Unanticipated Political Events and Their Effect on the Nepalese Insurance Sector and Stock Market

Dipendra Karki¹, Sajan Kakshyapati¹, Ganesh Bhattarai³, Hamadi Fakhfakh⁴, Dilini Randika⁵

¹ Faculty of Management, Tribhuvan University
² Research Scholar, Pokhara University,
³ Faculty of Management, TU
⁴ Department of Management, University of Sfax, Republic of Tunisia
⁵ Faculty of Management Studies, Sabaragamuwa University of Sri Lanka

Article History
Received on - December 4, 2023
Revised on - February 5, 2024
Accepted on - March 14, 2024

Keywords:
Stock Prices, Signaling Effect, Dummy Variable Regression, Market Efficiency.

Introduction
The insurance sector, often regarded as a barometer of economic stability and risk perception, plays a pivotal role in reflecting market sentiment in the face of political uncertainties (Streb, 2001, Dawd & Benlagha, 2023). Political events exert significant influence on the complex dynamics of economies, determining future policies, shaping electoral forecasts, and modeling governmental structures (Swank, 1988; Streb, 2001). In the domain of financial markets, unpredictability is a constant companion, the significance of political events becomes paramount. This study explores the multifaceted dimension of unanticipated political events and their impact on the stock market, with a specific focus on the insurance industry within the Nepal Stock Exchange (NEPSE). Political events, characterized by changes in leadership, policy alterations, and geopolitical movements, play a crucial role in shaping global economic environments (Dangol, 2008). In the context of Nepal, the Nepal Stock Exchange (NEPSE) emerges as a focal point for economic activities. Established in 1994 under the Company Act and operating under the Securities Act of 1983, NEPSE aims to facilitate liquidity and

This study analyzes the relationship between unanticipated political events and their profound impact on both the insurance sector and the Nepalese stock market (NEPSE). Utilizing comprehensive analysis, the research spans 200 days before to 10 days after the political event’s announcement. Employing Levene’s test, dummy variable regression, and estimated average abnormal return, the study reveals significant effects of political events on the insurance index and NEPSE indices. The pre-event period is particularly significant, indicating potential information leakage. Window Frame 1 (-10, -1) stands out as the most profoundly impacted period, with Window Frame 2 (0, +10) witnessing moderate impact during the announcement and Window Frame 3 (+2, +10) experiencing a comparatively lesser post-event effect. Nepali Congress Wins Election (Event 1) and End of Nepal Blockade (Event 3) were identified as the most significant events for the Insurance and NEPSE indexes. Dummy variable regression emphasizes the significance (P < 0.05) of multiple window frames (mostly 1, 5, & 6) in the NEPSE index, suggesting early information leakage adjustments. The insurance sector also demonstrates a highly significant (P < 0.05) impact of unanticipated political events across various data points, with the post-event period (Windows 2 and 3) as the sole exception. Cumulative abnormal return analysis demonstrates that the Nepalese stock market is moderately inefficient, as it reinforces the market’s attempt to incorporate political influences within three to five days of the announcement date. These findings bear implications for investors, policymakers, and regulatory authorities seeking to understand the dynamics of the Nepalese stock market, enabling informed decision-making during times of political transitions and uncertainty.
marketability to corporate and government securities.

The stock market in Nepal is a distinctive environment that is now experiencing a process of evolution driven by digitization, innovative products, and the adoption of online trading platforms (Bhandari et al., 2021; Karki et al., 2021). NEPSE, established on January 13, 1994, is the only stock exchange in the country. Its significance is underscored by the billions worth of transactions occurring daily. The transparency and legality of every transaction attract investors at both individual and institutional levels. To understand the dynamics of the Nepalese stock market, it is essential to explore the theoretical framework, particularly the Efficient Market Hypothesis (EMH) (Fama, 1970). The EMH, which includes weak, semi-strong, and strong variants, offers a framework for assessing market efficiency. The weak form hypothesis posits that current stock prices incorporate all historical price information, rendering technical analysis ineffective. However, NEPSE faces challenges, including momentum effects (Jegadeesh & Titman, 1993), impacts of major events (Karki, 2020, 2022), calendar anomalies (Hasan et al., 2022), and more, casting doubt on the theory’s relevance. These anomalies collectively challenge the assumption of market efficiency proposed by the EMH. The presence of these anomalies, documented in both established and emerging markets, raises doubt about the efficiency of NEPSE. The semi-strong form of market efficiency theory asserts that stock prices are influenced by public information, excluding the effectiveness of technical or fundamental analysis. However, anomalies persist, questioning the comprehensiveness of publicly available information.

