MPRA

Impact of Political Uncertainty on Pakistan Stock Exchange (1990-1999): An Event Study Approach

Sulehri, Fiaz Ahmad and Ali, Amjad

Lahore School of Accountancy and Finance, University of Lahore, Pakistan., Lahore School of Accountancy and Finance, University of Lahore, Pakistan.; University Paris 1 Pantheon Sorbonne (France)/ European School of Administration and Management (ESAM), France.

2020

Impact of Political Uncertainty on Pakistan Stock Exchange (1990-1999): An Event Study Approach

Fiaz Ahmad Sulehri[1]

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

Amjad Ali[2]

Lahore School of Accountancy and Finance, University of Lahore, Pakistan.
University Paris 1 Pantheon Sorbonne (France)/
European School of Administration and Management (ESAM), France.
Email: chanamjadali@yahoo.com

Abstract

Pakistan is struggling against many problems; out of which political instability and terrorism are crucial problems. These issues hindered the economic growth of the country as well as the confidence of investors. This study has investigated the impact of political events on Pakistan Stock Exchange. This paper uses a standard event study methodology. Data relating to the stock market index has been collected from the website of Pakistan Stock Exchange and relating to political events has been collected from the newspapers of Business Recorder and DAWN. A total of 18 political events was considered in the study out of which 08 events were coded as positive and other 10 were deemed negative. The first day abnormal return, a five-day cumulative abnormal return and ten day cumulative return was calculated for all of the events. This study found evidence that political events affected the stock market in Pakistan, but their impact is different considering the economic and political implications of these events. Certain events had the strongest impact on the stock market like Nuclear tests for effective defense, the Supreme Court had revoked the Presidential order and Nawaz Sharif had been reinstated, General elections held in the country and the 14th amendment because 14th amendment was related to the elimination of corruption in political parties. Overall, this study laid the foundation to make further explorations into the phenomenon of uncertainty caused by political events in relevance to the stock market in Pakistan.

Key words: Political instability, Stock Markets, Abnormal returns

JEL Codes: P16, G24

---

[1] Ph.D Scholar; Lahore School of Accountancy and Finance, University of Lahore, City Campus.
[2] Assistant Professor; Lahore School of Accountancy and Finance, University of Lahore, Pakistan.
Associate Researcher; University Paris 1 Pantheon Sorbonne (France) / European School of Administration and Management (ESAM), France.

1. Introduction

Political menace, however, has always been an obstacle to stock market performance in meticulous and to Pakistan's prosperity in common. Pakistan struck into the web of crisis and inconsistent political environment since independence. There should be serious reasons why crises should exist in abundance and create an unhealthy economic situation in the country. No political party in Pakistan has completed its democratic five-year term after getting mandate of public by election except last two democratic governments from 2008 to 2013 and 2013 to 2018. Most of the time military comes into power and dismisses the elected democratic system. This political instability has a very severe impact on the economy and stock market in the country. In today's information-oriented world, news travels very fast and contagion can spread quickly and capital markets have become more volatile and respond to different news of significance which might relate to the events representing changes in the macroeconomic prospects, instability caused by terrorist activities and political turmoil. The change of political scenarios and terrorist attacks has badly affected Pakistan Stock Market, under these conditions much of the foreign investors have withdrawn their money from Pakistani Stock Markets (Sherani, 2014).

Pakistan strategically situated at the junction of Afghanistan, China, India, Iran and the Gulf States of oil soaked sands. During 2000 to 2012 the development process in Pakistan is badly affected from Taliban (Al Qaeda) and the conflict on terror to distinction on the international political phase. These phenomena's discouraged Pakistan Stock Exchange, but after that stable political environment have been promoting and prospering stock market of the country which were nominated as the region's best performing stock market twice in the last decade. Capitalization of the stock market and per capita income over the last two decades has more than tripled. During this era, Pakistan's political menace, however and its penalty has become the object of strong concentration due to Pakistan's far above the ground position in the war on terror and which has potential to exert a strong impact on stock market performance. The overall scenario of Pakistan provides a unique socioeconomic and political environment which has been distorted investor's expectations about the future prospects of the corporate sector in the country (Collier, 2003).

Efficient Market Hypothesis proposed by Famma (1965), this hypothesis is based on information system which explained the perquisite for the partially strong form of the efficient market implies that all the information which is publicly available has an impact on stock prices. This information includes all significant events of economic importance and has somehow impact on overall

economic activities in the country which further have the potential to be translated into the corporate context of the companies (Ross et al., 2008). Empirics reveal that the political scenario of Pakistan is characterized by the intense strife among political parties as well as instability due to the frequent intervention of the military dictators. In such environment available information changes the sentiment and the overall performance of the corporate sector. Assassination of Benazir Bhutto has significant negative impact on Pakistan Stock Exchange and the index fell almost by 5% (Sohail and Hussain 2009).

The Pakistan Stock Exchange was founded on September 18, 1947 which the Pakistan's largest, most liquid and one of the oldest stock exchanges in south Asia. It was formally incorporated on March 10, 1949 under the name of "Karachi Stock Exchange" as a company limited by guarantee. In October 1970 second stock exchange had been established in Lahore. In October 1989 Islamabad Stock Exchange had been established to facilitate the investors of the northern part of the country. Ultimately, Government of Pakistan merged the operations of three exchanges effective from January 11, 2016 under the new name 'Pakistan Stock Exchange Limited' (PSX) At present 854 companies are listed on the Karachi Stock Exchange and its market capitalization was Rs. 10.807 billion as on April 28, 2015 (KSE). KSE-100 index is the most famous index, which is used as a benchmark to assess market activity. The market closed at 36235 points of KSE-100 index on May 30, 2016. At present there is a descending movement in the stock market and the stock market has witnessed a sharp drop from a level of more than 36,720 points in February 2016; the level the market attained for the very first time in the history. The level was achieved from the low of 4782 points in December 2008, after the stock market crashed from 15760 points (highest at that time) in April 2008 (DAWN, 2012). This scenario indicates that the stock market in Pakistan is quite volatile. So, following the importance of Pakistan Stock Exchange this study has examined the impact of political events on Pakistan Stock Exchange. This type of exercise is hardly available in existing literature. Hence, this study will be a healthy contribution towards respective literature.

