



Faculty of Economic and Business

**The Effect of General Election on Stock Volatility and its Determinants:
Evidence from Malaysia**

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The Effect of General Election on Stock Volatility and its Determinants:
Evidence from Malaysia

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



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ABSTRACT

This study analyzes the elections impact on stock market volatility in Malaysia through the Political Business Cycle across indices during GE13, GE14, and GE15. Using five volatility proxies, findings indicate distinct volatility patterns across indices. Log absolute return-based volatility shows minor pre-election effects but occasional post-election spikes, reflecting temporary uncertainty. Range-based volatility highlights significant election-day reactions in GE13 and GE14, with stabilization afterward. GARCH-based volatility suggests prolonged post-election uncertainty, particularly in GE14. Squared return volatility captures delayed reactions, indicating that investors take time to process outcomes, while absolute return-based volatility shows short-lived spikes immediately after elections.

Regression analysis confirms that election-related factors such as the number of political parties, minority in government, and margin of victory significantly influence market volatility. More political parties stabilize broad indices but increase volatility in industrial and plantation indices. Minority governments reduce volatility in construction and finance indices but elevate it in plantation indices due to policy uncertainty. A larger margin of victory generally lowers volatility in construction and finance but raises it in industrial and plantation indices due to anticipated regulatory changes. Political Business Cycle variables, including monetary and fiscal policies, significantly influence volatility. Increased money supply raises volatility in industrial and plantation indices, while expansionary fiscal policies lower volatility in property and technology sectors. Foreign direct investment (FDI) stabilizes markets by enhancing liquidity and investor confidence, though sudden outflows due to political uncertainty can heighten volatility, particularly in finance and construction

sectors. Stable and transparent governance policies are crucial in mitigating election-induced market instability.

Keywords: Malaysia General election, Stock Volatility, Volatility Event Study, Efficient Market Hypothesis, Volatility Measurements

Kesan Pilihan Raya Umum terhadap Volatiliti Saham dan Penentunya: Bukti dari Malaysia

ABSTRAK

Kajian ini menganalisis kesan pilihan raya terhadap volatiliti indeks di Malaysia melalui Kitaran Perniagaan Politik semasa PRU13, PRU14, dan PRU15. Dengan menggunakan lima proksi volatiliti, kajian ini meneliti corak volatiliti dan reaksi indeks yang berbeza terhadap pilihan raya. Pertama sekali, penggunaan Log Absolute Return sebagai ukuran volatiliti telah menunjukkan kesan sebelum pilihan raya yang minima tetapi terdapat kenaikan mendadak selepas pilihan raya yang sejurusnya mencerminkan ketidakstabilan pasaran yang bersifat sementara. Volatiliti berdasarkan Range-based pula menunjukkan reaksi ketara pada hari pilihan raya terutamanya bagi PRU13 dan PRU14, diikuti dengan pemulihan pasaran. Volatiliti berasaskan GARCH menunjukkan kemeruapan indeks yang berpanjangan selepas pilihan raya, iaitu PRU14. Ukuran volatility seterusnya iaitu Squared Return menangkap reaksi yang tertangguh, menunjukkan bahawa pelabur mengambil masa untuk memproses keputusan pilihan raya, manakala volatiliti Absolute Return pula menunjukkan kenaikan volatiliti yang mendadak dalam jangka pendek sejurus selepas pilihan raya. Analisis regresi mengesahkan bahawa faktor berkaitan pilihan raya seperti bilangan parti politik, kerajaan minoriti, dan margin kemenangan mempunyai pengaruh ketara terhadap volatiliti indeks. Bilangan parti politik yang lebih banyak menstabilkan indeks pasaran secara keseluruhan tetapi meningkatkan volatiliti dalam indeks perindustrian dan perladangan. Kerajaan minoriti mengurangkan volatiliti dalam indeks pembinaan dan kewangan tetapi meningkatkan volatiliti dalam indeks perladangan akibat dasar polisi yang tidak menentu. Margin kemenangan yang lebih besar secara amnya mengurangkan volatiliti dalam indeks pembinaan dan kewangan tetapi meningkatkan

volatiliti dalam indeks perindustrian dan perladangan akibat perubahan polisi yang dijangkakan. Pembolehubah dalam Kitaran Perniagaan Politik, termasuk dasar monetari dan fiskal, mempunyai kesan ketara terhadap volatiliti. Peningkatan bekalan wang didapati meningkatkan volatiliti dalam indeks perindustrian dan perladangan, manakala dasar kewangan yang meningkat mengurangkan volatiliti dalam sektor hartanah dan teknologi. Pelaburan langsung asing (FDI) menstabilkan pasaran dengan meningkatkan kecairan dan keyakinan pelabur, namun pengaliran keluar FDI secara mendadak berikutan ketidakstabilan politik boleh meningkatkan volatiliti, terutamanya dalam indeks kewangan dan pembinaan. Oleh itu, dasar tadbir urus yang stabil dan telus adalah penting untuk mengurangkan ketidakstabilan pasaran akibat pilihan raya.

Kata kunci: *Pilihan umum Malaysia, Kemeruapan pasaran saham, Hipotesis Pasaran Cepak, Kaedah Event Study, Kaedah Ukuran Kemeruapan*

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LIST OF ABBREVIATIONS

AAV	Average Abnormal Volatility
AFC	Asian Financial Crisis
AV	Abnormal Volatility
BN	Barisan Nasional
CAAR	Cumulative Average Abnormal Return
CAAV	Cumulative Average Abnormal Volatility
CAR	Cumulative Abnormal Return
CAV	Cumulative Abnormal Volatility
EGARCH	Exponential Generalised Autoregressive Conditional Heteroskedasticity
EMH	Efficient Market Hypothesis
FBM KLCI	FTSE Bursa Malaysia Kuala Lumpur Composite Index
FDI	Foreign Direct Investment
GARCH	Generalised Autoregressive Conditional Heteroskedasticity
GDP	Gross Domestic Product
GE	General Election
GLCs	Government-Linked Companies
MCA	Malaysian Chinese Association
MIC	Malaysian Indian Association
OLS	Ordinary Least Square
PBC	Political Business Cycle
PEC	Presidential Election Cycle
PH	Pakatan Harapan

PN	Perikatan Nasional			
TGARCH	Threshold	Generalised	Autoregressive	Conditional
	Heteroskedasticity			
UK	United Kingdom			
UMNO	United Malays National Organisation			
US	United States			

CHAPTER 1

INTRODUCTION

1.1 Introduction

Chapter One is the introduction of the study which covers six subsections. Section 1.2 provides an overview of the background of study in relation to political factors and the stock market in the Malaysian context. Section 1.3 is a problem statement in which issues are well- addressed here. The objectives of the study are constructed and presented in Section 1.4. Section 1.5 discusses the significance of the study and Section 1.6 presents the organization of the study.

1.2 Background of Study

In the history of financial economics, stocks are subject to the impacts of many independent variables and political factors have been thought of as a key factor in determining the stock market performance. The development and stable performance of stock market is an indicator of better economic health of the country. Levine and Zervos (1998) argue that a stable stock market performance helps to draw in investments, which in turn boosts the overall economic competitiveness of the country. Although there is no direct relationship between political factor and stock market performance, it is still a significant indicator to measure the stock market movement. According to Ali (1997), a stable political environment of a country is likely to increase capital inflow that will indirectly enhance the performance of firm, the industry and, the economy in general. It is also acknowledged that stable political situation is an indication of a low systematic investment risk which encourages growth, capital investment and improves economy's performance based on the statement of Bechtel (2009).

Conversely, unstable political environment or known as political instability presents poor economic condition. According to Alesina et al. (1992), the term political instability is defined as high propensity of change in government due to several factors such as conflict between political parties, inefficiency of local administration in conducting legal and transparent political election, good governance and corruption (Rahman and Rashid, 2018). In a study of Duscheneau and Gartner (1990), the scholars postulate that the unrest political conflict would jeopardize a country's financial growth because of foreign investor's preferences over stable and transparent political environment. Furthermore, Aisen and Veiga (2011) stipulate that the uncertainty raised from unstable political environment is prone to be volatile due to a more frequent switch of policies. A possible reason could be new government often associated with uncertainty about the new government policies which leave the risk-averse economic agents no choice but to "exit" the economy (Pastor and Veronesi, 2012) and thus, negatively affecting foreign direct investment (Asiedu, 2006). Therefore, it is not surprising that the market transaction is interrupted by political instability i.e. political election (Jorion and Geotzmann, 1999) since there is a convincing evidence that investors' sentiment are correlated to political election in financial market (Chiu et al., 2005; Colon-De-Armas et al., 2017) while figuring out stock and industries that could benefit from the policies of the winning party.

For years, academicians, policy-makers and market participants are keen to analyze the political-induced anomalies for portfolio diversification purpose. Political election considers as one of the most anticipated political news in the financial market. Election is conducted to form a new government that is more competent and must be able to take care of the social welfare. Chan, Chui and Kwok (2001) revealed that investors and analysts often possess wait-and-see position when it comes to the implication on the content of political

news before active trading of stock. Addoum and Kumar (2016) suggest that stock return predictability spans 17 percent to 27 percent and even stronger during the periods of political transition. On the other hand, Durnev (2010) argued that investment-to-price sensitivity is becoming less sensitive when the election outcomes are less certain particularly in countries with higher corruption, large state ownership and weak standards of disclosure by politicians. Moreover, information contained in stock price around election years appears less relevant to the investors as majority of the investment is politically motivated. This is because in countries where investment is highly dependent on political ties, politically connected managers can easily access to preferential treatment from politicians and hence, allowed stock manipulation to occur (Repousis, 2014). In this case, stock prices have less room to guide investment decisions from political perspective.

Apart from that, investors will be less willing to base decisions on the low quality information reflected on the stock prices if the election is uncertain. This makes perfect sense because as the amount of the private firm-specific information contained in the stock price increases, managers are likely to place investment based on the statement of Durnev et al. (2004). From stock price's information view, poor information quality is expected when it comes to political uncertainty. According to Wang and Lin (2009), the ambiguous political situation associated with major bills, budget and other important affairs are giving the investors hard time to predict the future of the country because the political decision is at the hand of the voters. As a result, the implied volatility of the financial market increases is in line with the uncertain of election outcome and induce negative stock market return (Bialkowski et al., 2008; Li and Born, 2006; Goodell and Vahamaa, 2013). On the contrary, investors should expect a positive stock returns following the resolution of political uncertainty. Also, the investors tend to pay less attention to the prices when the election

outcome is firmly established and well-informed in relative to outside investors. In summary, political risk arises from political instability is a threat to the expected returns on investment.

1.2.1 Overview of Malaysia General Election

Since independence, Malaysia's politic has relatively been calm and stable from about 1957 and till the early 1990s. There have been no major recorded disturbances or untoward incidences during that period. For six decades, Malaysia was governed by a single-ruling party, National Front (Barisan Nasional, BN) which comprised of three prominent political members, namely United Malays National Organisation (UMNO), Malaysian Chinese Association (MCA) and Malaysian Indian Association (MIC). Table 1.1 presents a summary of Malaysian general election during the sample period of 1995 to 2020. It covers six GEs (the 9th -14th GEs) which governed by three prime ministers so far. During the 9th to 10th GEs, the BN coalition was led by the fourth prime minster of Malaysia, Mahathir Mohamad and had been serving the country for four terms consecutively. After 22 years of serving, Mahathir Mohamad stepped down as prime minister and BN coalition was under the leadership of Abdullah Ahmad Badawi, the fifth prime minister for the 11th and 12th GEs. For the 13th GEs, Najib Razak led the coalition and became the sixth prime minister. In the latest GEs, BN coalition defeated by PH coalition ruled by former Prime Minister, Mahathir Mohamad which making him the seventh prime minister.

After two years of serving, PH government collapsed and replaced by Perikatan Nasional (PN) which governed by Tan Sri Muhyiddin Yassin, the 8th Malaysia's Prime Minister. The sudden dissolution of parliament at the end of February 2020 led to the appointment of premiership without official election to form new government during the unprecedented event such as pandemic.

Table 1.1: Malaysia's Prime Minister Tenure from 1995 – 2022.

Year	General Election	Tenure Prime Minister	Coalition
1995	9	Dr Mahathir Mohamad	Barisan Nasional (BN)
1999	10	Dr Mahathir Mohamad	Barisan Nasional (BN)
2004	11	Ahmad Badawi	Barisan Nasional (BN)
2008	12	Ahmad Badawi	Barisan Nasional (BN)
2013	13	Najib Razak	Barisan Nasional (BN)
2014	14	Dr Mahathir Mohamad	Pakatan Harapan (PH)
2020	-	Muhyiddin Yassin	Perikatan Nasional (PN)
2021	-	Ismail Sabri Yaakob	Barisan Nasional (BN)
2022	15	Anwar Ibrahim	Pakatan Harapan (PH)

The 9th GE was held in 1995 and it was the greatest victory for BN coalition in the election history in Malaysia. The coalition recorded for gaining 84 percent of parliamentary seats and winning 65 percent of the popular votes. The successful victory of BN coalition was due to strong economic growth and political stability during the 1990s. According to Khoo (2000), the country was flourished with employment opportunities and massive infrastructure development had been done to the new Chinese villages which brought the desired result of BN at that time. It was obvious that the BN victory could be explained by the majority supports from Malays and non- Malays and from urban as well as rural constituencies except Kelantan, as a result of voters' confidence in the governance of BN based on the statement of Chin (1996). On 29 November 1999, Malaysia went to the 10th GE. BN was confronted by opposition which spearheaded by former deputy prime minister, Anwar Ibrahim. The sacking of Anwar Ibrahim on 2 September 1998 was one of the most significant political events during that time and he was accused of a sex scandal and corrupt practices. Following the 10th GE, it was described as the "fight of the decade" with intermittent street demonstrations about Anwar Ibrahim's issues to protest against BN's government (Ahmad, 2000). However, the electoral outcome still favoured BN coalition

with two- third majority but fewer majority seats. For the 11th GE which was held on 21 March 2004, the election result was a surprise to many Malaysians as the BN coalition had survived another election by winning 90 percent of the total seats in the Parliament and 63.9 percent in terms of popular votes. The newly appointed prime minister, Abdullah Ahmad Badawi had promised reforms and development for the country. Unfortunately, the second election under the administration of Abdullah Ahmad Badawi did not go well as planned. It started to fall apart in the 12th election which was held in 2008. The 12th GE was known as political tsunami as the electoral outcome was recorded as the worst result for BN when they lost two-thirds majority in the Parliament and five states to the opposition parties. The coalition only secured 63 percent of the parliamentary seats and 51 percent of the popular vote. In 2009, Abdullah Ahmad Badawi resigned during his second term of serving as prime minister and handed power to Najib Razak. Despite the failure of Abdullah's administration, economic factors such as high oil prices, inflation and global economic slowdown also contributed to the electoral shocks (Moten, 2009).

In the 13th GE, the polling number of BN coalition kept dropping and created political uncertainty. Khoo (2013) expected that BN government defeated by their opponent due to the strength of the PH coalition. However, BN won the election again and managed to occupy 133 seats with 46.5 percent of vote as compared to PH coalition with 89 seats and 53.5 percent of votes. Although BN had successfully been re-elected, this election outcome induced surprise to the investors. When the Malaysian House of Representatives held an election in 2018, the PH coalition led by Mahathir Mohammad, had surprisingly won the majority seats with 125 out of 222 and 49.9 percent of votes. BN coalition, on the other hand, had most of the votes from Sarawak, Perak and Johor which entitled them a 97 of Parliament seats with 50.1 percent of votes. Upon the victory, PH coalition formed federal government

and obtained political rights until present. Nazri (2018) had identified the four major factors that constituted to the triumph of PH and the fall of BN and these are: the inclusion of Mahathir and two Malay/Bumiputra (“the natives”) political parties, negative issues surrounding Najib’s administration, the rupture of the elites within the ruling regime as well as the advancement of information and communications technology through the emergence of digital in Malaysia. However, the PH government was only able to sustain for two years due to several unsatisfaction among the political members within the same party.

Following the collapsed of Pakatan Harapan and resignation of Dr Mahathir Mohamed, the appointment of Muhyiddin Yassin has been selected as the next prime minister after obtaining nominations from political party without proceeding to federal election due to pandemic crisis. However, his premiership was short-lived after 168 days after losing his majority support from his political party due to the failure of handling the pandemic crisis and resigned on August 2021. Shortly after that, Ismail Sabri Yaakob replaces Muhyiddin Yassin by securing the backing of 114 lawmakers from the same coalition party that collapsed without going through federal election. Nevertheless, the appointment of Ismail Sabri is unlikely to inspire hope that the management of the pandemic will improve because of his failure to control the pandemic during his time as deputy prime minister.

Over the sixty years, BN coalition held a strong position on winning the election since independence. The table illustrated that the percentage of seats and votes were significantly diminished after the 11th GE. Whilst, PH victory in the 14th GE which was the only hope for Malaysian only sustained for 24 months or so due to political conflict within the political party and eventually replaced by unofficial coalition, PN in the early 2020. The

never-ending political turmoil in Malaysia creates instability, and consequently induces market uncertainty. This could probably explain as to why general election in Malaysia is highly significant to the investors.

Table 1.2: List of Federal General Election in Malaya and Malaysia from 1955-2022.

No	Year	General Election	Total seats	No of seats won		Percentage of seats		Percentage of votes (%)	
				Gov.	Opp.	Gov.	Opp.	Gov.	Opp.
	1955**		52	51	1	98.1	1.9	79.6	20.4
1*	1959**	1	104	74	30	71.2	28.8	51.7	48.3
2	1964**	2	104	89	15	85.6	14.4	58.5	41.5
3	1969	3	144	95	49	66	34	49.3	50.7
4	1974	4	154	135	19	87.7	12.3	60.7	39.3
5	1978	5	154	130	24	84.4	15.6	57.2	42.8
6	1982	6	154	132	22	85.7	14.3	60.5	39.5
7	1986	7	177	148	29	83.6	16.4	55.8	44.2
8	1990	8	180	127	53	70.6	29.4	53.4	46.6
9	1995	9	192	162	30	84.4	15.6	65.2	34.8
10	1999	10	193	148	45	76.7	23.3	56.5	43.5
11	2004	11	219	198	21	90.4	9.6	63.9	36.1
12	2008	12	222	140	82	63.1	36.9	50.3	49.7
13	2013	13	222	133	89	59.9	40.1	46.5	53.5
14	2018	14	222	125	97	56.3	43.7	49.9	50.1
15	2022	15	222	148	74	66.7	33.3	59	41

1.2.2 Malaysia Equity Market

As one of the vast growing emerging market in Asia, Bursa Malaysia is significantly important for the development of economic. It has been established as a resource allocation platform which allows international capital flows into Malaysia (Butler, Dhillon & Thiagarajah, 1991). In 1973, Malaysia stock market was established and formerly known as Kuala Lumpur Stock Exchange (Ali, 1997). Lim et al. (2005) later learned that the securities exchange company was renamed as Bursa Malaysia following a demutualization exercise in 2004. Currently, there are about 1000 companies listed on the Main and Ace market boards. All of the listed companies are categorized in accordance with sector classification. The introduction of sectoral indices in Bursa Malaysia allows the investors to make cross border comparison between sectors and industries in Malaysia and other countries as well. It also served as indirect measurement of the country's economic performance and provides alternative ways for investors to diversify their risk despite of relying on the stock market alone.