Dangol (2008) challenges the efficiency of the Nepalese stock market, asserting no substantial connection between political uncertainty and stock returns. Kumar (2013) contributes, emphasizing the impact of industrial performance and an optimistic macroeconomic environment on the stock market. Adhikari and Phuyal (2016) further illuminate the discourse by analyzing the relationship between political events and stock return volatility, supported by the NEPSE index’s fluctuation. Together, these studies underscore the profound influence of politics on Nepal’s share market, demonstrating the significance of event studies in resolving complex market dynamics. Despite these insightful studies, a critical literature gap exists in understanding the ripple effect of unanticipated political events on stock return volatility. To address this gap, this study aims to pinpoint the most consequential political events shaping the dynamics of both the insurance sector and the broader NEPSE market.

To attain these objectives, a robust event analysis approach has been employed, facilitating a thorough examination of the relationship between unanticipated political events and stock pricing. This method rigorously considers five major pre-pandemic political events spanning over six years. As the study extends above theoretical exploration, its findings hold practical implications for an extensive spectrum of stakeholders.

The remainder of the study consists of Section 2, which encompasses the literature review, Section 3, which provides a comprehensive explanation of the research methodology, Section 4 presenting the results and discussions of the empirical analysis, and Section 5 summarizes the conclusions and recommendations for future research.

### Literature Review

In the world of dynamic financial markets, unforeseen political events have a substantial influence on stock prices and market dynamics. This study investigates the profound impact of such events, emphasizing their potential to trigger market volatility and reshape investor perceptions. Adhikari and Phuyal (2016) found that political volatility had a significant impact on the Nepalese stock market, indicating that political events are key determinants of market behavior. Their multivariate analysis over a decade revealed that economic variables alone couldn’t fully explain volatility, suggesting the need to consider political instability. Survey results also identified political instability as the most influential determinant. Beyond political events, various factors, including investors’ knowledge base, firm-specific fundamentals, and others, exert substantial influences on stock prices (Mahajan et al., 2022; Karki, 2018, 2020). A study on individual investor behavior in Bartin by Islamoglu et al. (2015) explored these influential factors, providing valuable psychological insights into the intricacies of investment decision-making. Sapna & Dani (2014) analyzed the link between stock price and volume highlighting the multifaceted nature of factors affecting trading volume. Naik (2013) explored the effect of macroeconomic indicators on stock market behavior in the Indian context to establish a long-term equilibrium relationship, emphasizing the interconnectedness of economic conditions and stock market dynamics. Kumar (2013) studied the factors determining the performance of the Indian stock market adding depth to the understanding of macroeconomic influences. Merikas et al. (2004) conducted an empirical analysis of factors affecting individual investor behavior in the Greek stock exchange and revealed the relationship between behavioral finance factors and active investors’ behavior.

Bennet et al. (2011) analyzed investors’ perception of factors influencing stock selection decisions providing insights into collective...
decision-making factors. According to the sample retail investors, the five most influential factors were political stability, investors’ risk tolerance, media coverage of the stock market, the strength of the Indian economy, and government business policies. The emphasis on political stability underscores the need for a comprehensive understanding of market dynamics. Julio and Yook (2010) examined firm-level corporate investment around national elections introducing a temporal dimension, indicating the influence of political events and social media marketing on corporate decision-making (Ghimire & Karki, 2022). Field and Lowry (2009) showed that institutional investments in firms going public showcase the impact of institutions on shaping market dynamics. Nilsson’s (2008) examined on retail socially responsible investment (SRI) in mutual funds brings an ethical dimension, suggesting investors consider social responsibility with rationalized decision-making (Dahal et al., 2020). Mateev and Videy (2008) explored the association between macroeconomics and capital markets in transition economies provide a contrasting perspective on the relationship between macroeconomic factors and stock returns. The research conducted a two-pass regression analysis and discovered that macroeconomic factors, including unexpected inflation, trade deficit, and country risk premium, significantly contribute to the explanation of stock return fluctuations in emerging markets. Dangol (2008) examined the Nepalese stock market’s response to unexpected political announcements, highlighting its uniqueness. Employing event analysis methodology, the study found consistent evidence supporting the information content hypothesis, with positive (negative) abnormal returns following good-news (bad-news) political announcements. The findings underscore the market’s semi-strong inefficiency, with stock prices adjusting to new political information within 2 to 3 days, demonstrating a strong correlation between political uncertainty and common stock returns. Loewenstein and Willard’s (2006) proposed a conceptual framework addressing limitations imposed by equilibrium on investor behavior. Their research suggested that incorporating aggregate consumption into asset return calculations and employing limited asset liability can mitigate noise trader risk by eliminating violations of the Law of One Price.