2. Literature Review

Abdelrehim et al., (1951) conducted a case study to see the impact of nationalization of the assets of Anglo-Iranian Oil Company (AIOC, now British Petroleum) on stock prices of companies. This paper aimed to assess the relative bargaining of Musaddiq regime and influence of the AIOC in financially viable terms. To compare the stock market response to key proceedings in the political conciliation the methodology of event study was used by schedule preceding and following to the

nationalization. From AIOC and its shareholder's point of view, nationalization was explicitly bad news implying a serious failure in the company's policy. The events constituted in the study were the economic impact of nationalization on AIOC investors, announcement of nationalization in 30 April 1951 and checking the impact of financial statements publications in November 1951.The Nationalization had unenthusiastic collision on the members and market adjusts speedily to new information revealed by Using the Market Adjusted Model.

Brown and Warner (1983) examined belongings of how the meticulous uniqueness of these data and daily stock proceeds have an effect on incident study methodologies for reviewing the stock price collision of firm-specific incidents. The earlier work was extended by this study paper in which they investigated event study methodologies used with monthly returns but now they accounted for daily returns. The 50 securities 250 samples are created. The relevant daily return data were collected from Research center of the University of Chicago for which the securities were preferred at random and with substitute from the population of the entire securities from July 2, 1962, to December 31, 1979. The study indicated that using daily stock return data creates some problems like non-normality, non-synchronous and market model parameter estimation, variance estimation and important properties captured by simulation.

Beaulieu et al., (2006), conducted a study to assess the short run outcome of ordinary shares return of Quebec firms by the October 30th, 1995 Quebec referendum. It was studied that in the twentieth century the political menace and risk is a universal phenomenon that exaggerated most stock markets in the country. The final sample has been taken of both accounting data and ordinary share price data consists of 71 Quebec firms listed on the Montreal Stock Exchange and/or on the Toronto Stock Exchange. Event study methodology was used in this study. This study concluded that the results of the referendum had a positive short run effect on the returns of the stock and statistically momentous and Quebec-based firms were comprised of the base of two mechanisms of firm's disclosure to political hazard: the organization of assets (assets in place Vs growth options) and the level of overseas participation.

Voth (1996) analyzed inflation, political volatility and stock market instability in interwar Germany and the extent to which the collapse of democracy was a result of misguided economic policies. Monthly data collected on the German share index to show that when political events occurred the volatility was high during the first years of the Weimar Republic. Political events largely responsible for the high variability for the reason that of the obvious connection between the

political ambiguity, the level of industrial fabrication and inconsistency of asset worth has been seen as the scoundrel of the section. Many of the significant discontinuities exposed by a nearer look that the Weimar Republic unsuccessful to leave an outline in asset prices during the early years. Also, unenthusiastic proceedings were as possible to correspond with price increases while by means of price turn down. A supplementary organized investigation of the association between political actions and asset price instability unsuccessful to find significant impact in this study. Pantzalis et al., (1997) have investigated stock market activities in different countries near to political election dates. 33 countries data were utilized and gives proof concerning links stuck between stock market efficiency and elections on a worldwide scale for the era 1974-1995. Using the theoretical frameworks of Harrington (1993) and Brown et al. (1988) they created underlying principle for the employ of things, like the timing of the election and result, the country's fiscal performance and the level of press liberty to give details regarding the performance of the stock market near to elections. The value weighted equity indices relevant data was collected from the Morgan Stanley Capital International from 45 countries and a world equity index. They concluded there is an optimistic and significant stock market response in the 2 weeks earlier to political elections.

3. Research Methodology

This study uses standard event study methodology which is a forward-looking approach that focuses on quantification of abnormal returns resulting from a specific event of interest. Positive abnormal stock returns around the event date will be considered if investors react favorably to an event. Alternatively, if investors react unfavorably to an event, will be considered negative abnormal stock returns. Hence, abnormal returns provide a mean of assessing the capital market's response to specific events. The event-study methodology is based on the efficient markets hypothesis (Fama et al., 1969). This hypothesis generally states that as new information becomes available (as a result of some significant unpredicted event), it will be fully taken into consideration by investors assessing its current and future impact on the stock market. Investors without delay reconsider individual firms and their capability to withstand potential economic, Political, environmental, demographic and societal changes resulting from that event and that information is reflected immediately in the stock prices.

So, the new assessment results in a stock price change which is based on the discounted value of the future firm performance as measured by its ability to generate positive cash flows. The strength

of the event study method lies in its ability to identify such abnormal changes because it is based on the overall assessment of many investors who quickly process all available information in assessing each individual firm's market value (Schwert, 1981).

Since index returns are random variables, they will deviate from their means over any given event window. Also, when examining these deviations to past average returns and taking into account historical variability; important conclusions can be drawn regarding the statistical significance (the depth and breadth) of an event. If the return's deviation (abnormal return) is small and statistically insignificant on trading days that coincide with an event, then we can conclude that the market saw the event as inconsequential. However, if the return's deviation is large and statistically significant (falling outside the range of returns normally expected), then we can conclude that the market saw the event as important and one that moved it significantly. For the measurement of abnormal market returns mean-adjusted-returns approach would be used in the study, which compares the market returns after the events with the mean of market returns before the happening of the event. This procedure was proposed by Brown and Warner (1985). The time frame of the study is from 1990 to 1999 and data relating to the stock market index along with political events happened during this time frame.