To date, there are a total of 13 sector indices namely Construction, Consumer Products & Services, Energy, Health Care, Industrial Products & Services, Plantation, Property, REIT, Technology, Telecommunication & Media, Transportation & Logistics and Utilities. Of all the Bursa Sectorial Index, three of the sectors namely Consumer Products and Services index, Financial Services Index and Industrial Products and Services Index are rebranded and renamed whereas the five new sectors are Energy Index, Healthcare Index, Telecommunication and Media Index, Transportation and Logistics and Utilities Index and the remaining index remain unchanged (Bursa Malaysia Berhad, 2017). In the past, Malaysia stock market has experienced considerable growth and turbulence due to political instability and to a certain degree, such event has significantly influenced the stock market. Apparently,

there is an obvious up-and-down swing in the trend path of the relevant indices around the election starting from the 9th GE (25th April 1995) to 14th GE (9th May 2018). Additionally, the vertical dashed line in the plots show that the general election appears to have a relatively more substantial impact on the FBM KLCI as well as majority of the industry index as depicted in Figure 1.1.

According to Figure 1.1, the trend path for the main market and sectoral index performance for 1995 and 1999 are consistent in pattern throughout the ruling period of Barisan Nasional which helmed by Tun Dr Mahathir Mohamad. To begin with, the FBM KLCI and the rest of the sectoral indexes were keeping up its uptrend momentum before the entire equity market being dragged by Asian Financial Crisis (henceforth, AFC) in 1997. Prior to the 9th general election, the FBM KLCI was registered at 975.05 points and continued making losses during the post-election trade as much as 0.76 percent to 958.63 points before the market rebounded. From there, an upward momentum began and shown in the main market has continued for 21 months with a percentage increase of 29 percent to 1228 points. Similarly, consumer product and services index, property index, plantation index, industrial product and services index, financial services index, and construction index have percentage increase of 47 percent, 6 percent, 10 percent, 58 percent and 51 percent, respectively. The strong market growth led primarily by export-oriented industries in the early 90s as Malaysia shifted from the traditional agriculture and resource-based economy to one based on manufactured goods.

Unfortunately, the entire equity market slumped to the lowest level in history following the 1997 AFC. The percentage decline was the most severe, the FBM KLCI displayed 72 percent drop in 18 months. Among the underperformed sectoral indexes were

construction index (down 88 percent to 431.62 points), property index (down 85 percent to 70.35 points) and financial services index (down 84 percent to 1751.45 points) as illustrated in Figure 1.1. 18 months later, the FBM KLCI had recovered slowly from the crisis but the index remained between 300 and 1000-point territory between 1999 and 2004, Malaysian had experienced two economic crises namely Dotcom Bubble and Severe Acute Respiratory Syndrome (SARS) outbreak which occurred on February 18, 2000 and April 23, 2003, respectively during the fifth term of Tun Dr Mahathir Mohamad as Malaysia Prime Minister. Thus, it is observed that the local bourse exhibited W-shaped recovery pattern which means double-dip recession happened due to unprecedented event. The FBM KLCI started off the year with a volatile market as the benchmark index hover at 700 to 750 points ahead of GE10. Fortunately, the main index closed up to 0.99 percent at 745.91 points a day before the election but fell 1.51 percent to 734.66 points on the first trading of post-election as shown in Figure 1.1. Nevertheless, the FBM KLCI has demonstrated a 37.05 percent growth in the post- election trade and maintain its positive momentum for only 10 weeks before the market tumbled in response to the Dotcom bubble.

The market index has fallen 41.45 percent to 581.54 points from 993.16 points and stayed in negative territory for 15 months during the Dotcom Bubble (Figure 1.1). Meanwhile, the impact of the SARS outbreak is less severe to the benchmark index when it was recorded for 19.08 percent drop to 632.03 points from the originate index figure, that is, 781.02 points and remained in the negative momentum for 12 months before the market rebounded (Figure 1.1). Other than that, the performance of bursa indices is parallel to the FBM KLCI concerning the economic crises. The sectoral indices impacted by Dotcom Bubble (SARS outbreak) with more than 50 (20) percent are Construction index, Property index, and Financial Services index as illustrated in Figure 1.1.

As for GE11, the one-year post-election performance also settled in negative zone, declining as much as 3.34%. At the time, the market remained sluggish and hover at 800 and 1000-point level with percentage growth of 16.15 percentage declining as much as 3.34%. At the time, the market remained sluggish and hover at 800 and 1000- point level with percentage growth of 16.15 percent for 32 months. Following the stagnant growth, the market rebound kicked in and rose at exponential rate with 39.6 percent at 1,438.55 points. Sectoral indices such as Plantation index, Property index and Construction index have percentage increase of more than 50 percent in terms of growth while Technology index is the only index that exhibits downward trend with 18.7 percent drop at 22.99 points from 28.26 points throughout the five-year term under Abdullah Ahmad Badawi's premiership.

Early 2008, the emerging market was hit by global financial crisis and Malaysia is no exception. Despite the alarming rate that put the FBM KLCI in a red zone, Malaysia has to deal with another federal election which held on March 8, 2008. Hence, it is not surprising to watch the benchmark index in a downward trend and only one year later, the rebound was set in. It is observed that the FBM KLCI performance which coincided with the 2008 global financial crisis, saw the second largest dip after the 1997 AFC and down 40.25 percent to 859.51 points from 1,438.55 points end of 2008 as depicted in Figure 1.1. The 2008 financial crisis which originated from US mortgage bubble kicked in and dragged the global market to the negative territory last for 12 months before returned to positive territory. On a positive note, the benchmark index managed to offset the lost and continued the positive momentum for as long as 27 months with 82 percent increase from 862.60 points to 1572.37 points as shown in Figure 1.1. The performance of the sectoral indexes also suffered from the event and displayed similar pattern as in the FBM KLCI. The crisis has scrapped nearly half of the index points in most of the sectoral index. The downward trend of sectoral indexes is

explained in descending order based on the severity impact following the economic crisis: Plantation index lost 51.8 percent from 8241.22 points to 3970.78 points, Property index lost 49.6 percent from 1009.20 points to 509 points, Construction index lost 48.6 percent from 312.03 points to 160.41 points, Technology index lost 42.1 percent from 22.99 points to 13.30 points, Industrial Product and Services lost 40.6 percent from 112.25 points to 66.69 points, Financial Services index lost 38.8 percent from 10864.14 points to 6646.03 points and lastly, Consumer Product and Services lost 18.4 percent from 339.42 points to 277.06 points.

Prior to the 13th election, the FBM KLCI is seen volatile as the investors dumping many of the shares to avoid uncertainty brought forth by GE13. The FBM KLCI closed 18.69 points or 1.09% lower to 1,694.77 (The Edge, 2013a). It is reported that the benchmark remained in the red zone throughout the day and plunged as much as 1.64% to 1,685.28 points. However, the market displayed positive post-election trade following the ruling coalition (BN) won the election with simple majority. As depicted in Figure 1.1, the FBM KLCI opened 76.8 points higher at 1,771.62 and continued to climb as high as 1,826.22 points before settling at 1,752.02 on the same day (The Edge, 2013b). The market had been continuously to charge upwards the day before and managed to settle at 1,776.73 points, that is 3.4% higher than the pre-election week. It is believed that the bullish sentiment on the bourse was fueled by the continuity of the current investment-friendly policies which practiced by the winning coalition (The Edge, 2013c). As opposed to the most recent general elections, Wong and Tan (2019) added that the FBM KLCI has recorded a positive growth of 6.19% during the first year of GE13. The benchmark index continuous the positive momentum and reached its highest record at 1,881.76 points on July 2014 before the index dive dip twice. The two dips were spotted on December 2014 and August 2015 at 1,673.94

points and 1,532.14 points, respectively as demonstrated in Figure 1.1. The market dips were driven by the weaker global crude oil prices and sluggish Chinese economy (Azman, 2014; Murugiah, 2015). Thean (2015) affirmed that the implementation of the Goods and Services Tax in April, growing political unrest stemming from 1Malaysia Development Bhd's (1MDB) debts and other corruption cases related to Najib Razak were also among the contributing factor to the declining trend of the benchmark index in the first year of 2015. Surendran (2015) reported that the FBM KLCI fell 0.8 percent to 1,795.04 points on May 21, 2015 as heavy selling pulled the benchmark index below 1,800-point level amid the political concern over 1MDB issue. The benchmark index was hover around 1600 to 1700-point before rebounded. The following figure presents the FBM KLCI, Financial Service Index and Consumer Product and Services were on a positive territory whereas the rest remained the opposite three months before the GE14. Despite that, the performance of rest of the sectoral indexes were mostly parallel to the FBM KLCI during the five- year term of Najib Razak's premiership.

As illustrated in Figure 1.1, the year of 2018 and 2019 have been unfavourable year for Malaysia equity market. Despite the political uncertainty under new ruling party, Kok (2019) mentioned that the downward trend of the indexes was also fueled by the growing uncertainties of external economic environment such as rising US interest rates, US-China trade tensions, slowing growth rate in China as well as volatile oil prices are among the contributors to bearish market in Bursa Malaysia. Following the 14th general election year, stocks on Bursa Malaysia began 2018 in a bullish mood, pushing the FBM KLCI to hit an all-time high of 1,895.18 points on April 19.

Figure 1.1 uncovered that the selling pressure has caused the main index to volatile for four consecutive days before May 8 for the purpose of political risk management.

However, Wong (2018) reported the FBM KLCI closed higher and climbed one percent to 1,846.51 points on May 8, 2018 amid Barisan Nasional will have the upper hand in GE14. The index was traded in the range of 1,819.28 to 1,851.73 points on the same day. It is also reported that the trading volume has increased to 2.35 billion shares worth RM2.8 billion the day before the election as compared with Monday's 1.92 billion shares worth RM2.09 billion.

Surprisingly, the FBM KLCI has recorded its highest traded value of RM7.3 billion on the first trading day under Pakatan Harapan despite anticipated uncertainties (The Edge Market, 2018). The main index has closed as high as 0.21 percent to 1,850.42 points end of the day in relative to the morning trade which caused the index to lose 44.30 points which tumbled at 1,802.21 (Figure 1.1). However, less than two years later, the main index has recorded a 16 percent drop from 1823.08 points to 1528.58 points in 22 months due to conflict of interest within the coalition and slowed efforts to improve market and economy (Geraldine, 2020; Malaysiakini, 2019).

During the transition, share price of government-linked companies (GLCs) that were perceived to be closely linked to the previous ruling party had seen major declines since GE14 when the current government decide to review the role of GLCs and remuneration paid to the top executives. Sectoral wise, construction index was the biggest underperformer which fell nearly 45 per cent to 156 points from 282.02 points after the new government pledged to review large-scale infrastructure projects sponsored by the previous government (Figure 1.1). Soon after that, the construction stocks rebounded on the second year as government's reinstatement of mega projects breathes more optimism into sector which allowing the index to surge 75.66 points to 223.4 points. Following that year, plantation

sector also suffered from the low yields and weak commodity price. The plantation was registered at 8037.05 points at the beginning of the year and tumbled at 16 percent to 6751.75 points end of 2018 (Figure 1.1). The plantation index rebounded shortly after that before dive into another slump below the key 7000-point level at the end of 2019 (Figure 1.1).

On February 24, 2020, Malaysian was hit with another political news, Tun Mahathir Mohamad resigned as Malaysia Prime Minister which brought the Pakatan Harapan to collapse in the middle of Covid-19 crisis. In addition to political uncertainty, Tan (2020) reports that Covid- 19 global outbreak and lower crude oil prices has led the FBM KLCI closed down 41.14 points or 2.69 percent at 1,490.06 points on that day. All bursa indices were tumbled and on the same day, Construction and Energy indices were hit with the largest blow, after the indices fell 6.07 percent and 4.06 percent, respectively (Figure 1.1). Following the fifth day of the country without federal government, the benchmark index went into another negative territory and fell 1.52 percent to 1,482.64 points (Figure 1.1). Despite the continues downward trend portrayed in Figure 1.1, Thriven Global Bhd (politically-linked bursa stocks) share price was settled up 9.5 sen at 31.5 sen who owned by Datuk Fakhri Yassin Mahiaddin which is the son of the new prime minister following the appointment of Tan Sri Muhyiddin Yassin as Prime Minister on March 2, 2020 (Chong and Salim, 2020).

March 2020 considers as the most volatile month for the global market and Malaysia is no exception. As the rising confirmed cases of Covid-19 and national lockdown imposed in the country, it is observed that the FBM KLCI hit the trough at 1,363.55 points with 10.8 percent decrease in index point within a month. Other severely impacted bursa indices are Energy index fell 38.2 percent from 1,168.04 points to 721.79 points followed by

Construction index fell 25.9 percent from 201.84 points to 149.65 points, Technology index fell 23.4 percent from 40.15 points to 30.73 points and Industrial Product and Services index fell 22 percent from 144.09 points to 112.41 points. On the other hand, Healthcare index is the least impacted index with a percentage decrease of 6.6 percent. The shutting down of global economic activity due to increase social distancing measures has dragged the entire equity market tumbled to as much as 40 percent within a month and it is the worst market performance so far as compared to the previous crises that Malaysia ever encountered before.

However, the market rebound set in and surged 16.2 percent to 1,584.14 points from 1,363.55 points after three months of partial lockdown as the number of Covid-19 in local transmission has reduced to zero amid the recovery of the local economy (Jaafar, 2020). Of all the outperformed indices, Healthcare index and Technology index have the most gained with the percentage increase of 157.7 percent (from 1,267.93 points to 3,267.07 points) and 52.4 percent (from 30.73 points to 46.84 points), respectively (Figure 1.1). Shares in Top Glove, Supermax and Hartalega, which together provide more than half the global supply of gloves, shot up by 170 percent, 1233 percent and 147 percent, respectively and helped propel the benchmark index, FBM KLCI to rise 22 percent on the same period (Kumar, 2021).

Based on Figure 1.1, it is noticed that majority of bursa indices possessed W-shaped recovery amid the pandemic crisis and this is the second time that the local economy experienced in the period of 1999 to 2004. This mainly because as the number of Covid-19 confirmed cases increases, the country will have to go through another lockdown in order to contain the infection risk. The second dip occurred on October 2020 when the confirmed cases has crossed the 1,000-mark which caused by election in Sabah and put the country on another lockdown. It is also noticed that the FBM KLCI and most of the Bursa sectoral

indices present a downward trend for the first half of the year 2021 before the end of Tan Sri Muhyiddin Yassin's premiership. For the first half of 2021, the FBM KLCI was down 7.52 percent to 1519.84 points from 1643.42 points whereas Healthcare index used to be top performer sectoral index in previous year has dragged 24.84 percent at 2,831.90 points following the forced labour investigation among Top Glove's employees early this year (Figure ??). The Plantation index and Energy index have fallen 15.2 percent and 14.45 percent, respectively. It is concluded that the inability of the government to contain the pandemic, despite the declaration of an emergency and suspension of the parliament, has also heightened uncertainties over the country's recovery prospects and consequently trigger selling pressure from the investors in the statement of Kumar (2021).

In conclusion, GE9 and GE10 have shown a negative stock price changes prior election and positive in the post-election trading (Table 1.3). This stock price fluctuation during election period may indicate market tension due to the uncertainty before election and overpowering of downward tendencies. However, the situation is reserved in GE12 whereby the pre-election stock momentum was positive and marked a heavy selling on the first week of post-election trading as illustrated in Table 1.3. This is because the GE12 was described as 'political tsunami' as the Barisan Nasional only managed to secure simple majority of parliamentary seat. But also, the downward trend of benchmark index was coincided with 2008 global financial crisis and thus, brought in major lost to the local bourse. It is also noted that the 11th GE possessed negative stock price changes in majority whereas the 13th GE is the only election that shows positive price changes (majority) within one year period in relative to other election years. Nevertheless, the fluctuation of the FBM KLCI is increasing and becomes larger in the post-election trading after one year of 14th GE can be explained

by the first political transition happened in Malaysia and weak performance of Pakatan Harapan (Table 1.3).

Table 1.3: The elections and index price changes of FBMKLCI from GE9 to GE15.

	t	25/4/95	29/11/99	21/3/04	8/3/08	5/5/13	9/5/18	19/11/22
-	1-month	(GE9)	(GE10)	(GE11)	(GE12)	(GE13)	(GE14)	(GE15)
-	2-week	-45.34	-24.73	-96.88	112.27	-67.88	13.4	-41.96
-	1-week	-19.02	-24.39	-18.3	73.15	11.49	33.85	-2.04
+	1-week	-12.45	-12.62	-19.9	61.07	11.57	23.86	1.78
+	2-week	-23.67	-15.65	-9.33	-118.8	77.61	7.99	40.84
+	1-month	25.48	24.03	-17.11	-95.31	74.39	-49.11	29.23
+	1-year	67.63	144.69	-66.24	-16.33	77.4	-170.65	47.53
		165.87	-178.29	5.29	-123.77	128.38	-238.36	144.97

Again, the turbulence in Malaysia equity market is driven by many factors and the most significant one is obviously the political instability in the country. This political instability includes corruption case, political transition, conflict of interest within the political party and economic policy uncertainty. As long as the political dispute is not resolved, the market remain volatile due to panic selling from the investors. Despite the political issues, factors like economic event (such as 1997 Asian Financial Crisis, Dotcom Bubble and 2008 global financial crisis) and non-economic event such as Severe Acute Respiratory Syndrome (SARS) and Covid-19 outbreak) have dampened the equity market throughout the period of 1995 to present day. Of all the recent episodes of general election, three of them were coincided with economic crisis which brought negative post-election growth to the local bourse. Other than that, macroeconomic factors such as weak global oil price, US interest rate hikes and slower growth of foreign economy also contribute to capital flight and consequently poor performance of local bourse.