Gunasekarage et al. (2004) investigated the influence of macroeconomic factors on stock prices in Sri Lanka using data from 1985 to 2001. Their study utilized co-integration analysis and a Vector Error Correction Model (VECM), revealing a long-run equilibrium relationship between stock prices and certain macroeconomic variables. Griffin et al. (2003) analyzed the relationship between stock returns and institutional and individual trading in Nasdaq 100 securities, finding that net institutional trading positively correlates with past intraday excess stock returns, while net individual trading negatively correlates. Pathe and Karnik (2000) explored the interrelationships between stock prices and macroeconomic factors that challenge the notion of a stable relationship between stock prices and the macroeconomy. Ogawa (1997) investigated the correlation between stock prices and macroeconomic variables in Zimbabwe, employing dividend discount and multi-factor return models to add an international perspective. The study found consistent functioning of the Zimbabwe Stock Exchange despite significant price fluctuations since 1991. Mitchell and Mulherin (1994) analyzed the relationship between news announcements and market activity and provided insights into the impact of information on market dynamics. Nagy and Obenberger’s (1994) investigation into decision variables for individual investors, challenges assumptions about the homogeneity of investment decision criteria. Eckstein and Delaney (1993) examined the investment patterns in distressed companies offering a sociological perspective. Kitter’s (1988) proposal of the parking-the-proceeds hypothesis introduces a new dimension to the discussion by explaining the turn-of-the-year effect on individual investor behavior. Hochman and Palmon (1983) analyzed how inflation influences firms’ investment decisions, challenging traditional economic views. They found that inflation’s impact on investment is unrelated to capital structure when considering the equilibrium relationship between bond and stock market returns. Potter’s (1970) investigated common stock investors’ motivations using multiple factor analysis, regression analysis, and chi-square analysis. Findings identified key motivations such as income from dividends, rapid growth, and professional investment management.

Despite the abundance of studies, a noticeable research gap exists in Nepal in terms of investigating the influence of unanticipated political events on stock prices, especially within the insurance sector. Nepal, with its unique geopolitical and economic landscape, may exhibit distinct market dynamics in response to political events. This research bridges this gap by investigating the relationship between political events, stock prices, and the insurance industry in Nepal.

Theoretical Framework: This research is based on fundamental principles of investment theory, focusing on the Nepalese stock market to understand the influencing factors on stock pricing, particularly in the insurance sector. Building upon studies by Bennet et al. (2011) and Adhikari and Phuyal (2016), the framework illustrated in Figure 1 examines the influence of unanticipated political events on stock pricing of insurance sector and market volatility.

Figure 1: Conceptual Framework Window Frame Stock Prices
Investment decisions are based on the positive or negative aspects of independent variables, represented by event windows. These event windows, based on Cheng and Leung’s (2006), six-window frame, include pre-event (-10,-1), announcement (0, +10), and post-event (+2, +10) periods, facilitating a detailed analysis across different time frames.

**Research Hypothesis**

On the basis of literature review and the theoretical framework, the following hypotheses were developed:

- \( H_1 \): Nepal Congress winning CA election (Event 1) significantly influences insurance and NEPSE stock returns.
- \( H_2 \): The promulgation of constitution (Event 2) significantly impacts on returns in the insurance sector and NEPSE stock market.
- \( H_3 \): End of the unannounced blockade (Event 3) substantially affects insurance and NEPSE stock returns.
- \( H_4 \): Local election announcements (Event 4) significantly influence stock returns in the insurance sector and NEPSE.
- \( H_5 \): Bamghathabandan winning election (event 5) significantly influences the insurance sector and NEPSE stock returns.
- \( H_6 \): Nepalese equity market is weak-form efficient, reflecting past information in current prices.

**Methodology**

This study employs a descriptive and causal-comparative research design to investigate the relationships between dependent and independent variables. Additionally, the study assesses market efficiency through the perspective of major political events, analyzing their impact on NEPSE.

**Nature & Sources of Data**

This research is based on secondary data sources, extracted from the official site Nepal Stock Exchange (NEPSE). The focus was on studying the impact of major political events spanning from 2013 to 2018. This study strategically limited the observations and focused on the period until July 16, 2018, capturing a transformative moment when the common ‘Insurance’ sector index underwent segregation into distinct ‘life-insurance’ and ‘non-life-insurance’ sectors.