4. The Model

This study uses mean-adjusted-return approach for the calculation of market abnormal returns each day after the event for a period of ten day window. Data related to the PSE 100 index was collected from website of Pakistan Stock Exchange and 'Business Recorder' and DAWN newspapers were explored to locate significant events and their dates related to political scenario. The abnormal returns are calculated as follows:

$AR_{it} = R_{it} - \bar{R}_i$

Where

AR_{it} = Abnormal return of index i at time t

R_{it} = Actual return of index i at time t

$\bar{R}_i$ = Expected return of index i

$\bar{R}_i$ is calculated using a 20 days estimation period prior to the events by mean of index returns on days (-30, -11) where 0 is the event date. The expected return of the index is compared to the actual return of the stock on the event date i.e. 0. But to capture any subsequent impact of the event on the stock index two longer event windows would also be considered i.e. From event data for 5

trading days (t = +5) and from event date to 10 trading days (t = +10). Cumulative abnormal returns (CARS) are also calculated for the longer event windows. This procedure is proposed and used by Chen and Siems (2004). Further, in order to establish the significance of the abnormal returns and cumulative abnormal returns t-statistics has been used as proposed by Brown and Warner (1980). For better insight the abnormal returns calculated using the procedure entailed previously would be analyzed separately. Political events analysis is distributed in two heads where political events first are analyzed on overall bases and after that political events are also analyzed category wise where categories relating to defense, democracy, dictatorship, general elections, government suspension, international relations, strikes of political parties and political terrorist attacks are considered.

5. Data Analysis, Results and Discussions

The first section of the analysis is related to the analysis of the political events with reference to the stock market and second section of the analysis provides the analysis of the terrorism events. Subsequent divisions with regard to types, eras and years are also done in order to make analysis more meaningful.

5.1 Analysis of the Political Events

This section is further divided into two subsections where first subsection provides the summary results of all of the political events and then second subsection provides the category wise analysis of the political events and their subsequent impact on the stock returns. The political events were divided into following categories relating to defense, democracy, dictatorship, general elections, government suspension, international relations, strikes of political parties and political terrorist attacks (Pierson, P. 2000).

Table 1. Average impact of Political Events on Stock Market.

Regime	Nature	Count	AR0	CAR +5	CAR +10
	(+)ve	8	0.83%	3.56%	6.13%
Pre- Musharraf (1990-	T-Statistics		1.767	2.224*	2.365**
1999)	(-)ve	10	-1.23%	-2.72%	-5.62%
	T-Statistics		-1.032	-.840	-1.296

The above table provides the pre-Musharraf political events and their average impact on Karachi Stock Exchange. A total of 8 positive political events occurred in Pre-Musharraf regime and

average abnormal return of these 8 events on event day is 0.83% which is not significant (t-statistics = 1.767), five days average cumulative return of these 8 events is 3.56% which is significant at 10% level of significance (t-statistic = 2.224) and ten days cumulative return is 6.13% which is also significant at 5% level (t-statistic = 2.365). Thus, in pre-Musharraf regime the abnormal returns used to increase with time after an average positive event. There was a total of 10 negative political events during Pre-Musharraf regime and their average abnormal return on the first day was found to be -1.23% (t-Statistic = -1.032), five days cumulative return is -2.72% (t- statics = -.84) and ten days cumulative return is -5.62% (t- statics = -1.296). All of these abnormal return averages are not significant. Thus, during Pre-Musharraf regime positive events had a positive and significant impact on stock returns; while negative events had a negative, but an insignificant impact on stock returns on stock returns in Karachi Stock Exchange. Further, the impact of positive events translated into stock price a bit slower where abnormal returns on the first day were only .83%, and after ten days these accumulate to 6.13%, while negative abnormal returns, although cumulated higher but remained insignificant.

5.2 Category wise Analysis of Political events

Individual political events further were categorized into various types i.e. defense, General elections, appointment of prime minister, democracy, general, suspension of government, judiciary, dictatorship, political strikes and legislative development in order to assess the significance of these events according to their type.

Table 2. Political Events related to Defense

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
May 28, 1998	Nuclear tests for effective defense in response to the Indian explosion of its nuclear plans.	(-)ve	-4.52%	3.20%	-2.08%
	T-Statistics		-2.98***	2.12**	-1.38
May 26, 1999	The war of Kargil between India and Pakistan.	(-)ve	-7.22%	-23.26%	-30.56%
	T-Statistics		-5.01***	-16.16***	-21.23***

***,**,* significant at 1%, 5% & 10% level of significance

There were two defense related events during the selected time period and the first one is a nuclear test by the Government of Pakistan for effective defense of the country, international point of view, this event is considered negative but as per people of Pakistan this is a highly positive event. On the first day of the event the abnormal return is -4.52% (t- statics = -2.98) which is significant at the 1 % level, five days cumulative return is 3.20% (t-statistics = 2.12) which is significant at the 5 % level and ten days cumulative return is -2.08% (t-statics = -1.38) which is not significant at all. Second event related to defense is Kargil war with India is considered as a negative event because war is problem but not the solution of problems. First day abnormal return is -7.22% (t-statistics = -5.01) which is significant at the 1 % level, five days cumulative return is -23.26% (t-statistics = -16.16) which is significant at the 1 % level of significance and ten days cumulative return is -30.56% (t-statistics = -21.23) which is also significant at the 1 % level of significance.

Overall, the events related to the defense did not yield much of the significant implications apart from the obvious strong negative impact of the Kargil war on the Pakistani stock market. Nuclear tests provided negative and significant connotations on the event date and the impact was converted to positive one in subsequent days and after that the impact again was negative. Overall, it would be concluded that the events related to defense have to be strong to yield a significant impact on the stock markets in Pakistan.

Table 3. Political Events related to democracy

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
Wednesday, May 26, 1993	Supreme Court had revoked the Presidential order and Nawaz Sharif had been reinstated.	(+)ve	0.67%	1.94%	4.36%
	T-Statistics		0.69	1.99*	4.47***

***,**,* significant at 1%, 5% & 10% level of significance

There is only one event related to democracy which is the Supreme Court revoked the Presidential order and Nawaz Sharif was reinstated; this was a positive political event. On the first day of event the abnormal return was 0.67% (t-statistics = .69) which is not significant, five days cumulative

return of this event was 1.94% (t-statistics = 1.99) which was found significant at 5% level of significance and ten days cumulative return was 4.36% (t-statistics = 4.47) which was also significant at 1% level of significance.