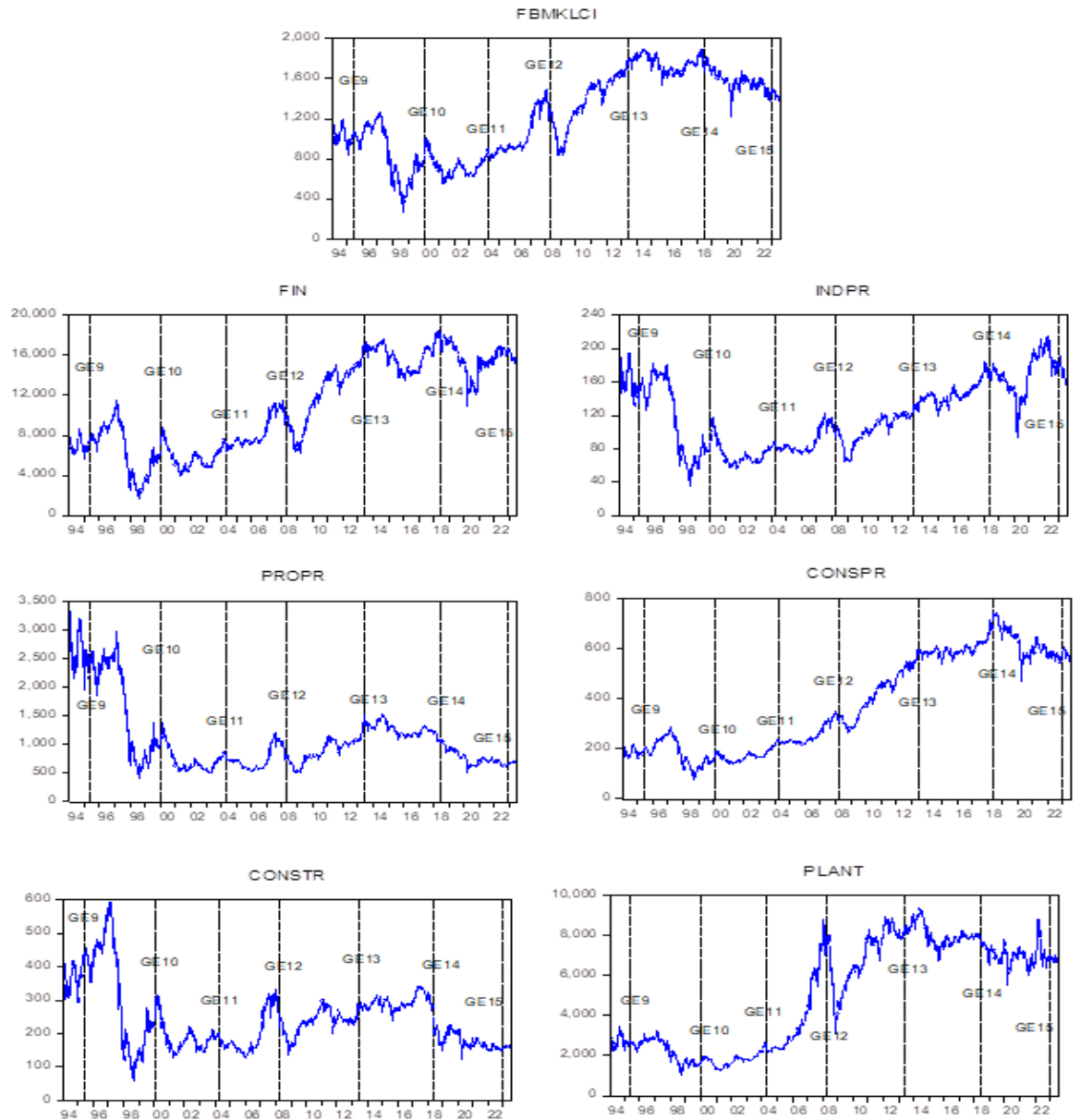


Figure 1.1: Trend path of local market index FTSE Bursa Malaysia (FBM KLCI) and sectoral indices from GE9 to GE15.

1.3 Problem Statement

Political events, particularly general elections, are known to have significant impact on equity markets. Elections create a climate of uncertainty and anticipation, as various parties or candidates propose differing policy directions, economic restructuring, and regulatory alterations that could greatly affect various industries and sectors. The political business cycle, a concept that describes how political motivations influence economic policy timing, implies that election periods may see strategic economic decisions intended to influence voter opinion. By analyzing stock market volatility during these cycles, this research aims to shed light on how election-related elements affect the stability of the market as well as investor behaviour, specifically concentrating on the Malaysian stock market with its distinct political and economic characteristics.

To begin with, volatility serves as a key measure of market risk, indicating levels of uncertainty and the likelihood of sudden price shifts. Understanding how volatility behaves in response to elections can help investors, policymakers, and financial analysts better manage risks and expectations around these political events. During election times, investors face heightened uncertainty regarding future policies, which can greatly impact industries depending on their alignment with proposed agendas. Consequently, election-induced volatility offers valuable perspectives on market responses to political shifts and the perceived stability of forthcoming economic conditions. Moreover, analyzing volatility throughout the political business cycle could uncover trends, such as increased risk and market fluctuations before or right after elections, which are vital for forecasting and managing the wider economic ramifications of political cycles on the stock market.

However, the main issue with volatility during election periods is that it often becomes extreme and unpredictable, leading to instability in the markets. Such volatility is not purely based on economic fundamentals but is often driven by speculation, fear, and uncertainty about potential political outcomes. This can lead to dramatic price changes, posing risks for investors, elevating the cost of capital for companies, and sometimes even resulting in market disruptions. Hence, this is challenging efficient market hypothesis theory whereby all the available information is reflected in the stock price and no abnormality is expected. Excessive volatility presents obstacles for long-term investors and can deter investment, as the unpredictability raises perceived risks. Furthermore, significant volatility surrounding elections may signify deeper worries about policy or political instability, which can have enduring effects on a country's investment and economic growth. Thus, by analyzing election-induced volatility, it helps to understand the sustainability of stock volatility and its pattern around election both in the short run and long run.

There is a growing body of literature that studying election, stock return and stock volatility. The most common test for testing market efficiency, event study methodology has primarily focused on returns, often neglecting the volatility dimension. The use of event study is to test the immediate effect of election on the stock market and is meant to detect the abnormal return during the election. Traditional event study methodologies have been widely applied to detect abnormal returns around elections, but their application to volatility remains limited (Mohamad, 2022; Diaconășu et al., 2023; Nguyen et al., 2023). Additionally, prior research has predominantly used conditional volatility models such as GARCH, while neglecting other volatility measures that may capture different aspects of market behavior during election periods.

To address this gap, this study employs multiple volatility measures to comprehensively analyze election-induced market fluctuations. Traditional measures such as absolute returns and squared returns capture sudden price movements and immediate market reactions (Granger & Sin, 1999; Forsberg & Ghysels, 2007), while standard deviation provides a longer-term view of market fluctuations (Gurrib, 2007). Conditional volatility models like GARCH assess volatility clustering and persistence, which are common around elections. Meanwhile, range-based volatility measures capture intraday market extremes, offering insights into short-term market spikes (Andersen & Bollerslev, 1998). Using multiple measures enhances statistical power and allows for a more robust assessment of how elections influence market volatility.

As a result, none of the studies engage in an empirical analysis to assess the use of different volatility measures in capturing different aspects of market behaviour around elections. For this reason, employing a range of volatility measures may help to assess the consistency of election-induced volatility as well as enhances the statistical power to detect significant changes when it comes to evaluate the impact of election on stock market volatility. For this reason, accurately measuring stock volatility during election periods is crucial to understanding how political events influence market stability.

1.4 Objectives

The main objective of this study is to investigate the effect of general election on the stock market volatility. This can be achieved through the following set of specific objectives:

- i. To evaluate the abnormal volatility, average abnormal volatility, cumulative abnormal volatility and cumulative average abnormal volatility across indexes during election period using different measures of volatility including

squared returns, absolute returns, logarithm of absolute return, range-based and GARCH model.

- ii. To assess the impact of fiscal and monetary policy on the cumulative abnormal volatility of the index in the pre- and post-election.
- iii. To assess the role of election-induced factor on the cumulative abnormal volatility of the index in the pre- and post-election.
- iv. To quantify the influence of foreign direct investment on the cumulative abnormal volatility of the index during election period.

1.5 Significance of Study

The importance of investigating the relationship between stock volatility and election over the political business cycle holds profound significance from different perspectives, including academic contribution, practical application, policy making, and broader economic implications. Firstly, this study add value to the existing literature by linking the concepts of the political business cycle theory with stock market volatility from academic perspective. Previous studies have predominantly focus on stock returns and macroeconomic variables such as gross domestic product (GDP), inflation and unemployment around election period. By focusing on volatility, the study introduces new viewpoint for understanding market dynamics during politically sensitive periods. It addresses a significant research gap in existing literature by examining the abnormal volatility trends in relation to electoral events. With detailed analysis, it enhances the theoretical framework for assessing how political events, particularly elections, affect market volatility.

On a practical level, elections often known for its uncertainty which leads to heightened market volatility. This study offers essential insights into how volatility varies throughout different stages of the electoral cycle, allowing investors and financial analysts to develop strategies in predicting and responding to the market behaviour. With these findings, investors can refine their portfolio strategies by identifying which indices are most vulnerable to election-driven volatility. By doing this, they can hedge against the risk and optimize the return during the election uncertainty period. Financial institutions, including asset management firms, hedge funds, and banks, can apply the research findings to refine their predictive models for volatility, enabling them to offer tailored investment products or advisory services that cater to clients' needs during election periods. In addition to this, the insights from the study regarding abnormal volatility trends can also improvise their forecasting models and developing strategic recommendations for stakeholders navigating through market condition influenced by politics.

For policymakers and regulatory and authorities, it is crucial to understand how general elections impact stock market volatility in maintaining market stability. This research offers critical insights for crafting effective policy measures by identifying the fundamental factors driving volatility during election cycles. It emphasizes the transparency and credibility of the electoral process in reducing uncertainty and fostering investors' confidence. Policymakers can benefit the findings by minimizing the destabilizing effect from the election onto the financial markets. As for regulatory bodies, they can establish protective measures using the findings from this study to lessen the risks associated with the elevated volatility during the election uncertainty period.

Last but not least, stock market volatility plays an important role here as it is a leading indicator of economic sentiment and stability. An increase in market fluctuation during election periods can have ripple effects across the economy. This can be seen through the corporate investment decision, consumer spending, and overall economic growth. These interdependencies provide valuable insights by examining how uncertainty in politics lead to instability in financial markets. Hence, this study is necessary in promoting political stability for economic resilience. For economies that rely heavily on foreign investment must be aware of the volatility pattern around election since an increased in volatility may discourage capital inflows. Despite that, the continuous volatility from the election uncertainty can affect corporate financing especially for the company who rely heavily on equity financing for raising capital. Due to increase in expenses and limited funding during the period of uncertainty, it might affect the company growth path and overall contributions to the economy.

In conclusion, this study is important for its diverse contributions to academia, investment practices, policy formulation, and economic growth. By investigating the connection between general elections and stock market volatility, it provides valuable insights on how political processes affect financial markets. The findings from this study have the potential to improve decision-making, enhance market stability, and support economic resilience, making it an invaluable resource for researchers, practitioners, and policymakers.

1.6 Organization of Study

This thesis is composed of five main chapters and organized in the following way. Chapter One deals with a brief overview of political factors and the stock market in the

context of Malaysia. Chapter Two begins by laying out the theoretical dimensions of the research and analyzes variables and methodology applied from the past researches in to construct empirical gap. Chapter Three is concerned with data collection, application of methodology and the development of the conceptual framework as well as the empirical model to cater the objective of the study. Chapter Four interprets the findings of the research, focusing on the aforementioned objectives of the study. Chapter Five provides policy implication based on the research findings and presents concluding remarks

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter Two presents a review of literatures and covers several subsections. Section 2.2 is theoretical discussion about Political Business Cycle, Efficient Market Hypothesis and Dependency Theory. Section 2.3 is the empirical findings about election and its impact on volatility. Section 2.4 summarizes empirical testing approach across the existing studies. Section 2.5 is the empirical gap of the study. Section 2.6 is the proposed variables used based on the underlying theories in constructing conceptual framework of election and stock volatility.

2.2 Theoretical Framework

2.2.1 Political Business Cycle

Generally, the association between election and market movement can be explained through three main theories which namely political business cycle (henceforth, PBC) by Nordhaus (1975), efficient market hypothesis (henceforth, EMH) by Fama (1970), and dependency theory. Nordhaus (1975) is the pioneer of the political business cycle model and theorized that the sole goal of incumbents is to increase re-election chances with the intervention of macroeconomic cycle. In other words, incumbents will pursue expansionary policies to induce economic prosperity, often with short term benefits for the purpose of increasing the popularity support prior to the election. Thus, fluctuation in economic performance during election period can be witnessed as a consequence of this manipulation from the politicians. For decades, the theory has evolved into many variations when it comes

to the study of political event effect on financial market and macroeconomy. The model suggests loosening monetary and fiscal policies such as cutting taxes and increasing public spending before election often used to promote the re-election of the candidates. By doing so, people tend to respond more quickly to such economic conditions as they tend to be myopic and short-sighted. Following elections, the economy slows down as a result of the reversal of these policies, which are implemented to control government debt and inflationary pressures. Because of short-term gains, this political exploitation contributes to the growth of market volatility in the long term.

The theory was later improvised by Hibbs (1977) and proposed new theory, that is, partisan theory suggesting ideological differences between political parties. The partisan theory of political cycles was first proposed by Hibbs (1977). It postulated that whereas right-wing governments prioritize preventing inflation and supporting policies that benefit the wealthy, left-wing governments often promote expansionary fiscal and monetary policies to reduce unemployment. Alesina (1987) expanded the idea and formed rational partisan theory, suggesting that political parties adopt distinct macroeconomic policies according to their ideology which results in different economic outcomes that reflected in market performance.

As mentioned earlier, the PBC theory is about political exploitation through electoral gain from manipulating the economy, and the studies that supported the theory are Alesina, Roubine and Cohen (1997), Allvine and O'Neill (1980), Huang (1985), Booth and Booth (2003). In a study of Alesina, Roubini, and Cohen (1997), the authors confirmed that political cycles affect economic policy by presenting evidence that U.S. presidents timing their economic interventions around elections. It is also noted that major fiscal stimulus

programs, such higher public expenditure or expansionary monetary policies, are frequently introduced during election years, boosting economic that impact the stock market performance. Further studies postulated that 4-year presidential term pattern in the stock market returns is another example of PBC theory. Such pattern often refers to presidential election cycle (henceforth PEC) in stock market returns and also interpreted as “second-half” effect in a study of Booth and Booth (2003). It is defined as low rate of return in the first 2 years of presidential term and high rate of return in the last 2 years. In a study of Allvine and O’Neill (1980) find that the construction of US macroeconomic policy was coincided with election cycle which reflected in the stock market since 1960. Through spectral analysis, there was an evidence of 208-week of business cycle whereby low return in the first two years following election and high return in the second half of the term. Similarly, Huang (1985) even suggest the investors to avoid the first two years term of Republican administration when it comes to stock investment as there is 24% more difference when comparing the annualized returns from the second half to the first half during the 1961-1980 period.

The role of PBC on stock market is further explored in the context of election and political uncertainty. Changes in leadership or party control may lead to economic policy discontinuation as a result of uncertainty from the election. Julio and Yook (2012) reported that volatile market and capital flight are often caused by political uncertainty particularly around election periods. This uncertainty is further amplified especially in a country with higher political risk and less stable institutions. Therefore, investors factor in greater political risk premiums during election cycles as they are anticipating market to be more volatile and possible changes in policy that may have an effect on corporate profitability.

Another noteworthy study by Foerster and Schmitz (1997) illustrated that the spillover effect from the United States political cycles has significant impact on international market. This is because the U.S. is an economic powerhouse and thus, investors often pay close attention to its political developments as the election outcomes have an impact on international investment flows. This evidence remains relevant as Diaconasxu, Mehdian, and Stoica (2023) revealed that most markets initially overreacted with sharp declines but eventually exhibited corrective patterns after the winning of Trump in 2016 U.S presidential election. Further evidence shows that political uncertainty significantly affects equity risk premia according to Pastor and Veronesi (2013). It is suggested that the market participants are expecting higher returns to compensate for high political risk as uncertainty increases due to uncertain future policy from the government during election period. Recent study by Mnasri and Essaddam (2020) demonstrate the uncertainty around the incumbent party's prospects lead to increase in stock market volatility, as investors react to anticipated shifts in economic policy during U.S. presidential election.

In the partisan theory proposed by Hibbs (1977), the ideology of left-wing political party is focusing on lower income and occupational status whereas the right-wing political party is focusing on lower inflation rate. Since the macroeconomic outcome in the Hibb's model move along the Philips curve, pursuing low unemployment rate and low inflation at the same time is impossible and hence, political parties have to take account for the importance of these two goals according to their ideology preference. There are several studies witnessing the existence of partisan cycle on the evaluation of stock movement. Hensel and Ziemba (1995) discovered that small capitalization stocks earned 20.54% per annum under Democratic administrations whereas Republican administrations had merely earned 1.94% for the period of 1929 to 1992. Another significant finding from Johnson,

Chittenden and Jensen (1999) affirmed that the partisan return for small stock between the two administrations were amounted to over 20% annually. Similarly, Santa-Clara and Valkanov (2003) estimate using equally-weighted index and value-weighted index to measure the return gap between Democratic and Republican presidencies and found the returns was 16% and 9%, respectively. As such, this proposed that political leadership exerts considerable influence on stock markets, reflecting the broader implications of the political business cycle.

Chang et al. (2013) report that differences in political ideologies across countries reduce business cycle synchronization as the partisan effects decay over time when using political party alignment in 14 OECD countries. This study emphasizes that systematic politics has significant influence on the macroeconomic indicator such as gross domestic product, when controlling for financial integration and trade. In contrast, Chien et al. (2016) suggest that stock market reactions following elections serve as predictive signals for GDP growth but not for unemployment rates in the case of United States. The finding further illustrates that stronger relationship between political transitions and economic performance over time is associated with Democratic and Republican administration. As for the case of Turkey, Köksal and Çalışkan (2012) report the country experience a temporary impact of the Rational Partisan Theory instead of political business cycle, whereby the stock market returns tends to drop with right-wing governments and rise under left-wing administrations.

Nonetheless, the assumption of PBC theory has been challenged due to its practicality of the theory across different political systems. In a study of Rogoff and Sibert (1988), the study argues that voters are not as myopic as the rational expectation theory claimed. In fact, the information and media nowadays are accessible to the tech savvy voters

and they can make decisions rationally before casting their votes. As a result, they may discount economic expansions timed around elections, reducing the effectiveness of these policies. Persson and Tabellini (2002) elaborated that politicians are less likely to manipulate economic policies for electoral purposes in countries with independent central banks or stringent fiscal rules. Hence, in countries with strong institutional structures that limit political interference in economic management, the PBC's influence could be less pronounced.