**Selection of Events**

While various events could potentially be considered, logistical constraints and data availability led to the selection of five major events, each marking crucial junctures in Nepal’s political history. The Nepali Congress won the constituent assembly elections in 2013 and the promulgation of the Constitution in 2015 replaced the interim constitution of 2007. The end of the blockade in 2016, a period of economic strain caused by an unannounced blockade by India, emerged as a pivotal event. Additionally, the occurrence of local and central elections in 2017 in quick succession, a rare phenomenon in Nepal’s history, represented a turning point. The last event under consideration is the formation of the common government under Bamgathabandan, fostering hope and expectations for positive developments across various sectors. Table 1 provides a detailed overview of these events.

**Table 1: List of Events**

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Events</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nepali Congress wins 2nd CA elections</td>
<td>19 Nov 2013</td>
</tr>
<tr>
<td>2</td>
<td>Promulgation of Constitutions</td>
<td>20 September 2015</td>
</tr>
<tr>
<td>3</td>
<td>End of unannounced blockade of India</td>
<td>5 February 2016</td>
</tr>
<tr>
<td>4</td>
<td>Announcement of local election</td>
<td>20 April 2017</td>
</tr>
<tr>
<td>5</td>
<td>Bam Gathabandan wins the elections</td>
<td>15 February 2018</td>
</tr>
</tbody>
</table>

**Method of Analysis**

The study employs a method rooted in the assessment of stock prices within a short period, as suggested by MacKinlay (1997). This involves scrutinizing abnormal behavior, such as rises and falls in the NEPSE index and sub-index, associated with unanticipated events. The data analysis process was executed using MS Excel and SPSS v23 software.

The temporal framework for analysis relies on six-window frames recommended by Cheung and Leung (2006). The estimation period spans 200-days to 21-days prior to the announcement date, \( t = (-200, -21) \). This timeframe aligns with established practices in previous research on market reactions (Hovav & D’Arcy, 2003; Bosch & Hirchey, 1989). The research emphasizes on six distinct event periods (W), each lasting 21-days around the event date \( t = -10, +10 \), as illustrated in Figure 2.

**Figure 2: Estimation of Event Period Parameters**

The six-event periods are outlined as follows:

- \( i \) Ten days before the announcement to one day before \( t = -10, \ -1 \).
- \( ii \) Announcement day to ten days after \( t = 0 \) to \( t + 10 \).
- \( iii \) Two days after to ten days after \( t + 2 \) to \( t + 10 \).
- \( iv \) Ten days before to ten days after \( t – 10 \) to \( t + 10 \).
- \( v \) Five days before to five days after \( t – 5 \) to \( t + 5 \).
vi) Three days before to three days after (t – 3 to t + 3).

The event day (t = 0) signifies the date of the government’s new political announcement. The analytical approach encompasses Levene’s test of homogeneity of variance, dummy variables regressions, and estimation of abnormal returns, ensuring a robust and multifaceted analysis of the event’s impact on the Nepalese stock market.

**Levene’s Test of Homogeneity of Variance:** It is a statistical test used to assess whether the variance of a variable is equal across different groups or categories. It is typically applied in the context of analysis of variance (ANOVA) to check the assumption of homogeneity of variance, which is necessary for valid interpretation of ANOVA results. In analyzing the impact of political events on the insurance sub-indices and the NEPSE, this test employed dummy variables, assigning a value of “1” during the event period and “0” otherwise. Percentage stock returns were calculated using the formula:

\[ SR = \frac{R_{it} - R_{it-1}}{R_{it-1}} \]  \hspace{1cm} (i)

Where; \( SR \) is the stock returns, \( R_{it} \) is the current day market returns, and \( R_{it-1} \) is the prior day market returns used for the Insurance Index and NEPSE indexes.

Adopting Fama’s (1991) Event Study framework, which compares mean stock returns pre and post-events, an Independent t-test was utilized for its suitability with two independent data groups—data before and after events. Levene’s test primarily aims to assess data homoscedasticity. Equal variances assumption or non-assumption was determined through this test. Homoscedasticity, indicative of equal variances, and heteroscedasticity, reflective of uneven variances, were pivotal in identifying significant impacts of events on stock returns. The comprehensive analysis was conducted separately for different political events to explore their impacts on the insurance sub-index and the market index.

**Dummy Variables Regression Model:** It employs Ordinary Least Squares (OLS) regression for modeling normal stock returns during specific event periods. Abnormal returns are computed using the dummy variable regression model (Gujarati, 2012), presented in equation (ii).

\[ SR_i = \alpha + \beta_i D_{it} + e_i \]  \hspace{1cm} (ii)

Where, \( SR_i \) is the stock return on event i at day t is calculated as, \( SR_i = . \) The political event dummy (\( D_{it} \)) takes the value 1 if the event occurs and 0 otherwise. The model involves independent coefficients (\( \alpha \) and \( \beta_i \)) to be estimated, and \( e_i \) represents the random error term for stock return on the event i during period t. The model is estimated for each event and event window, covering a period from 200 days prior the announcement date to 21 days prior to the announcement date, \( t = (-200, -21) \).