Table 4. Political Events related to General Elections in Pakistan

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
Sunday, October 10, 1993	General Elections held in 1993	(+)ve	-0.35%	4.43%	9.82%
	T-Statistics		-0.74	9.41***	20.83***
Tuesday, February 4, 1997	As per schedule Election held in 1997 in which Nawaz Sharif won with huge majority.	(+)ve	3.01%	9.02%	7.16%
	T-Statistics		2.61**	7.85***	6.23***

***,**,* significant at 1%, 5% & 10% level of significance

The above table provides the two events which are related to General Elections in Pakistan in the selected time span were considered by the study and the first one is General Elections held in 1993 which were considered a positive event but on first day of event the abnormal return at Karachi stock exchange was found to be -0.35% (t-statistics = -.74) which is not significant, five days cumulative return was 4.43% (t-statistics = 9.41) which is significant at 1% level of significance and ten days cumulative return was 9.82% (t-statistics = 20.83) which was also significant at 1% level and stock market of Pakistan behaved highly positive. Thus, the elections of 1993 were proved to be positive for the Pakistani stock markets.

Second event related to General Election in Pakistan is as per schedule Election held in 1997 in which Nawaz Sharif won with a huge majority. This also was considered a positive event as a result of this event the abnormal return on first day was 3.01% (t-statistics = 2.61) which was significant at 5% level of significance, five days cumulative return was 9.02% (t-statistics =7.85) which was significant at 1% level of significance and ten days cumulative return was 7.16% (t-statistics =

6.23) which was also found significant at 1% level. So, the elections of 1997 were also deemed positive in stock markets of Pakistan.

Overall, General elections in Pakistan are deemed a positive signal to the stock market and in almost all of the cases stock market yielded a positive return.

Table 5. Political Events related to Govt. suspension

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
April 18, 1993	Ghulam Ishaq Khan exercised his power and dismissed Nawaz Sharif government by using Eighth Amendment.	(-)ve	-0.35%	-1.70%	-0.36%
	T-Statistics		-0.416	-2.023*	-0.434
July 18, 1993	Nawaz Sharif and President Ishaq Khan both resigned due to serious differences from their offices.	(-)ve	-0.31%	6.74%	2.55%
	T-Statistics		-0.41	8.80***	3.32***
November 6, 1996	Benazir Bhutto's Govt. dismissed by Farooq Leghari on charges of mismanagement and corruption by using Eighth Amendment.	(-)ve	5.60%	1.83%	0.61%
	T-Statistics		5.58***	1.82*	0.61
December 2, 1997	Farooq Leghari resigned from his office.	(-)ve	0.59%	2.88%	-0.71%
	T-Statistics		0.22	1.07	-0.26
October 7, 1998	Serious differences and conflict emerged on the scene between Army General and Nawaz Sharif due to this conflict General Jehangir Karamat resigned from his office and a new Army chief was elected (Pervaiz Musharraf).	(-)ve	-6.01%	-19.85%	-32.25%
	T-Statistics		-3.65***	-12.03***	-19.55***

***,**,* significant at 1%, 5% & 10% level of significance

The above table provides the political events on the suspension of the government or resignation of any key political figure in Pakistan. A total of six events was considered in this regard which

were related to suspension of key political figures in the country. The first event considered was dismissal of Nawaz Sharif when President Ghulam Ishaq Khan exercised his powers and dismissed Nawaz Sharif's government by using Eighth Amendment. The event was considered negative. As a result of this event stock market abnormal return of the first day was -0.35% (t-statistics = -.0416) which was not significant, five days cumulative return was -1.70% (t-statistics = -2.023) which was significant at the 10 % level of significance and ten day cumulative return was -0.36% (t-statistics =-. 434) which again was not found significant.

Second event in this regard was that both Nawaz Sharif and President Ishaq Khan resigned due to serious differences from their offices and as a result abnormal return on first day of event was -0.31% (t-statistics = -.41) which was not significant, five days cumulative return was 6.74% (t-statistics = 8.80) which was found significant at 1% level of significance and ten days cumulative return was 2.55% (t-statistics = 3.32) which was also found significant at 1% level of significance. The positive impact of this event is due to the political strife between the office of president and prime minister which after the resignation of both resolved.

Third event was related to dismissal of Benazir Bhutto's Govt. Which was dismissed by Farooq Leghari on charges of mismanagement and corruption by using Eighth Amendment and new caretaker Prime Minister Malik Meraj Khalid was elected. By nature, it is a negative political event, but due to high levels of corruption in the country dismissal of government was perceived positively by the stock markets in Pakistan. On the first day of the event the abnormal return was 5.60% (t-statistics =5.58) which was found significant at the 1 % level of significance; five days cumulative return was 1.83% (t-statistics = 1.82) which was significant at the 10 % level of significance and ten days cumulative return was 0.61% (t-statistics =. 61) which was not found significant.

Forth event in this regard was the resignation of President Farooq Leghari. Stock markets in the country did not respond it in a significant manner and first day abnormal return was 0.59% (t-statistics =. 22) which was not significant, five days cumulative return was 2.88% (t-statistics = 1.07) which was not significant and ten days cumulative return was -0.71% (t-statistics =-. 26) which was also not found significant.

A fifth event considered to be related to serious differences and conflicts which emerged on the scene between Army General and Nawaz Sharif due to this conflict General Jehangir Karamat resigned and a new Army chief was appointed. First day abnormal return of the event was -6.01%

(t-statistics = -3.61) which was significant at 1% level of significance, five days cumulative abnormal return was -19.85% (t-statistics = -12.03) which was also significant at 1% level of significance and ten days cumulative return was -32.25% which was also found significant at 1% level of significance.

Sixth event is General Pervaiz Musharraf dismissed the Nawaz Sharif government which is a negative political event and as a result first day abnormal return was 0.62% (t-statistics = .51) which is not significant, five days cumulative return was -7.85% (t-statistics = -7.85) which was significant at 1% level of significance and ten days cumulative return was -5.02% (t-statistics = -4.12) which was also significant at 1% level of significance.