In addition to this, political business cycles are often less pronounced in parliamentary systems as opposed to presidential systems. This is because countries with coalition governments or fragmented political landscapes prevent politicians from controlling economic policies for electoral gain. According to Alt and Lassen (2006), institutional limitations imposed on parliamentary systems, such as the need for coalition-building will reduce the power of individual parties over fiscal policy and at the same time, less likely to be influenced by PBC.

In conclusion, the PBC model has evolved from focusing primarily on fiscal and monetary manipulation by incumbents to emphasizing the limitation through transparent and informed societies in rational expectation model. It is suggesting that political institutions play an important role in moderating the PBC effect. Such manipulations may be less effective in modern economies when independent institutions and information availability have strengthened for years. Nonetheless, market volatility is still driven by political uncertainty, especially during election seasons. This suggests that political developments have a significant impact on investor behaviour and stock market results. Political economic cycles in major economies especially the United States which continue to have a substantial

impact on worldwide financial markets as global markets grow more integrated. Eventually, PBC theory's development reflects a more sophisticated comprehension of the intricate connection between markets, politics, and economics.

2.2.2 Efficient Market Hypothesis

In a study of Fama (1970), an Efficient Market Hypothesis (EMH) is developed to understand the framework of how markets incorporate all the information into stock prices. The theory illustrates that market considers efficient when all the available and known information is being processed and reflected in stock price. There are three forms of EMH, namely weak, semi-strong and strong, depending on the type of information considered. In an event where the political uncertainty arises, semi-strong form of EMH helps to explain sudden spikes in the market to the publicly available information, for instance, delay in election outcome announcement.

It is acknowledged that market disruption is caused by uncertainty and the circulation of new information in the market which lead to market volatility. Gilson and Kraakman (1984) postulates that information dissemination and competitive trading are responsible for efficient market as it allows price to adjust rapidly to new information. According to Siourounis (2002), less liquid or emerging market tends to experience temporary market inefficiency as uncertainty heightened. This is because investors react differently to the information that leads to fluctuation in price before market stabilize. In addition to this, market volatility also driven by behavioural pattern of investors during periods of high uncertainty. Shiller (1980) and García et al. (2007) argue that overconfidence and herd behaviour undermine market efficiency, leading to overreaction or underreactions to new information. Investors rely on heuristics or collective decision-making in response to the

unclear new information, resulting in price distortion. The market participants are collectively reacts to the perceive risks or opportunities during period of uncertainty which contribute the spike in market volatility as a result of their herding behaviour according to Kristoufek and Vosvrda (2013).

Furthermore, the level of market efficiency is also influenced by institutional and structural factors. Chordia et al. (2008) highlight the importance of liquidity in supporting market efficiency. The study further elaborates that a lack of liquidity and increasing cost of trading can slow down price adjustment to new information, leading to prolong period of volatility. Additionally, information asymmetry as a result of limited access to better and faster information can delay the process of price discovery which further increase volatility (Jarrow & Larsson, 2012). Structural inefficiencies possessed by emerging markets display unique pattern of volatility. Siourounis (2002) discovered political instability often results in higher volatility as they are prone to external shocks easily. Goudarzi (2013) suggests prices tend to stabilize and revert to equilibrium in the long run despite temporary inefficiencies, when investigating for mean reversion tendencies in volatile markets. This is consistent with Timmermann and Granger (2004) suggesting the market reflect fundamental principles of efficiency despite behave unpredictably in dynamic situation.

Brunnermeier (2005) discusses the impact of information asymmetry and unpredictability on the price efficiency amidst times of rapid information flow. The study suggests short-term deviations from efficiency is expected as investors interpret the data differently especially during uncertain period. Nonetheless, Malkiel (1989) argues that such inefficiencies are often short-lived, as competitive trading and arbitrage mechanisms restore equilibrium over time. The role of liquidity, structural maturity, and behavioural dynamics

in markets all contribute to volatility during high-uncertainty events. For instance, Busse and Green (2002) emphasized the importance of real-time price adjustments in maintaining efficiency, suggesting that any delay in the incorporation of information exacerbates volatility. This delay is particularly evident in less liquid markets or when trading frictions hinder the price adjustment process.

2.2.3 Dependency Theory

Dependency theory, rooted in neo-Marxist thought, offers a lens to understand global economic inequalities and the systemic constraints peripheral nations face due to their reliance on core nations. Kaufman et al. (1975) argued that this dependency stems from structural imbalances in trade, capital, and technology, which perpetuate underdevelopment in peripheral nations. Dietz (1980) refined this view, critiquing modernization theory and emphasizing that underdevelopment is not a transitional phase but a consequence of exploitative global capitalist structures. Angotti (1981) demonstrated that dependency relationships often manifest in unequal economic exchanges, where core nations extract resources from peripheral economies without reinvestment, leaving the latter disadvantaged. Smith (1981) expanded this critique by highlighting the challenges peripheral nations face in achieving self-sustained growth while being locked into global capitalist systems. Velasco (2002) further illustrated that foreign direct investment (FDI), while heralded as a growth tool, frequently prioritizes the interests of foreign investors, thereby reinforcing the dependent status of recipient nations.

Carmody (2017) examined how emerging economies like the BRICS nations influence dependency dynamics, particularly in Southern Africa. He found that while these nations offer alternative trade and investment relationships, they often replicate core-

periphery dynamics, reinforcing dependency rather than alleviating it. Hubbell (2008) in a study of Dominica, highlighted how small states within the global capitalist system navigate dependency. By leveraging geopolitical tensions and alliances, Dominica demonstrated how peripheral nations can negotiate some benefits despite systemic inequalities. Stallings (2024) focusing on Latin America, highlighted how shifting hegemonies from the United States to China have transformed dependency mechanisms, showing how commodity-based relationships with China reinforced economic vulnerabilities, including deindustrialization. Antunes de Oliveira and Kvangraven (2023) revisited dependency theory from an anti-colonial perspective, advocating for its continued relevance in addressing the struggles of nations in the global South as they grapple with systemic inequalities.

Recent empirical studies add depth to the application of dependency theory in the context of global financial systems. Evaluating international financial integration, Yu (2015) demonstrated how center-periphery financial integration exacerbates welfare losses for peripheral nations, especially when external shocks occur. Sandoval Junior et al. (2015) emphasized the destabilizing role of global financial systems on peripheral economies, where external shocks such as fluctuating oil prices disproportionately impact these nations. Hoque and Zaidi (2020) examined the effects of geopolitical risk on stock returns in fragile emerging economies, demonstrating how political instability amplifies market volatility, particularly in economies dependent on foreign capital. Sultana et al. (2024) examined the intersection of dependency and politics, showing how short-term fiscal strategies during elections in developing nations often exacerbate long-term vulnerabilities. Nguyen-Thanh et al. (2024) explored global commodity price volatility and its effects on peripheral economies, reinforcing the argument that external economic forces significantly shape domestic policy and stability. Batra et al. (2024) analyzed the relationship between foreign

ownership and stock market volatility in India, finding that foreign investors' decisions can amplify market instability, particularly during crises such as COVID-19. Although this study focuses on India, its findings reflect dependency theory's broader critique of foreign influence in financial markets.

The impact of political risk on FDI inflows has also been extensively documented. Busse and Hefeker (2005) (Busse & Hefeker, 2007) identified key determinants of FDI, such as government stability, law and order, and institutional quality, which are often compromised during election periods in peripheral economies. Khan and Akbar (2013) further emphasized the negative relationship between political risk and FDI, showing how political instability deters long-term investments, leaving peripheral nations more vulnerable to economic volatility. These findings align with dependency theory's assertion that peripheral economies, reliant on external capital, face amplified vulnerabilities during periods of political uncertainty.

These studies collectively illustrate the evolution of dependency theory, while also underscoring its critiques. Angotti (1981) and Morgan (1987) emphasized the structural constraints dependency imposes, but Dietz (1980) pointed to exceptions, such as East Asia's industrialization, where strategic policymaking leveraged dependency relationships for development. Hubbell (2008) similarly argued that smaller nations might exercise agency within dependency frameworks by exploiting geopolitical opportunities. Oliveira and Kvangraven (2023) reaffirmed the importance of analyzing dependency through a decolonial lens, urging a broader understanding of systemic inequalities.

In conclusion, dependency theory provides a robust framework for analyzing the systemic challenges faced by developing nations, particularly during politically sensitive

periods like elections. By integrating historical and contemporary perspectives, the theory highlights the vulnerabilities of peripheral economies within global economic systems. Future research should combine dependency theory with complementary frameworks, such as modernization theory or world-systems theory, to provide a nuanced understanding of how global forces and domestic political events interact to shape economic outcomes.

2.3 Empirical Findings

This section provides empirical findings from the existing literature which focusing on two main themes: election-induced returns and volatility across financial markets and political factors influencing stock market volatility. These insights are crucial for a comprehensive understanding as it sets path for subsequent empirical testing and analysis in the study.

2.3.1 Election-Induced Returns and Volatility Across Financial Markets

The relationship between stock market performance and presidential elections has been extensively analyzed in many studies, showing predictable patterns that challenges the efficient market hypothesis theory. This predictability pattern often associated with four-year presidential cycle which demonstrates in theory of political business cycle, raises questions about market efficiency during election periods. According to Allvine and O'Neill (1980), the four-year cycle in US stock market returns is associated with presidential elections and further elaborate that stock returns were highest two years before elections, averaging 21.7%, but fell to -15.2% two years after elections. The study suggests that pre-election stimulus policies followed by post-election tightening played a critical role in shaping such pattern. Another study conducted by Huang (1985) also exhibits higher stock returns in the third and fourth years of administration, with higher average stock returns falls

under democratic presidencies, showing the existence of election cycles. Similarly, Herbst and Slinkman (1984) further support the four-year presidential cycle does in the U.S market and suggests the cycle is driven by market responses to political policies and expectations.

Previous findings have consistently showing four-year presidential cycles in the U.S market. However, the findings may not be generalized in a global context. For instance, Nippani and Arize (2005) reports that neighbouring countries like Canadian and Mexican stock markets are negatively affected by the delayed results of the 2000 U.S presidential election due to political uncertainty. Hung (2011) reveal that the four-year presidential cycle does exist in Taiwan but no evidence of short-term election bull run which suggest varied election impact across different political and economic contexts.

Despite the four-year presidential cycles in stock market, the relationship between election impact and stock market continued to be explored in both advanced and emerging market. For instance, Floros (2008) demonstrates that Greek political election exhibits statistically insignificant impact on Athen Stock Exchange, reflecting a relatively a stable market environment. Similarly, Nazir et al. (2014) analyses data from 1999 to 2011 and uncover that only 35% of the political events have significant impact on Karachi Stock Exchange (KSE) in a short event window. Among 35% of political events, none are caused by Pakistani election and this suggests KSE are inefficient for certain political events. In contrast, Ying et al. (2016) and Liew and Rowland (2016) postulate that stock returns are significantly affected by general election, with post-election optimism often driving returns higher. The findings further emphasizes that downwards trend on returns is expected during political uncertainty due to closely contested elections.

Similarly, Ramesh (2015) highlights that positive abnormal returns can be observed in the post-election as uncertainty diminished due to the available information like election outcomes. Conversely, Chuang and Wang (2010) document that abnormal returns are significantly negative around election period for developed countries like Japan U.S and UK as investors hedge against potential risks associated with electoral outcomes. Additionally, the study also possesses negative trend in cumulative abnormal return, indicating market disruption due to uncertainty surrounding election results and their potential economic implications.

In a recent study, Diaconășu et al. (2023) extends the investigation of election impacts on a global market by focusing political uncertainty element in reacting to Trump's surprise victory. The finding posits that the sudden victory of Trump has triggered immediate and heterogeneous impacts on returns across markets globally. A negative initial market trend is observed in most market but the market slowly adjusted and make positive returns particularly in Japan, Russia and China as more information become available. Conversely, Latin America and France are continuously presenting a negative market trend during the post-election due to the potential policy shifts under Trump's administration. Upadhyaya et al. (2024) further the analysis by using the role of sentiment-driven expectation which proxied as opinion polls in examining the relation of election and daily stock returns in the U.S market. The finding presents that US market performs better when Trump is leading in the polls which suggesting investors optimism regarding his proposed economic policies, such as tax cuts and deregulation.

Sectorial wise, the election impact is varied widely across countries. Oehler et al. (2013) examines the election impact of eight industries during 1980 to 2008 U.S presidential

and demonstrates inconsistent pattern in industry returns which rely heavily on policy expectation that ties to the election outcomes. As for emerging market like Egypt, Ahmed (2017) highlights that banking and financial services and food and beverages sector consider politically sensitive sectors that exhibits pronounced election impact, whereas construction sector remain resilient. On the contrary, Repousis (2014) reveals that banking sector does not affected by elections when the finding shows significant changes in stock returns throughout the four Greek national parliamentary elections which spanning from 2000-2009.

The impact of elections on stock returns has been extensively studied and it has been found the market performance is significantly influenced by election. Despite its impact on stock return, the uncertainty arises from the elections also contribute the growth of stock volatility. This volatility is often driven by political uncertainty, whereby investors respond to the possible changes in policy, leaderships, and governance which result from election outcomes. The impacts of election on market volatility is evident both before and after the election. Uncertainty in the market arises as political outcome become unknown due to its potential impact on macroeconomic policies prior to election. As the election campaigns progress, investors have been concerned about the future political direction and its implication on business operation, regulation and overall market stability. This can be evidenced from Balkowski, Gottschalk and Wisniewski (2008), the study offers an explanation that the stock market of 27 OECD countries are highly volatile in which the index return variance can easily double particularly within short trading intervals around election.

Goodell and Vähämaa (2013) find that implied volatility tends to increase following the US presidential election due to uncertainty in responding to the decrease in probability in election winner when utilizing data from Iowa Electronic Markets and the VIX index. in

the context of Australia, Worthington (2009) reports that stock variances reacts differently to the ruling party's ideology despite consistent mean stock returns across government. The study further suggests market tend to favour pro-business policies, which enhance investor confidence and stabilize volatility. In another study by Smales (2014), re-election of the incumbent party with known policies reduces market uncertainty, leading to lower volatility. Conversely, closely contested elections amplify volatility as markets face greater uncertainty about future policy directions. On the other hand, Nurlita and Naomi (2019) emphasize that structural vulnerabilities has caused heightened systematic risks in Indonesia, when investigating the 2014 Presidential Election effect on the stock market volatility. The study further elaborates that positive news having a stronger effect than negative news, indicating investors respond more rapidly to the news where opportunities for growth or improved economic outlooks of the country, leading to higher trading volumes and market fluctuation.

Recent study by Shaikh (2019) reports a significant surge in the VIX during the 2012 and 2016 U.S presidential election while Musah et al. (2023) also experience an increase volatility pattern in stock market of sub-Saharan Africa during election periods, emphasizing a global trend of uncertainty building up prior to elections. Nonetheless, the results after elections are varied. Some studies illustrate the on-going volatility in the post-election which leads to market instability, while others show diminishing trend in stock volatility as political uncertainty resolved following the election. Normally, the latter situation is seen as positive market response since investors adjust their expectation based on the newly elected leadership and the potential policies they might implement. It is evidenced that countries with smooth political transition tends to react positively in the market following the election according to Pantzalis et al. (2000). However, Musah et al. (2023) mention that it is not the case for African market as volatility persists after the election. The study further elaborates

that political instability, disputed election results, or the unpredictability of new government policies are the main reason for volatility growth. Sun et al. (2021) also further confirm that the surprising victory from Donald Trump has caused market instability in the long term due to political uncertainty following the 2016 U.S presidential election. In India, Wadhwa and Goodell (2024) reveal that the managerial tendencies to hoard bad news tend to increase the risk of market crashes during the period of political uncertainty. This is because the release of the accumulated bad news resulting in significant stock prices crash following the election. It further suggests that firms dependent on public policies or located in prominent states are pronounced with this effect.

2.3.2 Determinants of Election-Induced Volatility

The empirical findings presented in this section explore the impact of political factors on stock market volatility, emphasizing the unique dynamics of election periods. Political events, such as elections, can introduce uncertainty into financial markets, often triggering fluctuations in stock prices and trading volumes. This section delves into how political uncertainty, governance changes, and policy expectations shape market behavior, offering insights into the mechanisms through which political factors influence stock volatility. The analysis highlights the role of political stability and investor sentiment in driving market reactions, providing a comprehensive understanding of volatility patterns in politically sensitive periods.

The relationship between political factors and stock market volatility is crucial for understanding market behavior during election periods. Several key election-related variables, such as party affiliation, policy shifts, economic performance, and investor sentiment, have been found to significantly influence stock market volatility. The impact of

these variables varies depending on the political context and the economic environment at the time of the election.

Party affiliation has been identified as a significant factor influencing stock market volatility. Powell et al. (2009) examine the effects of presidential party affiliation on stock returns and find that Republican administrations tend to be associated with higher stock returns, particularly due to pro-business policies. This is supported by Worthington (2009), who shows that non-Labor governments in Australia generate higher stock returns, reflecting the market's preference for governments perceived as pro-market. Hall and Nishikawa (2018) argue that when the ruling party changes, it typically leads to increased economic volatility in the short term, as investors adjust their expectations to new policy agendas. Similarly, Pastor and Veronesi (2012) highlight that policy uncertainty, especially in the context of elections, has a direct impact on stock prices, with market reactions being influenced by the uncertainty about the future direction of government policy. Their findings show that policy changes around elections tend to introduce greater volatility, particularly when the expected change in leadership signals significant shifts in the country's economic direction.

The study is further investigated the stimulation of high index return variance using narrow margin of victory and change in political orientation, revealing that there are the reasons the market volatility spike. Chuang and Wang (2010) employs ruling party transition and legislative dominance of ruling party which proxied for political factors in examining its impact on cumulative abnormal return (CARs) in the case of stock market in United States, Japan United Kingdom and France. The study reports that dummy variable of ruling party transition has negative effect on CARs whereas the legislative dominance of the ruling

party, measured by its share of total seats in the legislature, shows positive impact on the CARs. A possible explanation for the former result could be due to economic disruption escalating from the uncertainty and the latter indicates continuation in previous policies which leads to market stability.

Studies such as Goodell and Vähämaa (2013) and Smales (2014) provide dichotomous view on the association between the implied stock market volatility and incumbency uncertainty whereas Lin and Wang (2007) were skeptical about the connection between the change in political orientation variable and stock volatility. For instance, Goodell and Vähämaa (2013) utilized the percentage change in probability of success of the eventual winning presidential candidates (which similar to margin of victory variable) and percentage change in election uncertainty to see the impact on the implied stock market volatility around US presidential over 1992 to 2008 and viewed that when incumbency uncertainty become less uncertain, the implied volatility is increase as well since it is subjected to the future macroeconomic uncertainty, whilst election uncertainty has negative impact on the implied volatility once it become more certain.