**Estimation of Abnormal Returns:** This approach was employed to quantify the abnormal returns within the identified significant event windows. The computation of abnormal returns is facilitated by the formula:

\[ AB_i = R_{it} - E(R_i) \]  \hspace{1cm} (iii)

Where, \( AB_i \) represents the abnormal return on a particular event window (\( W_i \)), \( R_{it} \) denotes the actual returns, and \( E(R_i) \) signifies the expected returns calculated using the running average method.

The methodological approaches employed in the study involve a comprehensive three-step analysis. Initially, the study employs Levene’s test to ascertain the overall significance of stock return impacts for a given event. Subsequently, the focus shifts to identifying the specific event windows that exhibit statistical significance in influencing stock returns, accomplished through dummy variable regression. Lastly, the study explores into quantifying the abnormal returns within the identified significant event windows. In essence, this sequential methodology aims to address the primary hypothesis: whether unanticipated political events genuinely yield abnormal returns.

**Results and discussion**

This study conducted a comprehensive event analysis employing Levene’s test, dummy variables regression, and the estimation of abnormal return estimation to examine the impact of unforeseen political events on the Insurance Sector Index and NEPSE.

Levene’s Test of Homogeneity of Variance

Levene’s Test was employed to assess the impact of five selected unanticipated political events on both the Insurance Sector Index and the NEPSE Index. The results are presented in Table 2.

<table>
<thead>
<tr>
<th>Window Frames</th>
<th>Event 1_NCWE</th>
<th>Event 2_PC</th>
<th>Event 3_NB</th>
<th>Event 4_ALE</th>
<th>Event 5_BGWE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INS</td>
<td>NI</td>
<td>INS</td>
<td>NI</td>
<td>INS</td>
</tr>
<tr>
<td>W1: (-10,-1)</td>
<td>0.13</td>
<td>29.01**</td>
<td>0.11</td>
<td>0.17</td>
<td>52.97**</td>
</tr>
<tr>
<td>W2: (0,+10)</td>
<td>84.88**</td>
<td>32.44</td>
<td>83.98**</td>
<td>13.64</td>
<td>86.51**</td>
</tr>
<tr>
<td>W3: (+2,+10)</td>
<td>0.056</td>
<td>3.24</td>
<td>0.06</td>
<td>0.36</td>
<td>0.23</td>
</tr>
<tr>
<td>W4: (+10,+10)</td>
<td>33.28**</td>
<td>191.46</td>
<td>32.55**</td>
<td>24.69**</td>
<td>33.82**</td>
</tr>
<tr>
<td>W5: (-5,+5)</td>
<td>84.60**</td>
<td>289.49</td>
<td>83.95**</td>
<td>0.22</td>
<td>2.56</td>
</tr>
<tr>
<td>W6: (+3,+3)</td>
<td>313.50</td>
<td>0.14</td>
<td>1.00</td>
<td>1.864</td>
<td>0.342</td>
</tr>
</tbody>
</table>

Note: Event 1_NCWE represents Nepali Congress winning election, Event 2_PC means Promulgation of the Constitution, Event 3_NB stands...
for Nepal blockade, Event 4_ALE stands for Announcement of local election, and Event 5_BGWE stands for Bam Gathabandan wins elections. W1, W2, W3, W4, and W5 represent respective event windows for the analysis. ‘*’ and ‘**’ signs represent the significance at 0.01 and 0.05 level.

Nepali Congress Wins Election (Event 1): The NEPSE index exhibited significant (p < 0.05) differences in variances for all event windows, emphasizing the substantial impact of the event on stock prices, corroborating the findings of prior studies (Streb, 2001; Dangol, 2008). Conversely, the Insurance Sector Index showed significant differences (p < 0.05) mainly in the pre-event period, aligning with the notion of a more concentrated impact during that phase (Adhikari & Phuyal, 2016).

Promulgation of the Constitution (Event 2): Both NEPSE and the Insurance Sector Index experienced statistical insignificance (p > 0.05) in the pre and post-event periods, with significant impacts during the announcement period and surrounding windows. This suggests sensitivity to constitutional developments, particularly during specific event windows, consistent with the findings of prior research (Swank, 1988, Streb, 2001).

Nepal Blockade (Event 3): The termination of the 2015 Nepal Blockade had a substantial impact on both the NEPSE and the Insurance Sector Index, with statistical significance observed in the majority of window frames for NEPSE (p < 0.05), consistent with the findings of previous research (Dangol, 2008). The concentration of effects in the pre-event and announcement periods for the Insurance Sector aligns with prior expectations (Adhikari & Phuyal, 2016).