Overall, dismissal of the government is deemed negative event in the stock markets of Pakistan. But dismissal of the prime minister yields much stronger impact than resignation or dismissal of the president of the country.

Table 6. Political Events related to International relations

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
Sunday, March 26, 1995	The first Lady Hillary Clinton visited Pakistan which changed the world's perception that Pakistan is a modern, forward-looking and liberal country.	(+)ve	-0.08%	1.94%	3.95%
	T-Statistics		-0.08	1.78	3.63***
Sunday, September 24, 1995	Brown Amendment passed by USA to ease the restrictions on Pakistan this positive step generates attraction for foreign investors.	(+)ve	-1.08%	-4.96%	-7.22%
	T-Statistics		-0.90	-4.14***	-6.03***
Monday, February 22, 1999	Prime Ministers of Pakistan and India singed Lahore Declaration.	(+)ve	0.99%	4.78%	16.02%
	T-Statistics		0.68	3.27***	10.97***

***,**,* significant at 1%, 5% & 10% level of significance

The above table provides the political events relating to the international relation and their subsequent impact on the stock markets in Pakistan. A total of 3 events was considered in this

regard where the first event was related to the visit of Lady Hillary Clinton to Pakistan, which changed the world's perception as to Pakistan being a modern, forward-looking and liberal country as a result of this positive event the first day abnormal return was -0.08% (t-statistics = .08) Which is not significant, five days cumulative return was 1.94% (t-statistics = 1.78) is also not significant while ten days cumulative return was 3.63% (t-statistics = 3.63) which was found to be significant at the 1 % level of significance.

Second event considered was The Brown Amendment passed by the USA Senate to ease the restrictions on Pakistan this positive step generate attraction for foreign investors, but the people of Pakistan most of the time do not take USA initiatives on a positive note. Thus, event first day abnormal return was -1.08% (t-statistics = -. 90) which is not significant, five days cumulative return was -4.96% (t-statistics = -4.14) which was found significant at the 1 % level of significance and ten days cumulative return was -7.22% (t-statistics = -6.03) which was also significant at the 1 % level of significance. This event generally indicated that stock markets in Pakistan do not take positive note for the USA initiatives even if they are in benefits of Pakistan.

Third event considered in the study was related to the signing of Lahore declaration between Pakistan and India Prime Ministers for better relation of both the countries as a result of this positive event the first day abnormal return was 0.90% (t-statistics = .68) which was not significant, five days cumulative return was 4.78% (t-statistics = 3.27) which was significant at 1% level of significance and ten days cumulative return was 16.02% (t-statistics = 10.97) which is significant at 1% level of significance.

Overall, mixed evidence was found with regard to the political events related to the international relations whereby events where USA supported Pakistan were considered negative. This negative impact of the USA support to Pakistan could primarily be attributed to the conception about the USA support where USA support generally was associated with the war on terror which caused many losses to Pakistan. Thus, such aid or support from USA has broader implications which are considered negative in context of the Pakistani stock market.

Table 7. Political events related to legislative development

Date	Description	Nature	AR0 (%)	CAR+5 (%)	CAR+10 (%)
Tuesday, April 1, 1997	Prime Minister has been empowered by Thirteenth Amendment to repeal 58(2) b, and advised the President for the appointments of three forces' chief, Governors and Chief Justice Supreme Court of Pakistan. The Power to appoint armed forces chief has been taken away from president.	(+)ve	1.65%	2.14%	1.40%
	T-Statistics		1.00	1.30	0.85
Tuesday, July 1, 1997	Fourteenth Amendment has been passed; The Anti-Defection Bill was a structural reform to end the blackmailing party leadership for ministerial slots etc.	(+)ve	1.82%	9.20%	13.55%
	T-Statistics		1.76	8.91***	13.12***

***,**,* significant at 1%, 5% & 10% level of significance

The above mentioned table provides the details of the legislative and constitutional developments in the stock market in Pakistan. The first event related to legislation is constitutional amendment of Thirteen Amendment. Stock market, although behaved positively, but first day abnormal return was only 1.65% (t-statistics = 1) which is not significant, five days cumulative return was 2.14% (t-statistics = 1.3) which was also not significant and ten days cumulative return was 1.40% (t-statistics =. 85) which again was not significant.

Second event considered here was that the Fourteen Amendment was passed and as a result of this event first day positive abnormal return was 1.82% (t-statistics = 1.76) which is not found significant, five days cumulative return on the other hand was9. 20% (t-statistics = 8.91) which was significant at the 1 % level of significance and ten days cumulative return was 13.55% (t-statistics = 13.12) which is also found significant at the 1 % level of significance.

Overall, stock markets in Pakistan do not respond the legislative improvements. The most significance event with regard was 14th amendment. The positive impact of these events is generally due to the fact that these amendments and rules are to avoid from corruption.

Table 8. Political Events related to strikes of political parties

Date	Description	Nature	AR0 (%)	CAR +5(%)	CAR +10(%)
September 20, 1994	"Train March" led by Nawaz Sharif from Karachi to Peshawar.	(-)ve	0.30%	2.18%	4.10%
	T-Statistics		0.38	2.82**	5.30***
October 11, 1994	"Wheel Jam" strike was called by Nawaz Sharif.	(-)ve	0.93%	1.75%	1.08%
	T-Statistics		1.55	2.91**	1.80*

***,**,* significant at 1%, 5% & 10% level of significance

The above stated table provides the political events related to the strikes of Political parties in Pakistan. A total of two events of this type was considered in the study, which along with their impact on the stock return is entailed hereunder.

The first event is "Train March" led by Nawaz Sharif from Karachi to Peshawar as a result first day abnormal return was 0.30% (t-statistics = .38) which was not significant, five days cumulative return was 2.18% (t-statistics = 2.28) which was found significant at 5% level of significance and ten days cumulative return was 4.10% which was also significant at 1% level of significance but the return was positive because stock market behaved positively due to corruption allegation on the government of Benazir Bhutto.