Applying similar technique, Smales (2014) uncovers that the connection between implied volatility and election uncertainty is more pronounced in Australia equity market in relative to the bond market although they were both possessed positive and statistically significant outcome. Meanwhile, negative effect from incumbency uncertainty exhibited only in Australia equity market. Smales (2014) also posits that the increasing level of political uncertainty which associated with high economic risk and contraction experience in business cycle can potentially increase the implied volatility and also reduce debt issuance level.

Another key election-related variable is the margin of victory. Białkowski et al. (2008) find that closely contested elections tend to generate higher market volatility, as the uncertainty surrounding the election outcome increases market fluctuations. The narrow margin makes it harder to predict the direction of future policies, and thus investors react more nervously to such results. Similarly, Girardi (2020) finds that left-wing victories—especially in economies with radical policy proposals—lead to negative stock market reactions, highlighting the market’s concern about major policy shifts.

The role of macroeconomic policy uncertainty (EPU) is another critical factor influencing market volatility during election periods. Baker et al. (2020) emphasize that EPU increases significantly in polarized political environments, which leads to higher volatility in the stock market. They suggest that polarized elections signal possible radical shifts in economic policy, creating uncertainty about the future direction of the economy. This is consistent with the findings of Mnasri and Essaddam (2021), who show that macroeconomic policy uncertainty—especially arising from changes in the probability of an opposing party’s victory—is a major driver of stock market volatility. The study also highlights that implied volatility (VIX) increases around elections, reflecting growing market uncertainty.

The impact of investor sentiment is also significant in shaping stock market behavior during election periods. Colón-De-Armas et al. (2017) show that investor sentiment, measured by closed-end fund discounts, shifts dramatically during U.S. presidential elections, with positive shifts in sentiment when the ruling party changes. Similarly, Smales (2014) finds that incumbent party victories lead to lower market uncertainty, while opposition victories tend to increase volatility due to the uncertainty about the future policy direction. These findings are echoed by Su et al. (2022), who demonstrate that presidential

popularity—as measured by approval ratings—negatively impacts market performance. Declining approval ratings during election periods often lead to increased market volatility, as investors become more uncertain about policy continuity.

Policy shifts around elections also play a major role in driving stock market volatility. Oehler et al. (2013) find that sector-specific stock returns are highly responsive to election outcomes, particularly in industries most exposed to fiscal policy changes, such as those affected by marginal tax rates. They argue that the party in power significantly impacts market sentiment and sectoral stock returns, as changes in taxation and government spending reshape the business environment. This is supported by Sturm (2011) who shows that policy changes around presidential elections, particularly those related to government spending and interest rates, significantly affect stock performance, with the second half of the presidential term typically seeing higher returns due to more stable policies.

Economic performance during an incumbent's term is another determinant of stock market volatility. Ferris and Voia (2020) show that governments with strong economic performance tend to reduce market volatility, as GDP growth and low unemployment rates contribute to a stable political environment. Conversely, governments pursuing austerity measures or raising taxes during elections often lead to political instability, which increases market fluctuations. Upadhyaya et al. (2024) also show that poll results—used as a proxy for political uncertainty—significantly influence market reactions. The study found that Obama's lead in the polls during the 2008 U.S. presidential election led to negative stock market reactions, as the market anticipated a shift toward less business-friendly policies. In contrast, McCain's lead was linked to positive market reactions, suggesting that investors preferred Republican pro-business policies.

Wang and Lin (2009) explore the role of political uncertainty in Taiwan, specifically during congressional sessions, and find that political decisions made during these periods lead to increased stock market volatility. Their study uses congressional session periods as a proxy for political uncertainty and shows that the uncertainty around policy decisions during these sessions significantly impacts stock returns, particularly when the outcome of these decisions is unclear. This shows that political uncertainty—especially in systems with frequent legislative sessions—can create market turbulence as investors react to the potential for policy shifts.

Lastly, policy shifts and the resulting economic uncertainty during elections play a critical role in shaping stock market performance. Ajmi and Arfaoui (2020) demonstrates that political risk, particularly in the context of the 2016 U.S. presidential election, leads to increased volatility in both traditional financial assets and cryptocurrencies. Their study points to the fact that political uncertainty during elections creates a flight-to-safety effect, where investors turn to alternative assets such as Bitcoin as a hedge against market uncertainty.

Polling data also plays a critical role in shaping market expectations and volatility. Ejara et al. (2012) examine the relationship between poll results and stock market reactions during the 2008 U.S. presidential election. They find that Obama's lead in the polls was associated with negative stock market reactions, reflecting the market's concern over less business-friendly policies. In contrast, McCain's lead was linked to positive market reactions, suggesting that investors preferred Republican pro-business policies. This aligns with the findings of Pantzalis et al. (2000), who show that pre-election uncertainty decreases

as the election approaches, leading to positive abnormal returns in the two-week period leading up to elections.

Herold et al. (2021) also employs polling data from 2016 U.S presidential election and demonstrates that the "Trump Head-to-Head Momentum" measure is a reliable metric that can be used as pre-election prediction for investors in decision making prior to election. It is found that the stock prices in industries are sensitive to Trump's policy agenda as the probability of Trump's winning the election increase for both pre- and post-election. Nguyen et al. (2023) further emphasize the importance of using polling data in reducing election uncertainty as well as maintaining market stability. The study suggests that markets become less volatile when the polling results are aligned with actual outcome, indicating rational investor reaction. Nonetheless, the difference in predictions and results increase uncertainty, which will then amplify the volatility and cause election shock. Herold et al. (2021) further elaborate the practicality of using polling data as part of trading strategies can outperform passive methods following the elections. Thus, the poll can be served as market sentiment and a mechanism for reducing uncertainty in political as well as financial contexts.

Finally, the timing of elections is also found to influence stock market volatility. Pantzalis et al. (2000) argue that early elections often lead to stronger positive returns, as the uncertainty surrounding the election is resolved earlier. However, the timing and political context of elections—whether they are early or late, and whether they are held during periods of economic uncertainty—remain critical factors in determining how elections affect stock market behaviour.

In conclusion, the empirical evidence consistently demonstrates that election-related variables, including party alternation, economic policy uncertainty, investor sentiment, and

margin of victory, all significantly influence stock market volatility and performance. However, the impact of these variables is contingent on the political context, the margin of victory, and the economic environment at the time of the election. Investors must thus consider not only the political environment but also the expected policy changes and economic conditions when making investment decisions during election periods.

2.4 Empirical Testing Approach

Based on the literature cited above, it can be identified that the previous studies have favoured three methodologies to investigate the association of political event and stock return. The first methodology involves the construction of time series model with regression analysis. Second methodology is event studies which investigate the price response of an asset to an unexpected event by establishing whether abnormal return caused by the event are statistically significant. The third methodology is the combination of time series model with regression and event studies.

2.4.1 Time-series model with regression analysis

The specification and estimation of time series models with rate of return on a financial asset as the dependent variable, and proxies of political risks as explanatory variables have been commonly used to investigate the association between election and financial market. Election dummy is the most common variable that proxied for political risks and such variable is regressed using linear regression or GARCH (Generalised Autoregressive Conditional Heteroskedasticity) family of models in order to capture the effects of such events on returns and volatility returns. Studies that employ linear regression are Floros (2008), Abidin, Old and Martin (2010), Liew and Rowland (2016, 2020) whereas Lean (2015), Ahmed (2016) and Nurlita and Naomi (2019) employ GARCH method to

explore the volatility at the market as well as sector level in response to political event. Using the sample from 1996 to 2002, Floros (2008) examine the relationship between Greek election and Athens stock exchange by introducing dummy variable to the model specification. In this case, the dummy variable takes the value of zero for the non-elections period and one for the elections period and proposed two different timeframes to it. There are one month before and after the election and 15 days before and after the election. Evidence shows Greek election has no significant effect on Athens stock exchange despite its negative returns.

As for Abidin, Old and Martin (2010), the study also employs two dummy variables and one of which before-election dummy takes a value of one for the 20 trading days before election and zero otherwise whereas after-election dummy takes a value of one for 20 trading days after election and zero otherwise. The regression analysis discovers that New Zealand stock index offered higher returns before election as compared to after election but the effect is insignificant over the sample period of 1986 to 2009. However, there is a positive and significant effect on the NZX50 with a yield of 0.49% of return after the election when the sample is regressed separately. Using a similar approach, Liew and Rowland (2016, 2020) revealed Bursa Malaysia is more information efficient in the Twelfth and the Thirteen general election as the market index managed to incorporate the election outcome information as fast as 15 trading days before and after the election over sample period from 1995 to 2018 which regressed using Ordinary Least Square (OLS). The studies have been using four different window timeframes ranging from 15 to 90 trading days. On the other hand, Ahmed (2016) and Nurlita and Naomi (2019) apply time-varying volatility modelling to address the asymmetry volatility impact at the market and sector level as a result of changes in political regimes. To conduct the asymmetric volatility effect on respectively

stock market, both studies have been using the following formula to test for EGARCH (p, q) and TGARCH (p, q):

$$R_t = \alpha_0 + (\alpha_1 - \alpha_0)D + \sum_{i=1}^m b_i R_{t-i} + \epsilon_t \quad \text{Equation 2.1}$$

where R_t denotes as stock return at time t , R_{t-1} denotes as stock return at time $t-1$ and D denotes as dummy variable which takes a value of one as the occurrence of political events and zero otherwise. The identification of the lag orders, p and q , for GARCH and ARCH terms, respectively, is based on the Akaike information criterion. In the case of Egypt, Ahmed (2016) uncovers that the outcome of the presidential election in 2012 and 2014 are statistically significant impact on the conditional volatility of Egypt market index (EGX100) and explain partially at sector level. Similarly, Nurlita and Naomi (2019) discover asymmetry effect on stock return volatility on Indonesian stock exchange (IDX) during the 2014 Indonesian Presidential election and reveal that positive shocks (good news) have better influence than negative shocks (bad news). Similarly, Lean (2015) applied GARCH (1,1) model to improve the original findings of using Ordinary Least Square (OLS) in determining the Malaysian effect on stock performance. The specification of a GARCH (1,1) model is as follows:

$$R_t = \alpha + \beta D_t + \epsilon_t, \epsilon_t \sim N(0, h_t) \quad \text{Equation 2.2}$$

$$h_t = r_0 + r_1 h_{t-1} + r_2 \epsilon_{t-1}^2 \quad \text{Equation 2.3}$$

where r_1 and r_2 are the standard GARCH and ARCH terms with GARCH term bigger than the ARCH term. In the GARCH framework, both the mean and variance equations are estimated jointly using the Maximum Likelihood method. After adjusted for GARCH (1,1), the empirical findings have significantly improved from being no-election effect (using OLS

method) to have election effect. It is revealed that the stock performance is highly affected by the election and illustrated that the pre-election tends to bring positive reaction to the stock market whereas the post-election tends to bring negative reaction to the stock market in the most recent episodes of general election.

This conditional volatility approach continued when Herold et al. (2021) analyze the influence of polling momentum on stock market returns during the 2016 U.S. presidential election using a GARCH-in-Mean. The study introduced “Trump Head-to-Head Momentum” (THHM) measure which proxied for changes in probability of Trump winning. This measure acts as a predictive power of opinion polls which allows to capture sector-specific impacts of pre-election sentiment. Using generalized autoregressive conditional heteroscedasticity (GARCH) models, Musah et al. (2023) evaluate pre- and post-election volatility dynamics across five sub-Saharan African markets. The study employs dummy variables to differentiate between election periods for comparative analysis across markets with different political and economic contexts. Another study by Cheong et al. (2020) examines the fractal structure of the Malaysian stock and further improve the methodology by adopting a two-step approach: ARIMA-GARCH and rolling window Hurst exponent. The former method is used to eliminate the short-memory effects and conditional heteroskedasticity in returns while the latter estimation is to identify the disruptions in the market’s fractal structure. The purpose is to focus on structural market changes rather than short-term volatility spikes.

Overall, this time series regression method requires longer horizon data set as well as dummy election variable to differentiate pre- and post-election window along with a series of election-induced factor as independent variable. Contradict to previous studies which adopting only standard GARCH model, Cheong et al. (2020) explore deeper structural

phenomena using fractal method. This is because the latter approach is more advanced as it is able to capture both short and long-term dynamics. Unlike standard GARCH which focus on immediate election impacts, this technique gives a better understanding on the potential structural shifts in market behaviour during election. Lastly, cross-country analysis in determining election effect on stock volatility by Musah et al. (2023) provides a broader perspective as compared to single country study.

2.4.2 Event study

Despite using time-series model regression analysis, event study methodology has been widely used in many studies in order to gauge the depth of election impact on market and sector returns. Few examples who conduct using event study methodology are Tay, Rasiah and Lai (2016) and Chavali, Alam and Rosario (2020). Utilizing five Greek national elections from 1996 to 2009, Repousis (2016) reveals that the investors were unable to gain profit from trading the bank's stock price through the assessment of CAAR of 41 trading days event window in market model event study as the election has no significant impact on the bank's stock movement, even though the bank's stock is assessed separately by each election in the case of Athens. On the contrary, this is not for the case of Malaysia when Tay, Rasiah and Lai (2016) aggregate the overall Malaysia general election from 2004 to 2013 and discover that there is a significant average return abnormal and cumulative abnormal returns within the 15-day period before and after the general election. Similarly, Chavali, Alam and Rosario (2020) employ similar technique with a sample period of 2014 to 2019 and 82 days of event window (41-day pre-and post-event) and postulate that Bombay Stock Exchange is categorized as semi-strong form efficient market in the 2014 and 2019 general election when the stock market has fully incorporated the election outcome information as fast as two days before and four days after the event, although same party have come to power for the second time.

2.4.3 Event study with regression analysis

As discussed in the previous section regarding the methodology used to investigate the election impact on the stock returns and volatility returns which ranging from time-series regression model to event study approach, many studies have started to combine both methodologies to strengthen the analysis. Few of them are Oehler, Walker and Wendt

(2013), Ong et al. (2015) and Blau, Griffith and Whitby (2019) and Bialkowski, Gottschalk and Wisnieski (2006). The initial step of these studies is to compute the cumulative abnormal returns (CAR) around the election period in a given event window timeframe and some of them have been using market model and multi-factor model event study for robustness check purpose. Meanwhile, the computation of cumulative abnormal volatility (CAV) in the study of Bialkowski, Gottschalk and Wisnieski (2006), the process is almost the same to the original computation of cumulative abnormal return using market model in the event study except that the abnormal return is adjusted for GARCH (1,1) in the market model instead to measure the election effect on stock volatility. Once computed, the CAR (CAV) of stock will act as dependent variable whereas the independent variables can be ranging from election-induced factors to macroeconomic factors which will be included in the model specification to run for regression analysis.

In another study by Mnasri and Essaddam (2021), utilize daily data from 1992 to 2016 to analyze the impact of U.S. presidential elections on stock market volatility using GARCH (1,1) model with volatility event study framework. This combination method is not only allowed to capture both financial and macroeconomic policy, but also to quantify the abnormal volatility by comparing actual volatility to a non-event benchmark throughout seven episodes of elections.

2.5 Empirical Gap

The empirical gap in existing literature highlights several areas requiring further research on the relationship between elections and stock market volatility, particularly in Malaysia. While many studies have examined this relationship in developed economies such as the United States, the United Kingdom, and Australia, there is limited empirical work on emerging markets where political risks may be more pronounced. Research on countries like Pakistan (Nazir et al., 2014) and Egypt (Ahmed, 2017) has provided some insights, but a comprehensive framework capturing different aspects of election-induced volatility is still lacking for Malaysia.

Another significant gap lies in sector-specific analyses of election-induced volatility. While existing studies primarily focus on aggregate market performance, limited attention has been given to how different industries respond to political uncertainty. Studies like Oehler et al. (2013) and Ahmed (2017) suggest that certain industries, such as banking and financial services, are more sensitive to political changes. However, research exploring sectoral differences in Malaysia across industries such as technology, plantation, finance, construction, and consumer goods remains scarce.

Moreover, the methodologies used to estimate election-related volatility are often limited to GARCH-based models (Lean, 2015; Mnasri & Essaddam, 2020). Alternative measures such as range-based volatility, absolute return, and log absolute returns remain underexplored. Employing multiple volatility estimation techniques and robustness checks could enhance the reliability of results and provide a more comprehensive view of stock market reactions to elections.

The interaction between political and economic factors in driving stock market volatility also remains underexamined. While political uncertainty is widely recognized as a key driver (Pastor & Veronesi, 2012; Goodell & Vähämaa, 2013), limited research integrates economic policy variables such as fiscal and monetary policies into volatility models. Examining the interplay between election outcomes and macroeconomic indicators like money supply changes and exchange rate fluctuations could provide valuable insights, particularly in emerging markets.

Furthermore, the impact of election timing and political stability on market behavior is another area requiring deeper investigation. Studies like Pantzalis et al. (2000) suggest that early elections may reduce uncertainty, while contested elections heighten volatility. However, the role of election timing within Malaysia's unique political structure and its long-term effects on market stability remain underexplored.

2.6 Conceptual Framework

This study examines the impact of elections on stock market volatility in Malaysia by using cumulative abnormal volatility (CAV) $[-12,12]$ of stock indices. The framework is grounded in three key theoretical underpinnings: the Efficient Market Hypothesis (EMH), the Political Business Cycle (PBC) theory, and the Dependency Theory, which collectively explain the potential drivers of stock market volatility in response to election events.

The dependent variable, CAV, measures the extent of market volatility surrounding election periods, capturing investor reactions to political and macroeconomic uncertainties. To examine the determinants of this volatility, the study considers several independent variables, each representing different aspects of election-related and economic influences. Political uncertainty, as explained by the Efficient Market Hypothesis (EMH) (Fama, 1970),

is proxied through three election-related variables: the number of political parties, margin of victory, and minority government. A highly fragmented political landscape, reflected by a greater number of political parties, may introduce instability and uncertainty in policymaking, leading to increased market volatility (Pastor & Veronesi, 2013). Similarly, a narrow margin of victory signals weak electoral support, raising concerns about government stability and policy effectiveness, which may contribute to heightened volatility (Julio & Yook, 2012). Additionally, the presence of a minority government may lead to legislative gridlock and policy uncertainty, further exacerbating market fluctuations (Bernhard & Leblang, 2006).