In NEPSE, statistical significance (p < 0.05) was observed in the majority of window frames, while the Insurance Sector exhibited effects concentrated in the pre-event and announcement periods.

Announcement of Local Election 2017 (Event 4): This event did not exert a statistically significant influence on either the Insurance or the NEPSE Index (p > 0.05), highlighting the market’s resilience to this particular political development.

Bamghathabandan Wins Election (Event 5): The unification of Communist Party Nepal (CPN) and United Marxsbad and Leninbad (UML), resulting in Bamghathabandan’s victory, demonstrated a significant impact on the NEPSE index (p < 0.05), with notable differences in variances during pre-event and post-event periods. Conversely, the Insurance Sector Index did not show statistically significant differences (p > 0.05), indicating a subdued response within this sector.

The analysis suggests that political events are crucial in shaping the Nepalese stock market. The most influential event, based on the overall impact and statistical significance, appears to be the termination of the 2015 Nepal Blockade. This event had significant repercussions for both the NEPSE and Insurance Sector indices, emphasizing the market’s responsiveness to geopolitical developments. These findings align with prior research by Julio and Yook (2012), emphasizing the temporal and varying impacts of political events on different sectors within the stock market.

Dummy Variable Regression Results: In this analysis, the one-to-one impact of each unanticipated political event on stock returns has been examined through dummy variable regression models for different event windows. The results are summarized for both the Insurance Sector Index and the NEPSE index in Table 3.

<table>
<thead>
<tr>
<th>Event</th>
<th>Intercept</th>
<th>Win_1</th>
<th>Win_2</th>
<th>Win_3</th>
<th>Win_5</th>
<th>Win_6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event 1 (NCWE)</td>
<td>0.007*</td>
<td>0.005*</td>
<td>0.488*</td>
<td>-0.468*</td>
<td>0.005**</td>
<td>0.004*</td>
</tr>
<tr>
<td>Event 2 (PC)</td>
<td>-0.094</td>
<td>-0.004**</td>
<td>0.495</td>
<td>-0.500</td>
<td>0.005**</td>
<td>-0.001**</td>
</tr>
<tr>
<td>Event 3 (NB)</td>
<td>-0.002**</td>
<td>-0.189**</td>
<td>-0.003*</td>
<td>-0.285*</td>
<td>0.263*</td>
<td>0.097*</td>
</tr>
<tr>
<td>Event 4 (ALE)</td>
<td>0.001</td>
<td>0.003*</td>
<td>0.002</td>
<td>0.003</td>
<td>0.006**</td>
<td>-0.003*</td>
</tr>
<tr>
<td>Event 5 (BGWE)</td>
<td>-0.001*</td>
<td>-0.002**</td>
<td>-0.004</td>
<td>-0.003</td>
<td>0.008*</td>
<td>-0.005**</td>
</tr>
</tbody>
</table>

Table 3: Dummy Variable Regression Results
Regression coefficient is significant at 0.01 and 0.05 with ‘***’ and ‘*’. The regression results on the influence of each event on the Stock Return of the Insurance Sector (SRINS) are illustrated in Table 3. The findings suggest highly significant (p < 0.05) impacts of unanticipated political events, with notable exceptions in window frames 2 and 3. This aligns with prior studies highlighting the significant influence of political events on market dynamics (Streb, 2001; Dangol, 2008). Interestingly, the lack of post-event significance suggests a considerable degree of information leakage in the pre-event period, consistent with prior findings (Adhikari & Phuyal, 2016). This emphasizes the market’s ability to anticipate and adjust to political events in advance. Table 4 presents the regression results for the NEPSE index, indicating the effects of unanticipated political events on stock returns. Most window frames exhibit significant impacts, particularly in windows 1, 5, and 6 (p < 0.05), supporting prior research on the substantial impacts of political events during these periods (Swank, 1988; Dangol, 2008). However, certain windows do not reject the null hypothesis (p > 0.05), suggesting a potential absence of statistically significant impacts during those specific timeframes, consistent with previous findings (Julio & Yook, 2012).

The estimated abnormal returns provide empirical results into the impact of unanticipated political events on the Insurance Sector Index and NEPSE index, with a focus on specific event windows. Table 4 offers a detailed breakdown of abnormal returns for both sectors across six event windows.