Second event considered was "Wheel Jam" strike which was called by Nawaz Sharif and as a result of this event first day positive abnormal return was 0.93% (t-statistics = 1.55) which was not significant; five days cumulative return was 1.75% (t-statistics = 2.91) which was significant at 5% level of significance and ten days cumulative return was 1.08% (t-statistics = 1.80) which was significant but only at 10% level of significance.

Overall, it seemed that the strikes and dharna politics do not have much to do with the stock market returns. The strikes of Nawaz Sharif against Benazir even yielded positive.

Table 9. Political Events related to Political terrorist attacks

Date	Description	Nature	AR0 (%)	CAR +5 (%)	CAR +10 (%)
September 22, 1996	Mir Murtaza Bhutto was assassinated under mysterious circumstances in a police ambush.	(-)ve	-1.32%	-0.92%	1.47%
	T-Statistics		-1.04	-0.72	1.15

***,**,* significant at 1%, 5% & 10% level of significance

The above table provides the political events of significance relating to the political terrorism where significant political leaders were killed or attacked. The first event considered related to political terrorism was the assassination of Mir Murtaza Bhutto under mysterious circumstances in a police ambush. As a result first day abnormal return was -1.32% (t-statistics = -1.04) which was not significant, five days cumulative return was -0.92% (t-statistics = -.72) which also was not significant and ten days cumulative return was 1.47% (t-statistics = 1.15) which again still was not found significant and the returns also turned positive for a negative political event deeming this event to be insignificant for the stock markets in Pakistan.

5.3 Summary of analysis of political events

Overall, an analysis of the events provided that positive and negative both types of events yield a significant impact on stock markets in Pakistan. The negative events, however, cast their impact on the stock markets a bit late as first day abnormal returns of the first day events were not found significant. Further, in Pre-Musharraf regime (1990-1999) a total of 18 political events happened, out of which 8 were considered positive and remaining 10 were deemed negative. Overall, in Pre-Musharraf regime (1990-1999) positive events yielded a significant positive impact on the stock market, while negative events did not yield a significant impact on the stock markets in Pakistan. The reason for this could be an immature stock market, which at that time was not tide much to the political economy. Further, Pre-Musharraf era is characterized by intense political strife between Nawaz Sharif and Benazir Bhutto and stock markets absorbs information quickly considering the prospects of the political economy; Thus, in that era stock market remained relatively insensitive to the negative news and showed positive abnormal returns to the positive news.

There are a number of previous studies which discuss the detail political history of Pakistan (Ali, 2011; Ali, 2015; Ali, 2018; Ali and Bibi, 2017; Ali and Ahmad, 2014; Ali and Audi, 2016; Ali and Audi, 2018; Ali and Rehman, 2015; Ashraf and Ali; 2018; Ali and Zulfiqar, 2018; Ali et al., 2016; Haider and Ali, 2015; Kassem et al, 2019; Ali and Şenturk, 2019; Ali and Bibi, 2020). But we have segregated the total political events into different categories as to explore the significance of the categorical classification of the political events on the stock markets in Pakistan. First category considered to be related to defense. The defense events did not yield much impact on the stock markets apart from the obvious negative impact of the Kargil war (Ahmad & Zulfiqar, 2010). The second category considered to be related to the state of democracy in the country. Such events also provided mixed evidence. Next category considered to be related to the strengthening of the dictatorship which mostly yielded negative stock returns. Next category in this regard was the general elections. Elections generally are considered positive signal and stock markets yielded positive returns in Pakistan after general elections. Next category as related to suspension of the government, which showed that suspension of the prime minister is considered a negative event, but suspension or resignation of the president is not considered that much negative event. Most significant events in this category were related to the conflict between the army and Nawaz Sharif and also the suspension of Nawaz government by General Pervaiz Musharraf. Next category considered to be related to the international relations. Mixed evidence in this regard is found where aid initiatives of the USA were considered negative events probably. Stock markets in Pakistan do not respond much to the legislative developments. Only 14th amendments yielded a significant impact on the stock market where 14th amendment was related to the elimination of corruption in political parties. Next category considered to be related to the strikes of political parties. It seemed that strikes do not have much impact on the stock market and the stock market responded positively to the strikes of Nawaz Sharif against Benazir yielded positive stock returns.

Overall, the findings in this section indicate that stock markets in Pakistan do respond to the political events in an appropriate and significant manner. This is consistent with the past evidence in this regard (Ahmad &Zulfiqar, 2010; Julio & Yook, 2012; Arzu, 2011; Saad, 2011). But considering the dynamics of Pakistan traditional coding of positive or negative do not apply to Pakistan, where events like suspension of the prime minister could also be seen as a positive event in a stock market. Thus, every political event does convey information to the stock market and sensitivity of the stock market to an individual event could differ depending upon the nature and

dynamics of the event which are open to interpretation and cannot be classified in a standardized manner.

6. Conclusions

Pakistan is a developing country which has faced many problems since its independence in 1947. On the top of these problems is political instability which is evident by frequent military interventions and takeovers over political governments. The democratic governments in Pakistan rarely complete their tenure. This uncertainty has caused much of the capital flight from the country. Considering the efficient capital market proposition, stock market response to the significant events in appropriate manner and Pakistan in this context provides an appropriate setting to test the propositions of efficient capital markets theory. Apart from testing the theory, this study also highlights the impact of political uncertainty in the stock market. The nature of this study is rather exploratory and the objective of this research is to consider various events of political significance to assess the impact of these political events on stock markets in Pakistan. The data relating to stock index were collected from the website of Karachi Stock Exchange and the data relating to the political events was collected from the newspapers. Standard event study methodology was employed to assess the impact of each political event on the stock market. The study considers a total of 18 political events, out of which 8 were coded as positive political events and remaining 10 events were considered as negative political events. The political events were further categorized according to their nature and category wise for analysis. The study found evidence that both positive and negative political events yield significant abnormal returns in the stock markets in Pakistan. Regime wise analysis entailed that during the Pre-Musharraf regime (1990-1999) positive events yielded a positive and significant response in the stock market while negative events did not yield significant response in the stock market. This tenure characterized by extreme political strife between Nawaz Sharif and Benazir Bhutto, thus stock markets responded to positive events in a significant manner, while negative events were considered normal in that tenure in the stock market. Category wise analysis of the political events suggested that the nature and significance of the individual events matters a lot where certain events within the category yielded stronger impact on the stock market and others yielded an insignificant impact. Most significant events found in the study was 14th amendments yielded a significant impact on the stock market where 14th amendment was related to the elimination of corruption in political parties. It

seemed that strikes do not have much impact on the stock market and the stock market responded positively to the strikes of Nawaz Sharif against Benazir yielded positive stock returns.