The Political Business Cycle (PBC) theory (Nordhaus, 1975) suggests that governments manipulate fiscal and monetary policies to influence economic conditions around election periods, which can affect market volatility. In this study, money supply (Log M2) and government budget serve as proxies for government intervention. Expansionary monetary policy, reflected by an increase in money supply, can indicate pre-election economic stimulus efforts, potentially altering market expectations and influencing stock volatility (Alesina et al., 1997). Similarly, government budget decisions, particularly in terms of fiscal spending or deficits, may shape investor sentiment, either stabilizing or disrupting market trends depending on the perceived sustainability of such policies (Drazen, 2000).

From the perspective of Dependency Theory, this study considers Foreign Direct Investment (FDI % GDP) as a key variable representing economic dependency on external capital flows. According to dependency theorists, economies that heavily rely on foreign investment tend to experience heightened volatility due to external shocks and capital flight

risks (Dos Santos, 1970). Given Malaysia’s reliance on foreign investments, political instability and policy uncertainty can have a disproportionate impact on stock market volatility, as foreign investors may react sensitively to election outcomes by adjusting their capital allocations (Jensen, 2003).

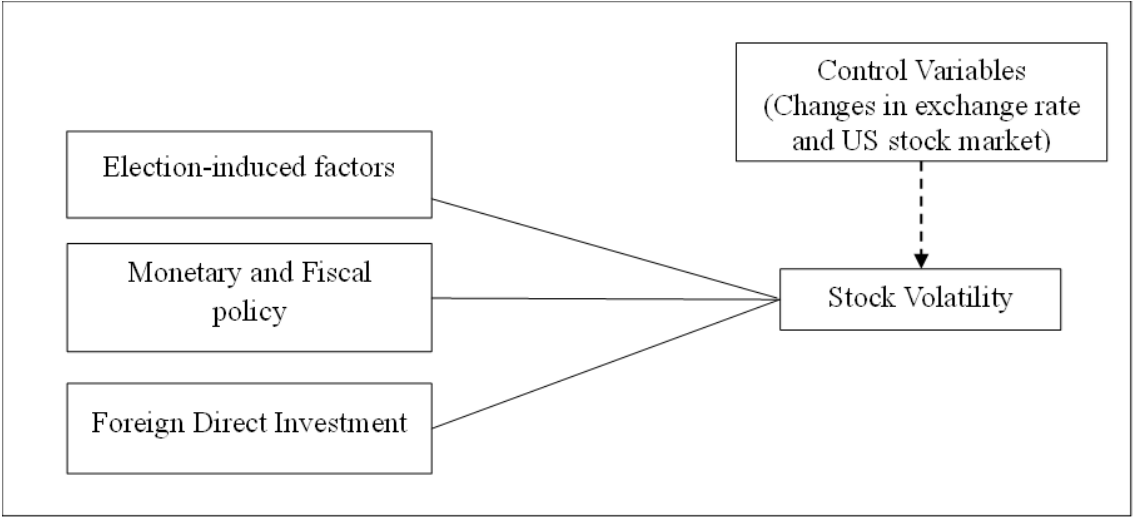


Figure 2.1: Conceptual Framework for Election Impact on Stock Index Volatility

To ensure a robust analysis, this study incorporates macroeconomic control variables that account for external economic influences. Changes in exchange rates are included to capture fluctuations in currency values that might impact investor confidence and capital flows (Dornbusch & Fischer, 1980), while changes in the S&P 500 index reflect global financial market conditions, recognizing that Malaysia’s stock market is interconnected with international economic trends (Forbes & Rigobon, 2002).

By integrating election-induced political uncertainty (EMH), government intervention (PBC), and external economic dependence (Dependency Theory), this framework provides a comprehensive approach to understanding how elections influence stock market volatility. The inclusion of control variables further ensures that the analysis

accounts for broader macroeconomic dynamics, allowing for a more precise estimation of the effects of elections on market fluctuations.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Chapter Three composes of five sub-sections. Section 3.2 is data description that data used for conducting volatility event methodology and regression analysis. Section 3.3 is development of hypotheses. Section 3.2 is a data description which provides data collection to be used in this study. Section 3.4 is illustrating methodology implementation in the analysis whereby volatility event study and panel regression analysis are explained here. Section 3.5 is summarizing the methodology in concluding remarks.

3.2 Data Description

Daily index data of FTSE Bursa Malaysia Kuala Lumpur Composite Index (hereafter FBMKLCI) which represents local main market index, seven sector indexes of Malaysia and one benchmark index namely FTSE Bursa Malaysia EMAS index are retrieved from CEIC and the election information can be obtained from the official website of Malaysian Election Commission. According to Bursa Malaysia, it has thirteen sectorial indices which include Construction, Property, Consumer Product and Service, Industrial Product and Service, Plantation, Financial Service, Technology, Health Care, Real Estate Investment Trusts (REITs), Telecommunication and Media, Energy, Utilities and Transportation and Logistics. Due to data availability and synchronization purpose, this study only covers election from 2010 onwards which allows to include three elections starting from 2013 (GE13) until 2022 (GE15). Although there was a restructuring happening in June 6, 2020 whereby reclassification of old sector index such as trading, telecommunication etc into another sector and five new sectors index has also been introduced at the same time. This study has decided

to include only seven sector indices as the primary intention of the study is to focus on the election impact instead of restructuring impact on the indices. The selected sector indexes are Construction, Plantation, Property, Finance Service, Technology, Industrial Product and Service, Consumer Product and Service. In addition to this, the FBMKLCI is served as main market to capture overall market's performance.

3.3 Hypothesis Development

3.3.1 Hypothesis Development: Election Effect and Market Volatility

The Efficient Market Hypothesis (EMH) asserts that stock prices fully reflect all available information, including political events such as elections (Fama, 1970). In an efficient market, investors rationally adjust their expectations based on new information, and stock price volatility should only exhibit temporary fluctuations before returning to its fundamental level (Malkiel, 2003). However, elections introduce uncertainty related to policy direction, government stability, and macroeconomic management, which may lead to volatility (Pastor & Veronesi, 2013).

In a perfectly efficient market, election-related uncertainty should be immediately priced in, and there should be no significant deviation in volatility beyond normal expectations. However, emerging markets, including Malaysia, often experience information asymmetry, speculative trading, and investor overreaction, leading to prolonged deviations from normal volatility levels (Białkowski, Gottschalk & Wisniewski, 2008). If elections induce sustained market volatility, it would indicate inefficiencies in how markets absorb political information, challenging the EMH. To test whether stock market volatility aligns with EMH predictions, the following hypotheses are developed:

H1: Abnormal volatility (AV) is not significantly different from zero during election periods ($AV = 0$), indicating that election-related uncertainty is efficiently priced in.

H2: Average abnormal volatility (AAV) is not significantly different from zero during election periods ($AAV = 0$), suggesting that election-related volatility does not persist beyond short-term market adjustments.

H3: Cumulative abnormal volatility (CAV) is not significantly different from zero during election periods ($CAV = 0$), implying that election-induced volatility does not create prolonged market disruptions.

H4: Cumulative average abnormal volatility (CAAV) is not significantly different from zero across multiple election events ($CAAV = 0$), demonstrating that elections do not systematically disrupt market efficiency over time.

If these hypotheses hold, it would support the EMH, indicating that election-related information is rapidly incorporated into stock prices without causing prolonged volatility. Conversely, if AV, AAV, CAV, or CAAV are significantly different from zero, it would suggest that elections introduce inefficiencies, causing persistent volatility beyond what would be expected in an efficient market (Kim & Mei, 2001; Bekaert & Harvey, 1997)

3.3.2 Hypothesis Development: Monetary, Fiscal Policy and Market Volatility

Besides, this study integrates the Political Business Cycle (PBC) Theory to examine how fiscal and monetary policies shape stock market volatility in the context of elections. Monetary policy, particularly through money supply ($\log M2$), plays a crucial role in shaping stock market volatility during election periods. According to Nordhaus (1975), governments tend to engage in expansionary monetary policies before elections to stimulate economic

activity and gain voter support. A higher money supply reflects such policies, increasing liquidity in financial markets and enhancing investor confidence. This effect is particularly beneficial for credit-dependent sectors such as construction and finance, where increased liquidity improves access to funding and investment stability (Rogoff, 1990). Consequently, these sectors are expected to experience lower volatility in response to an expansionary monetary stance. Conversely, a contractionary monetary policy characterized by a reduction in money supply signals tighter economic control, often aimed at containing inflation (Drazen, 2000). This may induce uncertainty among investors, leading to cautious trading behaviour. Sectors that rely heavily on consumer spending and liquidity availability, such as consumer products & services and property, are likely to experience heightened volatility as reduced money supply constrains disposable income and investment inflows (Julio & Yook, 2012). To test whether stock market volatility aligns with PBC predictions, the following hypotheses are developed:

Hypothesis 5 (H5): Changes in money supply (Log M2) significantly influence election induced cumulative abnormal volatility (CAV).

H5a: An increase in money supply (expansionary monetary policy) reduces volatility due to improved liquidity and credit availability (Rogoff, 1990).

H5b: A decrease in money supply (contractionary monetary policy) increases volatility in where demand is highly sensitive to liquidity constraints (Julio & Yook, 2012).

Fiscal policy, particularly government budget decisions, also plays a significant role in influencing election-induced market volatility. As argued by Alesina et al. (1997), policymakers adjust public spending and taxation strategies around election periods to

manipulate economic conditions and influence market sentiment. An expansionary fiscal policy (higher government spending), often observed in the pre-election period, includes investments in infrastructure, subsidies, and social programs, fostering short-term economic optimism (Brender & Drazen, 2005). Such policies benefit infrastructure-heavy sectors, including construction and industrial products & services, as they directly benefit from government-led development initiatives (Dixit & Londregan, 1996). Consequently, these sectors are expected to experience lower volatility due to stable investment inflows. In contrast, a contractionary fiscal policy (reduced government spending or fiscal austerity) can dampen economic growth, leading to higher volatility in sectors reliant on public and consumer spending (Klomp & De Haan, 2013). Post-election spending cuts, fiscal consolidation, and austerity measures reduce economic momentum, increasing uncertainty in technology and consumer product & services sectors as investors anticipate lower government and consumer spending (Białkowski, Gottschalk & Wisniewski, 2008).

H6: Changes in fiscal policy (government budget) significantly influence election-induced cumulative abnormal volatility (CAV).

H6a: An increase in government budget (expansionary fiscal policy) reduces volatility due to increased public sector investment (Alesina et al., 1997).

H6b: A decrease in government budget (contractionary fiscal policy) increases volatility due to reduced consumer and business confidence (Białkowski, Gottschalk & Wisniewski, 2008)

3.3.3 Hypothesis Development: Foreign Direct Investment and Market Volatility

Dependency Theory posits that developing economies, such as Malaysia, remain highly reliant on external financial flows, particularly Foreign Direct Investment (FDI), to sustain economic growth and market stability (Dos Santos, 1970). As these economies are integrated into the global financial system, foreign investors play a critical role in determining market conditions, especially during periods of political uncertainty such as elections. Political risk and instability can influence the decision-making of foreign investors, leading to shifts in FDI inflows and outflows, which in turn affect stock market volatility (Cardoso & Faletto, 1979).

During election periods, uncertainty regarding policy direction, government stability, and regulatory changes creates a volatile environment for foreign investors (Jensen, 2003). When investors anticipate policy continuity and stable economic management, they may increase capital inflows, fostering market confidence and reducing volatility (Busse & Hefeker, 2007). Increased FDI inflows provide liquidity to financial markets, reducing uncertainty and speculation, which contributes to lower abnormal volatility (Alfaro et al., 2004). Conversely, if elections signal potential political instability or policy shifts unfavourable to foreign investors, capital flight may occur, leading to heightened stock market fluctuations (Schneider & Frey, 1985). A sudden withdrawal of FDI results in reduced liquidity, increased uncertainty, and panic-driven trading, amplifying market volatility (Li & Resnick, 2003).

Additionally, emerging markets often lack deep domestic capital markets to absorb the shocks of foreign capital withdrawal (Blanton & Blanton, 2007). When foreign investors liquidate their holdings in response to election-related risks, domestic investors may react

by adjusting their portfolios, further exacerbating market fluctuations. This cyclical effect reinforces the volatility-inducing nature of FDI withdrawals during political transitions (Asiedu, 2002).

H7: Changes in Foreign Direct Investment (FDI) significantly influence election-induced cumulative abnormal volatility (CAV).

H7a: An increase in FDI inflows reduces volatility as foreign capital provides liquidity and stabilizes market expectations (Busse & Hefeker, 2007).

H7b: A decrease in FDI inflows increases volatility due to capital flight, liquidity shortages, and heightened market uncertainty (Schneider & Frey, 1985).

3.3.4 Hypothesis Development: Election-Related Variables and Market Volatility

The number of political parties competing in an election reflects the level of political fragmentation and uncertainty in a country. A higher number of parties increases the likelihood of a divided government or coalition formation, which may lead to policy gridlocks and slower decision-making (Leblang & Mukherjee, 2005). Investors prefer stable and predictable governance structures and increased political fragmentation may introduce doubts about economic policies, increasing uncertainty and volatility (Białkowski, Gottschalk & Wisniewski, 2008). In contrast, a lower number of competing parties suggests a more decisive election outcome, reducing policy ambiguity and lowering stock market volatility.

H8: The number of political parties contesting in an election is positively associated with cumulative abnormal volatility (CAV), as greater political fragmentation increases uncertainty.

The margin of victory represents the difference in votes between the winning and losing parties. A narrow margin of victory implies that political control is weak, and small changes in public sentiment or coalition shifts could lead to instability (Jens, 2017). In such cases, investors face higher uncertainty regarding policy continuity, leading to heightened stock market volatility (Julio & Yook, 2012). Conversely, a large margin of victory signals strong electoral support, which often translates into policy consistency, market stability, and reduced investor uncertainty.

H9: A narrower margin of victory is associated with higher cumulative abnormal volatility (CAV), as it increases uncertainty regarding government stability and policy continuity.

A minority government occurs when the ruling party does not secure an outright majority in the legislature and must rely on coalition agreements or external support to govern. Such governments are inherently unstable, prone to legislative deadlocks, and face difficulties in passing economic policies, contributing to heightened market volatility (Bernhard & Leblang, 2006). Investors prefer strong, stable governments that can implement policies efficiently, and the presence of a minority government raises concerns about policy reversals, fiscal decisions, and economic reforms, leading to increased stock market fluctuations (Białkowski et al., 2008).

H10: The formation of a minority government is positively associated with cumulative abnormal volatility (CAV), as it increases political and policy uncertainty.

3.4 Methodology

3.4.1 Volatility Event Study

In an attempt to capture the impact of general election on stock volatility at market and sector level in the context of Malaysia, this study combines both volatility event study and panel regression analysis in the methodology section. To accommodate the first objective of the study, the volatility event study methodology is adapted from Fama et al. (1969), Brown and Warner (1980); (Brown & Warner, 1985). The framework is the same except that this study is focusing on volatility estimation instead of return. Hence, the measurement of abnormal volatility (AV), cumulative abnormal volatility (CAV), average abnormal volatility (AAV) and cumulative average abnormal volatility (CAAV) are analysed and interpreted in Chapter 4.

3.4.1.1 Event date, estimation window and event windows selection

First step, define event dates, event window and estimation window to be studied. In this study, Malaysia's general election is recognized as event day. However, election day in Malaysia always announce as public holiday and hence, local stock market is closed on that particular day. In this case, day zero (event date:0) should be accounted for the first trading day, when the stock market opens in Malaysia after the releasing of election outcome in order to estimate the election shock according to Bialkowski, Gottschalk and Wisniewski (2008) and Repousis (2016).

Next is selecting event window to capture the election effect on the stock return as well as stock volatility. McKinlay (1997) and Asgharian et al. (2011) mentioned that the magnitudes of impacts are sensitive to the choice of the event window. However, it is found out that there is no theoretical guidance to choose optimal event window in event study and

they are mostly determined by researchers themselves after reviewing previous literatures. Hence, this study employs 25 trading days of event window, that is, 12 days before and after including event day. Within the event window, the sub-window is also introduced and divided into three periods including pre-event period, event day and post event period to capture different stages of election effect on stock volatility especially when the market is inefficient.

For pre-event period, the sub-windows are $[-12, -1]$, $[-10, -1]$, $[-5, -1]$, $[-3, -1]$, $[-1, 0]$. The rationality behind the selection of sub-windows is that longer pre-event window allows to assess the anticipation effect through the potential leaks of election outcome information to the market at early stage while shorter pre-event sub-window shows immediate reaction from the market where the speculations intensify as announcement of election outcome approaches. As for post-event period, the sub-windows are $[0, 1]$, $[0, 3]$, $[0, 5]$, $[0, 10]$, $[0, 12]$. With these sub-windows, it allows for interpreting a delayed reaction from the investors as they often take time to adjust their portfolio accordingly to the news and this post-event observation continue for a longer period to check the sustainability of the market inefficiency impact. Aside from that, this study also investigates stock volatility around symmetrical window in the episodes of elections. The proposed symmetrical windows are $[-12, 12]$, $[-10, 10]$, $[-5, 5]$, $[-3, 3]$ and $[-1, 1]$. According to McKinlay (1997), estimation period is ranged between 120 to 250 days for a stable estimation of normal return during the non-event period. Thus, this study employs 200 trading days of estimation window. Table 3.1 shows event dates, event window and estimation window to be included in the study.

Table 3.1: List of event day, event window and estimation window for GE13 to GE15.

General Election (GEs)	Event Dates	Event day (0)	Estimation Window (200 trading days)	Event Window (25 trading days)
GE13	5/5/2013	6/5/2013	21/6/2012 – 16/4/2013	17/4/2013 – 22/5/2013
GE14	9/5/2018	14/5/2018	29/6/2017 – 19/4/2018	20/4/2018 – 31/5/2018
GE15	19/11/2022	21/11/2022	6/1/2022 – 1/11/2022	2/11/2022 – 8/12/2022

3.4.1.2 Computation of volatility measures

Next is the computation of volatility measures for both market index and sector index using the following five volatility proxies which are illustrated as follows:

- Squared return (Harris, 1987)

$$R_{it}^2 \quad \text{Equation 3.1}$$

- Absolute return (Crouch, 1970)

$$|R_{it}| = |P_{it} - P_{it-1}| \quad \text{Equation 3.2}$$

where $|R_{it}|$ represents absolute return at time t , P_{it} and P_{it-1} are closing prices on day t and one day before day t for index i , respectively.

- Logarithm of Absolute Return (Peng & Xiong, 2003)

$$\log(|R_{it}|) \quad \text{Equation 3.3}$$

- Range-based volatility (Parkinson, 1980)

$$Range = \ln(H_{it}) - \ln(L_{it}) \quad \text{Equation 3.4}$$

where H_{it} and L_{it} are respectively, represent the highest and lowest price of index i at time t .