### Table 4: Estimation of Abnormal Returns

<table>
<thead>
<tr>
<th>Event</th>
<th>Estimated Period</th>
<th>Win_1</th>
<th>Win_2</th>
<th>Win_3</th>
<th>Win_4</th>
<th>Win_5</th>
<th>Win_6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1_NCWE</td>
<td>(-200, -21)</td>
<td>-0.00295</td>
<td>1.45262</td>
<td>0.11241</td>
<td>0.02628</td>
<td>0.06422</td>
<td>0.10875</td>
</tr>
<tr>
<td>2_PC</td>
<td>0.00078</td>
<td>-0.00079</td>
<td>0.08960</td>
<td>-0.00159</td>
<td>0.04656</td>
<td>0.09184</td>
<td>0.13934</td>
</tr>
<tr>
<td>3_NB</td>
<td>0.00109</td>
<td>-0.09271</td>
<td>0.09159</td>
<td>0.00084</td>
<td>0.00383</td>
<td>0.09186</td>
<td>0.14450</td>
</tr>
<tr>
<td>4_ALE</td>
<td>-0.00257</td>
<td>0.00052</td>
<td>-0.00889</td>
<td>0.00206</td>
<td>0.00044</td>
<td>-0.00084</td>
<td>-0.00211</td>
</tr>
<tr>
<td>5_BGWE</td>
<td>0.00150</td>
<td>-0.00016</td>
<td>0.00084</td>
<td>0.00098</td>
<td>0.00139</td>
<td>0.00318</td>
<td>0.00036</td>
</tr>
<tr>
<td>Average</td>
<td>0.00075</td>
<td>0.27190</td>
<td>0.05711</td>
<td>0.05571</td>
<td>0.02329</td>
<td>0.05896</td>
<td>0.08828</td>
</tr>
</tbody>
</table>
For the Insurance Sector (Table 4), the highest abnormal return is observed in window 1 (-10, -1), indicating a substantial impact during the pre-event period (0.27190). The cumulative averages demonstrate the influence of events not only in the post-event period but also in the lead-up to the announcements. The lowest abnormal return is observed in the estimated period (0.00075), suggesting a potential signaling effect with information leakage before event announcements. The results emphasize the temporal dynamics of stock returns within the insurance sector, aligning with prior research (Karki, 2020).

In contrast, the NEPSE index reveals interesting patterns. The highest abnormal return occurs in window 5 (-5, +5), indicating a notable impact after the flow of information (0.20462). Window 2 (0, +10) follows closely with a substantial abnormal return (0.08992). Interestingly, the estimated period shows a negative abnormal return, gradually rising as it approaches the event announcement. This signifies a strong signaling effect in NEPSE returns, consistent with prior research emphasizing the market’s responsiveness to impending political developments (Dangol, 2008). Comparatively, the insurance sector exhibits considerable abnormal returns in the periods preceding and succeeding an event, while NEPSE experiences pronounced impacts post-event. This implies a divergent market response, with the insurance sector influenced by both anticipation and realization of political events, whereas NEPSE primarily reacts post-announcement. Analyzing the cumulative averages, it becomes evident that the ‘Nepali Congress Wins Election’ (Event 1_NCWE) significantly influences both indices. Event 1_NCWE yields the highest abnormal return in window 1 (1.45262) for the Insurance Sector and in window 2 (0.26630) for NEPSE, indicating its substantial influence on stock returns in the Nepalese market, consistent with prior literature emphasizing the importance of major political events on market dynamics (Dangol, 2008; Adhikari & Phuyal, 2016, Karki, 2020). Among all the events, the ‘Nepali Congress Wins Election’ emerges as the most influential political event impacting stock returns in the Nepalese market. The summary of the hypothesis testing is mentioned in Table 5.

Comparatively, the insurance sector exhibits considerable abnormal returns in the periods preceding and succeeding an event, while NEPSE experiences pronounced impacts post-event. This implies a divergent market response, with the insurance sector influenced by both anticipation and realization of political events, whereas NEPSE primarily reacts post-announcement. Analyzing the cumulative averages, it becomes evident that the ‘Nepali Congress Wins Election’ (Event 1_NCWE) significantly influences both indices. Event 1_NCWE yields the highest abnormal return in window 1 (1.45262) for the Insurance Sector and in window 2 (0.26630) for NEPSE, indicating its substantial influence on stock returns in the Nepalese market, consistent with prior literature emphasizing the importance of major political events on market dynamics (Dangol, 2008; Adhikari & Phuyal, 2016, Karki, 2020). Among all the events, the ‘Nepali Congress Wins Election’ emerges as the most influential political event impacting stock returns in the Nepalese market. The summary of the hypothesis testing is mentioned in Table 5.