7. Implications & Recommendations

Overall, this study found that stock markets do respond to the political events in Pakistan, but the implications of each event might be different. Following are the implications and recommendations of the study in this regard:

- The study founds varying evidence with regard to political events implying that each political event has its own implication, according to the nature and strength of the events. The economic and political consequences of these events seem relevant in this regard.
- Stock markets in periods of prosperity, consider positive news normal and in the period of low economic growth consider negative events normal. While negative events are responded to in good time and positive events are responded to in bad times.
- Policymakers should adopt a stabilized outlook of both political and economic scenarios as to avoid negative shocks of negative events on the stock market.
- Government should also make some serious progress to address to the corruption and strengthen the legislation in this regard. Stock markets in Pakistan responded to all events which somehow were related to reduction of corruption.

8. Limitations

Following are the limitations of the study:

- The study considers a larger data set of the political events, whereas the significance and implications of each event is different. The further category wise analysis also supports this notion. Thus, treating events on standardized bases yielded conflicting results.
- This study also does not take into account the relative significance of the terrorism events where subsequent terrorist events occurring immediately after first event could yield different implications.
- The political events, mostly are not unexpected and media tend to provide news relating to all political development. Thus, the element of surprise is lost considering political events and their impact on the stock markets.

The limitations of the research could be addressed in the following manner in the subsequent research:

- Subsequent studies could consider political events on an individual bases and explore the implications of the individual events in a broader context as to which type of event is considered more important in the stock market.
- New content considering the political uncertainty and uncertainty arising out of terrorism could also be investigated in a subsequent study.

9. Directions for Future Research

Apart from addressing the limitations of the study, research could also be conducted in the following directions:

- Portraying of events in the news could also be investigated in the context of the stock market as to whether stronger events which are portrayed as less significant events in the media yield same impact on the stock market or not.
- The events could also be considered in context of different phases of the stock market like uncertainty or in bear markets or in bullish market etc. as to investigate whether such events yielded consistent results in different phases of stock market activity or not.

References

1. Abadie, A., Gardeazabal, J. 2008. Terrorism and the world economy. *European Economic Review*, 52(1): 1-27. https://doi.org/10.1016/j.euroecorev.2007.08.005

2. Abdelrehim, N., Maltby, J., Toms, S. 2011. Corporate social responsibility and corporate control: The Anglo-Iranian oil company, 1933–1951. *Enterprise and Society*, 12(04): 824-862. https://www.jstor.org/stable/23701572

3. Aggarwal, R.K., Meschke, F., Wang, T. 2012. Corporate political contributions: Investments or agency. Business and Politics. http://dx.doi.org/10.2139/ssrn.972670

4. Agirman, E., Ozcan, M., Yilmaz, O. 2014. The impact of terrorism on financial markets: an empirical study. *Journal of BRSA Banking and Financial Markets,* 8(2): 99-117. https://ideas.repec.org/a/bdd/journl/v8y2014i2p99-117.html

5. Ajinkya, B.B., Jain, P.C. 1989. The behavior of daily stock market trading volume. *Journal of Accounting and Economics*, 11(4): 331-359. https://doi.org/10.1016/0165-4101(89)90018-9

6. Aktas, H., Oncu, S. 2006. The stock market reaction to extreme events: the evidence from Turkey. *International Research Journal of Finance and Economics,* 6(6): 78-85. http://www.eurojournals.com/finance.htm

7. Alesina, A., Perotti, R. 1996. Income distribution, political instability, and investment. *European Economic Review,* 40(6): 1203-1228. https://doi.org/10.1016/0014-2921(95)00030-5

8. Alesina, A., Özler, S., Roubini, N., Swagel, P. 1996. Political instability and economic growth. *Journal of Economic Growth*, 1(2): 189-211. https://link.springer.com/article/10.1007/BF00138862

9. Ali, A., Bibi, C. 2020. Public Policies, Socio-economic environment and crimes in Pakistan: a time series analysis. *Bulletin of Business and Economics*, 9(1): 1-11. https://mpra.ub.uni-muenchen.de/100216/

10. Ali, A., Şenturk, İ. 2019. Justifying the impact of economic deprivation, maternal status and health infrastructure on under-five child mortality in Pakistan: An empirical analysis. *Bulletin of Business and Economics (BBE),* 8(3): 140-154. https://mpra.ub.uni-muenchen.de/96055/

11. Ali, A. 2011. Disaggregated import demand functions of Pakistan. An empirical Analysis. M-Phil Thesis, NCBA & E, Lahore, Pakistan, 1-70. https://scholar.google.com.pk/citations?user=L65fhAsAAAAJ&hl=th

12. Ali, A. 2015. The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan. Doctoral dissertation, National College of Business Administration & Economics Lahore. http://eprints.hec.gov.pk/6793/

13. Ali, A. 2018. Issue of income inequality under the perceptive of macroeconomic instability: An empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1): 121-155. https://mpra.ub.uni-muenchen.de/74963/

14. Ali, A. Bibi, C. 2017. Determinants of social progress and its scenarios under the role of macroeconomic instability: empirics from Pakistan. *Pakistan Economic and Social Review,* 55(2): 505-540. https://mpra.ub.uni-muenchen.de/72920/