- GARCH (1,1) model (Bollerslev, 1986)

$$\sigma_t^2 = \omega_i + \alpha_i \epsilon_{i,t-1}^2 + \beta_i \sigma_{i,t-1}^2 \quad \text{Equation 3.5}$$

where σ_t^2 is a conditional variance for index i at time t , ω_i is a constant term that represents long-term average variance for index i , $\epsilon_{i,t-1}^2$ refers to the ARCH term that captures the effect of the most recent shock on the current volatility, and $\sigma_{i,t-1}^2$ refers to the GARCH term, which represents the influence of past volatility on current volatility. A larger α_i indicates index i is highly sensitive to recent market shocks whereas larger β_i implies that volatility persists over time.

Equation 3.1 to Equation 3.6 is a list of volatility proxy and it is selected based on the availability of the data as well as frequency of data to be used in this study. Each proxy provides unique characteristics. As can be seen, squared return and absolute return are known for its simplicity and straightforward measurement of volatility. Squared return emphasizes extreme movements due to large returns are squared whereas absolute return is less sensitive to extreme values which makes it more stable in datasets with moderate price changes. Logarithm of absolute return is basically a transformation of absolute return to ensure positive values while also normalizing and compressing large fluctuations which is useful to handle non-linearity and outliers in data analysis. Range-based volatility is another simple measurement for volatility. It takes into account the highest and lowest prices within

a trading period, reflecting intraday variability. Lastly, GARCH (1,1) model which considers the most advanced among the volatility measures as it can effectively capture time-varying volatility, emphasizing the persistence of past volatility and the impact of recent market shocks. It is acknowledged that financial time series tends to have volatility clustering characteristics and thus, this model is well-suited for this study.

3.4.1.3 Measurement model

After estimating for the volatility proxy, this study uses market model for producing ex-ante and ex-post volatility for both selected market index as well as sector indices. In this case, an estimation of market (sector) index's beta, β_i as well as intercept, α_i around estimation window is required before the computation of abnormal volatility (AV) of FBMKLCI and seven other sectoral index is as follows:

$$V_{it} = \alpha_i + \beta_i V_{mt} + \varepsilon_{it} \quad \text{Equation 3.6}$$

where V_{it} represents actual volatility index i at time, V_{mt} represents actual volatility of market index at time t , β_i represents beta for index i which used to measure sensitivity of index i 's volatility to the market volatility, α_i represents intercept term for index i and ε_{it} is the error term, representing the portion of V_{it} cannot be explained by market model. Both V_{it} and V_{mt} are estimated using five volatility measures as described in Equation 3.1 to Equation 3.5. For market index which serve as benchmark index, this study is using FBM EMAS index due to its robust and comprehensive representation of Malaysian equity market. There is approximately 98% of the total market capitalization of Bursa Malaysia, which covering a wide range of large, mid and small-cap companies. This breadth ensures that the benchmark reflects the overall market dynamics rather than being overly concentrated on the largest firms, as compared to the FBMKLCI.

According to Market Model approach, the estimation of market (sector) index's beta, $\hat{\beta}_i$ as well as intercept, $\hat{\alpha}_i$ can be done through regressing actual index volatility against actual market volatility in the estimation window [-212, -13] using Ordinary Least Square (OLS) which illustrated in Equation 3.7. The Market Model method is the most common approach employed in the event study as it accounts for unique characteristics of market or sector by adjusting for market or sector specific betas and intercepts. In addition, it is also to enhance statistical power in detecting significant effects which suggested by Brown and Warner (1980) and McKinlay (1997).

Once market (sector) index's beta and intercept have derived from estimation window [-212, -13] from each election, the estimated beta and intercept will be used to calculate for expected volatility, $E(V_{it})$ for market (sector) index within event window [-12, 12] which shown in Equation (3.9). The abnormal volatility, AV_{it} , can be obtained from subtracting the expected volatility, $E(V_{it})$, estimated model from the actual index volatility, V_{it} , in the event window. Hence, Equation 3.8 and Equation 3.9 are expressed as follows:

$$AV_{it} = V_{it} - E(V_{it}), \quad \text{Equation 3.7}$$

$$\text{where } E(V_{it}) = \hat{\alpha}_i + \hat{\beta}_i V_{mt} \quad \text{Equation 3.8}$$

Based on Equation (3.8), AV_{it} refers to abnormal volatility of index i at time t , V_{it} refers to actual volatility of index i at time t , and $E(V_{it})$ refers to the estimated volatility of market (sector) index from estimation model through market model in event window.

Following that, the abnormal volatility for each index is subsequently cumulated over the relevant window (n_1, n_2) which has discussed in Section 3.3.1.1 to get an estimation of CAV (n_1, n_2) for each election. As volatility changes persist beyond a single day, CAV is

an useful tool to analyse the cumulative impact of election on volatility over time rather than focusing on individual days. The estimation of CAV (n_1, n_2) is illustrated as below:

$$CAV_{(n_1, n_2)} = \sum_{n_1}^{n_2} AV_{it} \quad \text{Equation 3.9}$$

where $CAV_{(n_1, n_2)}$ denotes the total AV of each index from period n_1 to period n_2 . According to Białkowski et al. (2008), Essaddam and Mnasri (2014) and Essaddam and Karagianis (2014), the analysis only focus on the estimation of abnormal volatility (AV) and cumulative abnormal volatility (CAV) of stock which is contradicted to the conventional event study methodology which measurement is extended to average abnormal return (AAR) and cumulative average abnormal return (CAAR). A rational explanation could be that estimating average abnormal volatility (AAV) and cumulative average abnormal volatility (CAAV) of a stock provide less meaningful insight to the investors since the real interest is to analyse the magnitude and persistence of the volatility of a stock throughout the election instead of average volatility per day or per certain event window. However, this study further estimates for average abnormal volatility (AAV) and cumulative average abnormal volatility (CAAV) follows the concept of conventional event study. Next is the estimation of Average Abnormal Volatility (AAV) by averaging the same day across election for each index. The formula for AAV is illustrated as follows:

$$AAV_t = \frac{1}{N_t} \sum_{i=1}^N AV_{it} \quad \text{Equation 3.10}$$

where, AAV_t denotes the estimated AAV at time t , AV_{it} is the estimated AV at time t for index i , and N denotes the number of observations which in this case, is the number of

elections. Finally, the computation of CAAV is aggregating the abnormal volatility of index i at day t across multiple elections and cumulating it within each sub-event. The purpose of this is to provide a comprehensive measure of the event's overall volatility impact across time and indexes. Thus, the CAAV is computed as follows:

$$CAAV_{(n_1, n_2)} = \sum_{i=1}^N AAV_{it} \quad \text{Equation 3.11}$$

where, $CAAV_{(n_1, n_2)}$ denotes the estimated CAAV over a specified event window (n_1, n_2) , AAV_{it} is the estimated AAV across multiple observations i at time t in which observation i can be referred to elections.

3.4.1.4 Parametric tests for AV, CAV, AAV and CAAV

To examine the significance of the AV, CAV, AAV and CAAV statistics, this study develops hypotheses statements for each measurement and employs parametric t-test to compare the observed values to their normal values from the estimation window. Followings are the hypotheses and testing procedure for each measurement:

$$H_0: AV = 0$$

$$H_1: AV \neq 0$$

Based on the null hypothesis above, it states that the abnormal volatility for index during the event window is not statistically different from zero, indicating no significant impact of election on market volatility. On the contrary, alternative hypothesis of abnormal volatility for index is statistically different from zero, suggesting that the election had a significant impact on market volatility. T-test for AAV is illustrated as follows:

$$t_{AV} = \frac{AV_{it}}{S_{AV}}$$

Equation 3.12

Then, standard deviation is estimated as

$$S_{AV} = \sqrt{\frac{1}{M-1} \sum_{t=1}^N (AV_{it} - \overline{AV})^2}$$

Equation 3.13

where, S_{AV} denotes the standard deviation of abnormal volatility for index i in the estimation period $[-13, -212]$, AV_{it} refers to abnormal volatility for index i for day t , $\overline{AV}$ refers to mean abnormal volatility for index i in the estimation window $[-13, -212]$ and M refers to the number of days in the estimation period according to Equation 3.14. If the computed t-statistic is greater than the critical value at 1%, 5% and 10% significant level, null hypothesis is rejected which implies that the sector and market index are affected by election will experience abnormal volatility.

$$H_0: AAV = 0$$

$$H_1: AAV \neq 0$$

For average abnormal volatility, null hypothesis states that there is no significant impact of election on market volatility on average when the average abnormal volatility across indexes (elections) on day t during the event window is not statistically different from zero. However, alternative hypothesis suggests that the average abnormal volatility across indexes (elections) on day t is statistically different from zero, implying that the election had a significant impact on market volatility on average. T-test for AAV is illustrated as follows:

$$t_{AAV} = \sqrt{N} \frac{AAV_{it}}{S(AAV_{it})} \quad \text{Equation 3.14}$$

Then, the standard deviation is estimated as

$$S(AAV_{it}) = \sqrt{\frac{1}{M-1} \sum_{t=1}^M (AAV_{it} - \overline{AAV})^2} \quad \text{Equation 3.15}$$

Equation 3.15 is a t-statistic for AAV where AAV_{it} denotes average abnormal volatility for index i on day t in the event window and $S(AAV_{it})$ denotes standard deviation of AAV for index i on day t in the estimation window. As for Equation 3.16 shows time-series standard deviation for AAV_{it} where M refers to the numbers of days in the estimation period.

$$H_0: CAV = 0$$

$$H_1: CAV \neq 0$$

The above hypotheses statements is for cumulative average volatility (CAV). The null hypothesis (H_0) posits that the CAV of an index over the entire event window is not statistically different from zero, which suggesting indexes that are affected by election will not experience CAV. Conversely, the alternative hypothesis (H_1) implies that index that affected by the election will exhibit cumulative abnormal volatility when the CAV is statistically different from zero. T-test for CAV is illustrated as follows:

$$t_{CAV} = \frac{CAV}{S_{CAV}} \quad \text{Equation 3.16}$$

Then, the standard deviation is estimated as

$$S^2 CAV_i = L_2 S_{AV}^2 \quad \text{Equation 3.17}$$

Equation 3.16 is a t-statistic for CAV where CAV_{it} denotes cumulative abnormal volatility for index i on day t in the event window and $S(CAV_{it})$ denotes standard deviation of CAV for index i on day t in the estimation window. As for Equation 3.16 shows time-series standard deviation for CAV_{it} where L_2 refers to the length of event window.

$$H_0: CAAV = 0$$

$$H_1: CAAV \neq 0$$

The above hypotheses statement is for cumulative average volatility (CAAV). The null hypothesis (H_0) posits that the CAAV of an index over the entire event window is not statistically different from zero, which suggesting indexes that are affected by election will not experience CAAV. Conversely, the alternative hypothesis (H_1) implies that index that affected by the election will exhibit cumulative abnormal volatility when the CAAV is statistically different from zero. T-test for CAAV is illustrated as follows

$$t_{CAAV} = \sqrt{N} \frac{CAAV}{S_{CAAV}} \quad \text{Equation 3.18}$$

Then, the standard deviation is estimated as

$$S_{CAAV} = \sqrt{\frac{1}{M} \sum_{t=T_0}^{T_i} \left(CAAV_t - \frac{1}{M} \sum_{t=T_0}^{T_i} CAAV_t \right)^2} \quad \text{Equation 3.19}$$

3.4.2 Panel Regression

After estimating the election effect on stock price using event study approach, this study will further validate the election effect by incorporating election-induced variables to the empirical model and perform panel regression analysis. The dependent variables are cumulative abnormal volatility of stock indices for [-12,12] event window. A series of independent variables and control variables for regression analysis is listed in the following table.

Table 3.2: Independent and Control Variables used for Regression Analysis

Variables	Data Frequency	Source
Log M2	Monthly	Bank Negara Malaysia
Government Budget	Monthly	World Bank
FDI % GDP	Annual	World Bank
Number of Political Parties	Election-specific	Malaysia Election Commission Reports
Margin of Victory	Election-specific	Malaysia Election Commission Reports
Minority Government Dummy	Election-specific	Malaysia Election Commission Reports
Change in Exchange Rate (USD/MYR)	Daily	Bank Negara Malaysia
Change in SP500	Daily	CEIC

Since the study employs CAV of each index for [-12,12] event window and is measured daily, a constant assignment is required when these variables such as LogM2, government budget and foreign direct investment as % of GDP have the lowest frequency which is monthly or annually. To handle this kind of data, match each day within a given month (or year) to the latest available monthly (or yearly) value. For instance, LogM2 data is reported monthly, then the same value will be assigned for all daily observations within

that month. If FDI % GDP is annual, the same value will be assigned for all daily observations within that year.

A model specification used for regression analysis is illustrated as follows:

$$CAV_{i,t} = \beta_0 + \beta_1 POL_{i,t} + \beta_2 PBC_{i,t} + \beta_3 DEP_{i,t} + \beta_4 X_{i,t} + \varepsilon_{i,t} \quad \text{Equation 3.20}$$

Where $CAV_{i,t}$ represents the cumulative abnormal volatility for event window [-12,12] for index i at time t . $POL_{i,t}$ captures the political uncertainty factors which reflecting under EMH theory includes number of political parties, margin of victory and minority of government. Number of political parties is the total political parties in a ruling coalition. Margin of victory is taking a measurement of percentage of votes between ruling coalition and opposite coalition. Minority of government is measured dummy where 1 indicates government failure in securing two-third of the seats in Parliament or zero otherwise. $PBC_{i,t}$ represents political business cycle which include money supply (LogM2) and government budget. $DEP_{i,t}$ represents economic dependency and used FDI % as GDP proxied for foreign direct investment. Lastly is $X_{i,t}$ represents control variables which include change in exchange rate and change in SP500. This study employs a panel regression model to examine the impact of election-related political uncertainty, government intervention, and economic dependency on cumulative abnormal volatility (CAV) of stock indices in Malaysia. The dependent variable, CAV [-12,12], is computed as the cumulative sum of abnormal volatility (AV) over the event window [-12,12], where AV is derived using the market model based on five different volatility measurements. This measure captures fluctuations in market volatility surrounding election periods and reflects how investors react to electoral outcomes and macroeconomic changes.

The primary explanatory variables are categorized into three key theoretical perspectives: political uncertainty (EMH), government intervention (PBC), and economic dependency (Dependency Theory). Political uncertainty is proxied through three election-related variables: the number of political parties, margin of victory, and minority government status. The number of political parties represents electoral fragmentation and is measured as the total number of contesting parties in a given election. A higher number may indicate greater political competition and uncertainty, potentially leading to increased market volatility. The margin of victory, calculated as the percentage difference between the winning party and the runner-up, serves as an indicator of political stability; a lower margin suggests uncertainty about the government's ability to implement policies effectively. The minority government dummy takes a value of 1 if the election results in a government that does not hold a majority in parliament and 0 otherwise, as minority governments often face legislative instability, leading to higher volatility.

Government intervention, as described by the Political Business Cycle (PBC) theory, is assessed using two macroeconomic variables: money supply (Log M2) and government budget. Money supply, measured as the natural logarithm of M2 (broad money), reflects the extent of monetary expansion before and after elections. A rising money supply may indicate pre-election economic stimulation, which can influence investor expectations and market behavior. Government budget, recorded as total government expenditures relative to GDP, captures fiscal policy adjustments. A larger budget allocation in an election year may suggest politically motivated spending, which could introduce volatility due to concerns over fiscal sustainability.

From the Dependency Theory perspective, the study incorporates Foreign Direct Investment (FDI % GDP) as a measure of economic dependence on external capital flows. FDI is measured as the ratio of net foreign direct investment inflows to GDP. A high reliance on FDI may make stock markets more sensitive to political and economic uncertainties, as foreign investors may quickly react to election outcomes by withdrawing or reallocating capital, increasing market volatility.

To control for external economic influences, the model includes change in exchange rate and change in SP 500 as control variables. Exchange rate changes are measured as the daily percentage change in the Malaysian ringgit against the US dollar, accounting for the impact of currency fluctuations on investor sentiment and capital movements. Changes in the S&P 500 index, measured as the daily percentage change in the index, serve as a proxy for global financial conditions, recognizing that Malaysia's stock market is influenced by international trends.

The regression model will be estimated using panel data techniques, allowing for the inclusion of multiple sectoral indices over different election events. Pooled Ordinary Least Square will be considered. This empirical approach ensures a comprehensive assessment of the relationship between election-induced uncertainty, economic policies, and stock market volatility

3.5 Concluding Remark

To summarize, this study implements event study approach that use to determine the election effect on the stock volatility around the election period. The setting for this event study is the general election itself and the analysis is conducted on the local market index and six other sectors indices across three episodes of election from 2013 to 2022. The

estimation window is set to be 200 trading days and employs 25 trading days (inclusion of day 0, event day) as event window to measure the magnitude of the election impact on the stock volatility before and after the election. This study also employs five different volatility proxies including absolute return, squared return, GARCH (1,1) model, Logarithm of absolute return and range-based volatility (high price – low price) in estimating stock volatility. These measurements will be used for estimating the abnormal volatility (AV), average abnormal volatility (AAV), cumulative abnormal volatility (CAV), cumulative average abnormal volatility (CAAV) of indices. After computing these measurements, it will be tested for its significance using parametric test. From there, the cumulative abnormal volatility of stock indices will be used as dependent variable in the model specification for panel regression. A series of independent variables which related to Efficient Market Hypothesis theory, Political Business Cycle and Dependency theory will be used to perform the regression.

CHAPTER 4

RESULT AND DATA ANALYSIS

4.1 Introduction

In Chapter Four, the findings of Malaysia general election's effect on local stock market and six other sector indices through event study approach along with regression analysis are reported here. Section 4.2 discuss the results of general election impact on Malaysia's index volatility from the perspective of Abnormal Volatility (AV), Average Abnormal Volatility (AAV), Cumulative Abnormal Volatility (CAV) and Cumulative Average Abnormal Volatility (CAAV) for five different volatility measurements. Section 4.3 presents panel regression analysis in determining the impact of election-induced variables on cumulative abnormal volatility (CAV) of local market and sector indices.

