | -0.0003          | -0.0520  | -0.0076 | -0.4178  | 0.0031               | 1.4268   | -0.0455 | -3.5968  |
| Day 7   | 0.0344           | 6.5917   | 0.0268  | 1.6545   | 0.0345               | 10.0735  | -0.0110 | -0.9490  |
| Day 8   | 0.0057           | 1.7228   | 0.0325  | 1.8595   | 0.0089               | 3.2197   | -0.0021 | -0.1798  |
| Day 9   | 0.0297           | 3.9797   | 0.0622  | 4.2935   | 0.0421               | 13.5764  | 0.0401  | 3.5742   |
| Day 10  | 0.0107           | 2.0698   | 0.0730  | 4.5872   | 0.0170               | 4.4489   | 0.0571  | 4.7416   |
| Day 11  | -0.0312          | -9.3619  | 0.0418  | 2.4793   | -0.0195              | -7.9887  | 0.0375  | 3.0730   |
| Day 12  | 0.0025           | 0.4366   | 0.0443  | 2.6405   | -0.0003              | -0.1318  | 0.0372  | 3.0405   |
| Day 13  | -0.0221          | -9.6568  | 0.0222  | 1.2817   | -0.0171              | -6.1001  | 0.0201  | 1.6531   |
| Day 14  | -0.0103          | -3.2129  | 0.0119  | 0.6753   | 0.0013               | 0.5023   | 0.0214  | 1.7417   |
| Day 15  | -0.0028          | -1.1759  | 0.0091  | 0.5205   | -0.0030              | -1.6387  | 0.0184  | 1.4564   |
| Day 16  | 0.0073           | 1.5439   | 0.0164  | 0.8964   | 0.0123               | 5.2741   | 0.0307  | 2.4243   |
| Day 17  | 0.0053           | 1.5312   | 0.0217  | 1.1607   | -0.0019              | -0.8083  | 0.0289  | 2.2679   |
| Day 18  | 0.0006           | 0.0908   | 0.0223  | 1.0235   | -0.0052              | -2.5925  | 0.0237  | 1.8566   |
| Day 19  | 0.0145           | 2.7672   | 0.0369  | 1.6415   | 0.0039               | 1.5527   | 0.0277  | 2.2250   |
| Day 20  | -0.0014          | -0.3111  | 0.0354  | 1.5519   | -0.0023              | -0.9679  | 0.0254  | 1.9653   |

Significance level at 5%

Table 4 shows the comparison between Average abnormal and Cumulative Average abnormal returns for Non-financial and Financial sectors of KSE 100 index. The results stated that AABR for the financial sector was high as compare Non-financial sector for the consider window. Similarly for most of the days CAABR of financial sector was

also higher than Non-financial sector for the consider window. This shows that the investors who invest their money in financial sector will get high return than Non-financial sector in the era of political uncertainty.

### Conclusion

The investigation of abnormal returns (AABR) and cumulative average abnormal returns (CAABR) using market model of KSE 100 index for the recent political event (Sit-in) shows that AABR for market model (MM) has statistically significant in Pakistan. The same results are also evidenced for the CAABR based on MM. Furthermore these returns are negative for most of the days for both AABR and CAABR using market model. This means that the information has significantly negative effect on the market. Hence the market fails to fully reflect to public information. The results of the study also show that the investors who invest their money in financial sector may earn excess abnormal returns than Non-financial sector.

The above results reveal that Karachi stock exchange show inefficient behavior and investor by applying fundamental analysis can earn excess abnormal returns. Results show drastic changes in stock prices around the particular political event. The suggestion of the study is that investor should take preventive steps before trading in stock in the period of political uncertainty. So the investors who are reluctant to take risks should stay away from trading around political uncertainty to settle the extra risk connected with the political uncertainty. The current study recommends that the investor should take precautionary steps before trading in uncertain political environment. A huge flight of capital and financial assets from a country due to uncertain political environment or economic instability, the government and other officials should also consider this point in their minds. The study also recommends to the risk averse investors for high earnings in uncertain political environment that they should invest their money in financial sector than non-Financial sector. Furthermore governments should increase their attention against exchange market during such kind of events. The study further suggested that the citizens of Pakistan do not comprehend political instability quickly. That's why most of the investors can earn abnormal returns.

Due to limited time resources and unavailability of full and proper data, the study selected only one political event and KSE 100 index companies. The researchers may also take other political events to test their impact on stock prices. And they may also conduct research on that why the returns of financial sector is more than Non-financial sector during such kind of events.

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