15. Ali, A., Ahmad, K. 2014. The Impact of socio-economic factors on life expectancy in sultanate of Oman: an empirical analysis. *Middle-East Journal of Scientific Research,* 22(2): 218-224. https://mpra.ub.uni-muenchen.de/70871/

16. Ali, A., Audi, M. 2016. The impact of income inequality, environmental degradation and globalization on life expectancy in Pakistan: an empirical analysis. *International Journal*

of Economics and Empirical Research, 4 (4): 182-193. https://mpra.ub.uni-muenchen.de/71112/

17.   Ali, A., Audi, M. 2018. Macroeconomic environment and taxes revenues in Pakistan: an application of ARDL approach. *Bulletin of Business and Economics (BBE)*, 7(1): 30-39. https://mpra.ub.uni-muenchen.de/88916/

18.   Ali, A., Rehman, H.U. 2015. Macroeconomic instability and its impact on gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review,* 53(2): 285. https://www.jstor.org/stable/26153261

19.   Ali, A., Zulfiqar, K. 2018. An assessment of association between natural resources agglomeration and unemployment in Pakistan. *Pakistan Vision*, 19(1): 110-126. https://mpra.ub.uni-muenchen.de/89022/

20.   Ali, A., Ahmed, F., Rahman, F.U. 2016. Impact of Government borrowing on financial development (a case study of Pakistan). *Bulletin of Business and Economics (BBE),* 5(3): 135-143. https://mpra.ub.uni-muenchen.de/78100/

21.   Ali, A., Rehman, H.U. 2015. Macroeconomic instability and its impact on gross domestic product: An empirical analysis of Pakistan. *Pakistan Economic and Social Review,* 53(2): 285. https://www.jstor.org/stable/26153261

22.   Allayannis, G., Mozumdar, A. 2004. The impact of negative cash flow and influential observations on investment–cash flow sensitivity estimates. *Journal of Banking & Finance,* 28(5): 901-930. https://doi.org/10.1016/S0378-4266(03)00114-6

23.   Alogoskoufis, G. S., Lockwood, B., Philippopoulos, A. 1992. Wage inflation, electoral uncertainty and the exchange rate regime: Theory and UK evidence. *The Economic Journal*, 102(415): 1370-1394. https://doi.org/10.2307/2234795

24.   Alti, A. 2003. How sensitive is investment to cash flow when financing is frictionless? *The Journal of Finance,* 58(2): 707-722. https://doi.org/10.1111/1540-6261.00542

25.   Altug, S.G., Demers, F.S., Demers, M. 2007. Political risk and irreversible investment. *CESifo Economic Studies*, 53(3): 430-465. https://doi.org/10.1093/cesifo/ifm014

26.   Arin, K.P., Ciferri, D., Spagnolo, N. 2008. The price of terror: The effects of terrorism on stock market returns and volatility. *Economics Letters,* 101(3): 164-167. https://doi.org/10.1016/j.econlet.2008.07.007

27.   Arzoo, S. 2011. Political instability & its impact on Karachi stock exchange (impact on trading volume and trading value). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1801231

28.   Ashraf, I., Ali, A. 2018. Socio-economic well-being and women status in Pakistan: an empirical analysis. *Bulletin of Business and Economics (BBE),* 7(2): 46-58. https://mpra.ub.uni-muenchen.de/88972/

29.   Atanassov, J., Kim, E. 2009. Labor and corporate governance: International evidence from restructuring decisions. *The Journal of Finance,* 64(1): 341-374. https://doi.org/10.1111/j.1540-6261.2008.01436.x.

30.   Bailey, W., and Chung, Y.P. 1995. Exchange rate fluctuations, political risk, and stock returns: some evidence from an emerging market. *Journal of Financial and Quantitative Analysis*, 30(04): 541-561. https://doi.org/10.2307/2331276

31.   Baker, M., Stein, J.C., Wurgler, J. 2002. When does the market matter? Stock prices and the investment of equity-dependent firms. *National Bureau of Economic Research.* https://doi.org/10.1162/00335530360698478

32.   Bakke, T.E., Whited, T.M. 2010. Which firms follow the market? An analysis of corporate investment decisions. *The Review of Financial Studies,* 23(5): 1941-1980. https://doi.org/10.1093/rfs/hhp115

33.   Barro, R.J. 1989. Economic growth in a cross section of countries: *National Bureau of Economic Research.* https://doi.org/10.2307/2937943

34.   Barro, R.J. 1996. Democracy and growth. *Journal of Economic Growth,* 1(1): 1-27. https://link.springer.com/article/10.1007%2FBF00163340

35.   Barry Johnston, R., Nedelescu, O.M. 2006. The impact of terrorism on financial markets. *Journal of Financial Crime*, 13(1): 7-25. https://www.emerald.com/insight/content/doi/10.1108/13590790610641233/full/html

36.   Bayar, A.H., Smeets, B. 2009. Economic and political determinants of budget deficits in the European Union: A dynamic random coefficient approach. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1340404

37.   Beaulieu, M.C., Cosset, J.C., Essaddam, N. 2006. Political uncertainty and stock market returns: evidence from the 1995 Quebec referendum. *Canadian Journal of*

Economics/Revue Canadienne d' Économique, 39(2): 621-642. https://doi.org/10.1111/j.0008-4085.2006.00363.x

38. Beaulieu, M.C., Cosset, J.C., Essaddam, N. 2005. The impact of political risk on the volatility of stock returns: The case of Canada. *Journal of International Business Studies,* 36(6): 701-718. https://link.springer.com/article/10.1057/palgrave.jibs.8400160

39. Beck, T., Clarke, G., Groff, A., Keefer, P., Walsh, P. 2001. New tools in comparative political economy: The database of political institutions. *The World Bank Economic Review,* 15(1): 165-176. https://doi.org/10.1093/wber/15.1.165

40. Kassem, M., Ali, A., Audi, M. 2019. Unemployment rate, population density and crime rate in Punjab (Pakistan): an empirical analysis. *Bulletin of Business and Economics,* 8(2): 92-104. https://rfh.org.pk/2019/06/?post_type=paper&magazine_category=bbe