### Table 5: Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H$_1$: Nepal Congress winning CA election (Event 1) significantly influences insurance and NEPSE stock returns.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H$_2$: Constitution promulgation (Event 2) significantly impacts insurance sector and NEPSE stock returns.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H$_3$: End of the unannounced blockade (Event 3) substantially affects insurance and NEPSE stock returns.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H$_4$: Local election announcements (Event 4) significantly influence stock returns in the insurance sector and NEPSE.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H$_5$: Bamghathabandan winning election (event 5) significantly influences the insurance sector and NEPSE stock returns.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H$_6$: Nepalese equity market is weak-form efficient, reflecting past information in current prices.</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

### Conclusions

This study comprehensively examines the impact of unanticipated political events and their ripple effects on the Nepalese stock market, with a specific emphasis on the insurance sector. Notably, the post-event and announcement periods did not exhibit a statistically significant relationship with the unexpected events. However, the pre-event period, specifically window frame 1 (-10, -1) days, demonstrated a pronounced signaling of information leakage, suggesting that the market adjusted rapidly. This influence had a significant influence not just on the specific insurance sector index but also on the main stock market index, NEPSE. The analysis of window frames revealed that window 1 (-10, -1) emerged as the most significantly impacted, followed by windows 5 (-5, +5) and 6 (-3, +3). These windows experienced the greatest influence during the pre-event period, with relatively less impact in the post-event window 3 (+2, +10). Nepali Congress Wins Election (Event 1) and End of Nepal Blockade (Event 3) were found as the most impactful events for the both Insurance and NEPSE index. Similarly, pre-event windows (1, 5, and 6) are found more impactful in influencing the stock returns for both insurance and
the NEPSE index. For the Insurance Sector, the highest abnormal return (0.272) is observed in window 1 (-10, -1), indicating a substantial impact during the pre-event period. In contrast, the NEPSE index reveals the highest abnormal return (0.205) in window 5 (-5, +5), indicating a notable impact following the dissemination of information. Compared to the market index (NEPSE), the insurance industry demonstrates substantial abnormal returns and is more affected by the effects of political events. This study aligns with the findings of previous research (Adhikari & Phuyal, 2016; Karki, 2020), offering practical recommendations for investors and regulators. Future research endeavors could consider alternative methodologies, expanding beyond the scope of this study. Exploring avenues such as employing primary data sources and adopting the cognitive-behavioral approach proposed by Devkota et al. (2023) could offer a more comprehensive analysis and reveal additional factors shaping the market.

Acknowledgment: ‘The University Grants Commission, Nepal provided financial support for this study under UGC Award Number: PhD-77/78-Mgmt-01. The facilities provided by the Kathmandu University School of Management contribute to the quality of this work. The authors are grateful to them.’

Funding Information
This research is funded by the University Grants Commission under UGC Award Number: PhD-77/78-Mgmt-01. Sincere gratitude is extended to the University Grants Commission, Sanothimi, Bhaktapur, for their generous funding.

Authors’ contributions
Mention the contribution of each author to bring the paper in this stage. Please include the following job and mention the contributor’s name on each.

Concept or design of the work: Dipendra Karki, Sajan Kakshyapati, Hamadi Fakhfakh

Data collection: Sajan Kakshyapati, Ganesh Bhattarai

Data analysis and interpretation: Dipendra Karki, Sajan Kakshyapati, Dilini Randika

Drafting the article: Ganesh Bhattarai, Hamadi Fakhfakh, Dilini Randika

Final approval of the version to be published: Dipendra Karki, Ganesh Bhattarai, Hamadi Fakhfakh

Disclosure statement / Conflict of interest: The author declares no conflict of interest.

Ethical statement: This research did not require ethical approval as it does not involve any human or animal experiments.

Data deposition: Data have been used only for this paper.

Author ORCID information
Dipendra Karki: ORCiD: https://orcid.org/0000-0001-9045-7423
Sajan Kakshyapati: ORCiD: https://orcid.org/0002-0008-3015-5966
Ganesh Bhattarai: ORCiD: https://orcid.org/0000-0001-9163-5172
Hamadi Fakhfakh: ORCiD: https://orcid.org/0000-0002-7652-5044
Dilini Randika: ORCiD: https://orcid.org/0000-0003-3775-778X

References


DOI: 10.3126/qjmss.v4i1.45866

DOI: 10.1057/palgrave.eej.9050031

DOI: 10.19030/jabr.v20i4.2227

DOI: 10.1111/j.1540-6261.1994.tb00083.x

DOI: 10.2469/faj.v50.n4.63


DOI: 10.1007/s10551-007-9621-z

DOI: 10.2139/ssrn.882653


DOI: 10.2307/2325598

DOI: 10.1111/j.1540-6261.1988.tb04601.x


DOI: 10.2307/2111203