4.2 Volatility Event Study Analysis

4.2.1 Absolute Return-Based Volatility Event Study Analysis

4.2.1.1 Interpretation of Abnormal Volatility (AV) for All Indices during GE13 – GE15

Table 4.1 – Table 4.4 presents the abnormal volatility of FBMKLCI and seven other sector indices across elections (GE13-GE15) using absolute return as volatility proxy. Results exhibited frequent spikes with most significant abnormal volatility can be observed in General Election 13 and 15 as compared to General Election 14. For instance, substantial spikes in volatility were recorded in several indices: FBMKLCI on Day -1 (4.34***) and Day 0 (2.64**); Finance index on Day 0 (170.75***), Day 1 (157.57***), and Day 3 (138.14***); and Property on Day 0 (52.08***) and Day 1 (39.24***). Similarly, several significant abnormal volatility were evident during GE15 such as FBMKLCI on Day -12 (5.88**) and Day 0 (5.21**); Construction on Day -12 (-2.30**) and Day -6 (-1.95*); and

Property index on Day -12 (-7.94***) and Day -11 (-7.21**). On the contrary, there were fewer significant movements presented in the result of GE14 in overall despite *TE* and *FIN* index showed some activity, such as in Day -10 (-5.50**) and Day -3 (Construction: 3.38*). All are statistically significant at least at 10% level. This suggests GE13 and GE15 induced greater market uncertainty or anticipation compared to GE14.

Apart from that, it can be observed that mixed reaction among the indices in terms of the volatility. For instance, Finance index demonstrates extreme large and significant abnormal volatility for all three elections: GE13 (Day -3:130.83***, Day 0: 170.75***, and Day 3: 138.14***); GE14 (Day -4: 130.83***, Day -2: 143.42*** and Day 2: 81.88*); and GE15 (Day 3: 160.41***). Such result explained the sensitivity of the sector index towards electoral events. Another index namely Property Index also demonstrated high significant spikes following the GE13 (Day 0: 52.08***) and GE15 (Day 6: 8.51***), due to the housing policies that tied to election promises. Industrial and Consumer Product and Service index presents a moderate and significant abnormal volatility, whereby on Day 0, each index generates -4.17*** (GE13) and 5.52*** (GE15), respectively. On the contrary, Technology index had muted response with rare significance, indicating less sensitive to electoral events. A heightened volatility is reflected on Construction index, particularly during GE13 (Day 0: 8.75***) and GE14 (Day 2: 35.67***). Overall, the financial and property sectors appear to be the most reactive to election events.

The findings illustrates that the abnormal volatility tends to be more pronounced during GE13 and GE15, suggesting increased in market uncertainty due to policy changes anticipated in these elections. Sector-wise, Finance and Property were the most reactive, suggesting their sensitivity to fiscal or regulatory changes often promised in elections.

Additionally, the AV trend can be seen more pronounced pre-election as compared to post-election, which is in line with the study of Chuang and Wang (2010), who suggest that escalation in market volatility from political uncertainty was a consequence of investor behavioural responses. The findings, however, partly align with the Efficient Market Hypothesis theory by Fama (1970), when the markets adjust quickly before official outcomes especially in the weak form, while also hinting at behavioural inefficiencies in post-election periods. Therefore, the null hypothesis stating that AV is not significantly different from zero is rejected in several cases, particularly in pre-election days and politically sensitive sectors.

Table 4.1: Event Study on Abnormal Volatility for FBMKLCI and Industrial Product and Service index Using Window [-12, 12] with Absolute Return as the Volatility Proxy

Day	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	0.13 [0.923]	0.98 [0.682]	5.88** [0.018]	-0.34 [0.484]	0.36 [0.534]	-0.74 [0.455]
-11	-1.86 [0.166]	-2.03 [0.397]	2.75 [0.266]	-0.23 [0.632]	0.15 [0.791]	-0.51 [0.605]
-10	-1.87 [0.163]	-5.50** [0.022]	-0.27 [0.914]	-0.13 [0.788]	0.46 [0.425]	-0.13 [0.897]
-9	0.30 [0.825]	-0.84 [0.726]	-2.17 [0.379]	-0.45 [0.348]	-1.18** [0.041]	0.18 [0.858]
-8	1.45 [0.278]	0.55 [0.817]	0.04 [0.986]	-0.22 [0.644]	-0.37 [0.521]	-0.04 [0.965]
-7	0.09 [0.946]	-0.61 [0.798]	1.46 [0.553]	-0.26 [0.587]	-0.22 [0.696]	0.04 [0.965]
-6	0.46 [0.733]	4.47* [0.063]	-0.75 [0.760]	-0.64 [0.188]	-1.81*** [0.002]	2.09** [0.036]
-5	-1.01 [0.451]	-3.25 [0.175]	0.83 [0.738]	-0.54 [0.267]	-0.22 [0.699]	-0.31 [0.756]
-4	3.16** [0.019]	3.24 [0.176]	2.71 [0.273]	-0.86* [0.076]	-0.70 [0.219]	-1.01 [0.311]
-3	-0.61 [0.648]	-0.54 [0.822]	-1.09 [0.658]	-0.22 [0.643]	-0.86 [0.133]	-0.44 [0.656]
-2	-0.42 [0.753]	0.77 [0.748]	-1.68 [0.497]	-0.69 [0.153]	-1.30** [0.024]	-0.30 [0.760]
-1	4.34*** [0.001]	-0.61 [0.798]	-0.61 [0.804]	-0.87* [0.072]	-0.22 [0.696]	-0.22 [0.822]
0	2.64** [0.050]	-0.61 [0.798]	0.18 [0.941]	-4.17*** [0.000]	-0.22 [0.696]	0.03 [0.979]
1	-0.70 [0.603]	-0.61 [0.798]	2.53 [0.305]	-2.23*** [0.000]	-0.22 [0.696]	-0.59 [0.551]
2	-1.25 [0.351]	2.70 [0.259]	-0.83 [0.736]	0.00 [0.996]	3.63*** [0.000]	0.48 [0.626]
3	6.04*** [0.000]	0.21 [0.932]	6.44*** [0.010]	-0.19 [0.691]	0.93 [0.104]	-1.46 [0.142]
4	-3.80*** [0.005]	0.39 [0.870]	3.02 [0.222]	0.44 [0.357]	-1.33** [0.021]	-1.33 [0.181]
5	-3.41** [0.012]	-3.98* [0.097]	-0.61 [0.804]	-0.83* [0.085]	-0.60 [0.296]	-0.22 [0.822]
6	-0.98 [0.466]	-4.48* [0.062]	4.85* [0.050]	0.18 [0.716]	0.77 [0.180]	3.04*** [0.002]
7	4.45*** [0.001]	-1.87 [0.435]	-0.15 [0.952]	1.28*** [0.009]	-0.49 [0.387]	-1.46 [0.142]
8	2.29* [0.088]	3.38 [0.158]	-5.65** [0.023]	-1.78*** [0.000]	1.48** [0.010]	0.29 [0.768]
9	-2.08 [0.121]	6.42*** [0.008]	3.83 [0.121]	-0.01 [0.984]	-2.70*** [0.000]	0.54 [0.585]
10	-5.93*** [0.000]	4.49* [0.062]	1.14 [0.643]	-0.74 [0.126]	-2.51*** [0.000]	-1.02 [0.305]
11	-0.17 [0.899]	2.54 [0.290]	-1.07 [0.664]	-1.00** [0.039]	-2.09*** [0.000]	0.93 [0.350]
12	-1.40 [0.295]	5.21** [0.031]	-0.96 [0.697]	-0.11 [0.824]	-1.53*** [0.008]	0.55 [0.578]

Notes: This table shows abnormal volatility (AV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.2: Event Study on Abnormal Volatility for Construction Index and Consumer Product and Service index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Day	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	0.18 [0.851]	-0.31 [0.862]	-2.30** [0.026]	-1.70 [0.286]	-1.78* [0.516]	1.77 [0.305]
-11	-0.29 [0.757]	0.27 [0.879]	-1.49 [0.149]	0.65 [0.683]	3.97* [0.148]	3.18* [0.066]
-10	1.13 [0.229]	3.38* [0.059]	-0.32 [0.756]	1.07 [0.503]	-0.62* [0.821]	0.09 [0.959]
-9	0.70 [0.457]	-0.88 [0.621]	0.48 [0.643]	-2.22 [0.166]	-0.71* [0.796]	2.29 [0.184]
-8	-0.54 [0.564]	5.42*** [0.003]	-0.83 [0.419]	-0.16 [0.919]	-2.23* [0.416]	-1.39 [0.419]
-7	-0.28 [0.764]	-0.60 [0.736]	-0.69 [0.504]	0.25 [0.876]	-1.04* [0.704]	-1.02 [0.555]
-6	-0.43 [0.644]	3.94** [0.028]	-1.95* [0.060]	-1.29 [0.418]	2.81* [0.305]	2.21 [0.200]
-5	0.76 [0.417]	-0.50 [0.780]	-0.60 [0.559]	-1.03 [0.517]	0.26* [0.923]	-1.33 [0.440]
-4	-0.79 [0.401]	-1.20 [0.499]	-1.50 [0.147]	-0.06 [0.970]	0.83* [0.761]	-2.17 [0.210]
-3	-0.60 [0.522]	0.79 [0.656]	1.44 [0.162]	-1.04 [0.515]	-0.11* [0.968]	-0.36 [0.834]
-2	0.82 [0.380]	0.70 [0.695]	-0.76 [0.461]	0.45 [0.778]	-1.30* [0.634]	-0.64 [0.710]
-1	-1.89** [0.044]	-0.60 [0.736]	-0.60 [0.561]	1.06 [0.507]	-1.04* [0.704]	-1.04 [0.547]
0	8.75*** [0.000]	-0.60 [0.736]	-0.67 [0.519]	-2.16 [0.176]	-1.04* [0.704]	5.52*** [0.002]
1	6.24*** [0.000]	-0.60 [0.736]	-0.92 [0.370]	-2.79* [0.081]	-1.04 [0.704]	2.06 [0.233]
2	2.67*** [0.005]	35.67*** [0.000]	1.00 [0.331]	-1.19 [0.455]	32.02*** [0.000]	-1.21 [0.482]
3	1.58* [0.092]	1.95 [0.274]	0.24 [0.815]	0.55 [0.730]	-0.28* [0.919]	4.13** [0.017]
4	5.38*** [0.000]	-1.56 [0.381]	-0.19 [0.856]	2.02 [0.208]	5.55** [0.044]	2.30 [0.184]
5	2.65*** [0.005]	8.44*** [0.000]	-0.60 [0.561]	-0.63 [0.694]	2.13* [0.437]	-1.04 [0.547]
6	1.38 [0.141]	8.74*** [0.000]	-0.75 [0.464]	2.68* [0.094]	5.93** [0.031]	-0.01 [0.996]
7	1.94** [0.039]	-0.68 [0.701]	-0.10 [0.920]	1.93 [0.227]	6.38** [0.021]	9.11*** [0.000]
8	-0.14 [0.884]	2.31 [0.196]	-0.25 [0.805]	-4.03** [0.012]	-0.09 [0.973]	-1.27 [0.460]
9	0.88 [0.345]	-1.98 [0.267]	-0.77 [0.456]	-1.80 [0.260]	-2.34* [0.393]	-1.34 [0.438]
10	3.67*** [0.000]	-1.08 [0.546]	-1.26 [0.221]	-0.21 [0.895]	-0.68* [0.805]	1.71 [0.320]
11	1.18 [0.207]	-0.67 [0.708]	-0.56 [0.585]	-1.04 [0.514]	-3.80* [0.166]	0.09 [0.958]
12	1.96** [0.037]	-0.01 [0.995]	0.33 [0.745]	1.24 [0.437]	-3.73* [0.174]	-0.17 [0.921]

Notes: This table shows abnormal volatility (AV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.3: Event Study on Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Day	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-28.34 [0.343]	-19.67 [0.691]	52.24 [0.371]	-14.50 [0.606]	-66.91*** [0.010]	-10.11 [0.885]
-11	21.41 [0.474]	-6.62 [0.894]	-96.77* [0.098]	10.02 [0.722]	-47.38* [0.066]	20.40 [0.771]
-10	7.27 [0.808]	-10.74 [0.828]	-32.97 [0.572]	5.88 [0.834]	-30.65 [0.233]	-29.62 [0.673]
-9	0.20 [0.995]	-53.65 [0.279]	26.45 [0.650]	6.50 [0.817]	-57.48** [0.026]	-18.23 [0.795]
-8	-12.25 [0.682]	25.54 [0.606]	51.34 [0.379]	49.77* [0.078]	-42.33* [0.100]	-22.21 [0.751]
-7	57.01* [0.058]	-13.50 [0.785]	40.28 [0.490]	19.97 [0.478]	-17.76 [0.489]	-6.26 [0.929]
-6	7.27 [0.808]	56.84 [0.252]	-141.10** [0.016]	-29.14 [0.301]	-35.09 [0.172]	-30.68 [0.662]
-5	26.04 [0.384]	0.73 [0.988]	27.87 [0.633]	16.65 [0.554]	-17.99 [0.483]	-29.94 [0.669]
-4	11.28 [0.706]	130.83*** [0.009]	19.76 [0.735]	12.84 [0.648]	-30.80 [0.230]	-34.58 [0.622]
-3	-13.50 [0.652]	30.10 [0.543]	47.06 [0.420]	-17.76 [0.528]	-15.32 [0.550]	-0.46 [0.995]
-2	-1.71 [0.954]	143.42*** [0.004]	56.40 [0.334]	1.48 [0.958]	-86.57*** [0.001]	-4.87 [0.945]
-1	-38.40 [0.200]	-13.50 [0.785]	-13.50 [0.817]	32.73 [0.245]	-17.76 [0.489]	-17.76 [0.800]
0	170.75*** [0.000]	-13.50 [0.785]	13.80 [0.813]	-96.31*** [0.001]	-17.76 [0.489]	20.74 [0.767]
1	157.57*** [0.000]	-13.50 [0.785]	-6.82 [0.907]	-60.67** [0.032]	-17.76 [0.489]	-30.68 [0.662]
2	2.10 [0.944]	81.88* [0.099]	-29.92 [0.608]	-25.10 [0.373]	35.91 [0.162]	-3.30 [0.962]
3	138.14*** [0.000]	-13.54 [0.784]	160.41*** [0.006]	76.26*** [0.007]	58.02** [0.025]	-227.53*** [0.001]
4	-38.94 [0.194]	83.81* [0.092]	-42.67 [0.465]	-26.38 [0.349]	-34.17 [0.184]	-42.86 [0.541]
5	46.78 [0.119]	-17.85 [0.718]	-13.50 [0.817]	-90.20*** [0.002]	26.76 [0.297]	-17.76 [0.800]
6	35.63 [0.234]	-37.28 [0.452]	2.53 [0.965]	30.94 [0.272]	-22.04 [0.390]	-26.48 [0.705]
7	7.68 [0.797]	11.97 [0.809]	-81.95 [0.161]	38.68 [0.170]	8.74 [0.733]	10.18 [0.884]
8	23.71 [0.428]	22.20 [0.654]	-21.17 [0.717]	63.22** [0.025]	-19.71 [0.442]	40.66 [0.562]
9	13.58 [0.649]	7.23 [0.884]	63.37 [0.278]	4.74 [0.866]	-112.06*** [0.000]	-28.16 [0.688]
10	-33.05 [0.269]	214.46*** [0.000]	-83.14 [0.155]	-7.88 [0.779]	-80.21*** [0.002]	-1.39 [0.984]
11	28.92 [0.334]	-10.69 [0.829]	-10.96 [0.851]	25.79 [0.359]	-95.36*** [0.000]	8.14 [0.908]
12	3.91 [0.896]	-0.32 [0.995]	-10.89 [0.852]	4.98 [0.859]	-88.69*** [0.001]	-39.20 [0.576]

Notes: This table shows abnormal volatility (AV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.4: Event Study on Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Day	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	1.08 [0.825]	-4.79 [0.274]	-7.94*** [0.008]	-0.32 [0.270]	-1.26 [0.103]	-1.26 [0.103]
-11	2.01 [0.679]	-4.15 [0.343]	-7.21** [0.016]	-0.18 [0.524]	0.07 [0.853]	-0.52 [0.496]
-10	10.18** [0.038]	5.85 [0.183]	5.12* [0.086]	-0.21 [0.471]	-0.46 [0.222]	-0.21 [0.784]
-9	3.62 [0.457]	-4.37 [0.318]	0.42 [0.889]	-0.40 [0.172]	-0.57 [0.125]	0.09 [0.906]
-8	-1.76 [0.717]	9.06** [0.039]	-0.22 [0.942]	-0.44 [0.133]	-0.18 [0.636]	-0.35 [0.647]
-7	-1.53 [0.753]	-2.24 [0.608]	-1.43 [0.629]	-0.14 [0.638]	-0.15 [0.693]	0.44 [0.564]
-6	1.50 [0.758]	-0.13 [0.975]	-5.64* [0.059]	-0.33 [0.249]	-0.59 [0.117]	1.79** [0.021]
-5	0.75 [0.877]	5.92 [0.177]	-1.05 [0.723]	-0.29 [0.310]	0.09 [0.814]	-0.17 [0.829]
-4	7.67 [0.116]	-4.07 [0.353]	-4.15 [0.163]	-0.43 [0.140]	-0.26 [0.486]	-0.12 [0.881]
-3	-2.24 [0.645]	3.98 [0.364]	-1.24 [0.677]	-0.15 [0.611]	-0.55 [0.139]	-0.26 [0.737]
-2	-2.36 [0.628]	5.02 [0.252]	-2.15 [0.470]	-0.38 [0.188]	-0.48 [0.200]	0.99 [0.198]
-1	-2.60 [0.593]	-2.24 [0.608]	-2.24 [0.450]	-0.91*** [0.002]	-0.15 [0.693]	-0.15 [0.848]
0	52.08*** [0.000]	-2.24 [0.608]	-1.32 [0.656]	-3.03*** [0.000]	-0.15 [0.693]	0.31 [0.688]
1	39.24*** [0.000]	-2.24 [0.608]	-1.31 [0.659]	-1.41*** [0.000]	-0.15 [0.693]	-0.35 [0.647]
2	13.10*** [0.008]	0.51 [0.908]	-0.19 [0.950]	-0.14 [0.622]	1.56*** [0.000]	0.14 [0.851]
3	9.93** [0.042]	1.97 [0.654]	-0.94 [0.751]	-0.04 [0.877]	0.21 [0.578]	0.66 [0.388]
4	13.28*** [0.007]	2.50 [0.567]	-2.07 [0.486]	-0.30 [0.305]	-0.61 [0.103]	0.10 [0.897]
5	40.33*** [0.000]	2.13 [0.627]	-2.24 [0.450]	-0.74** [0.011]	-0.38 [0.314]	-0.15 [0.848]
6	6.12 [0.210]	6.87 [0.117]	8.51*** [0.005]	-0.14 [0.624]	-0.37 [0.326]	-0.31 [0.688]
7	8.25* [0.091]	0.31 [0.944]	-3.59 [0.227]	-0.01 [0.980]	0.17 [0.648]	-0.47 [0.540]
8	0.74 [0.879]	-2.22 [0.612]	0.74 [0.802]	-0.91*** [0.002]	0.27 [0.477]	3.48*** [0.000]
9	20.52*** [0.000]	-6.85 [0.118]	-3.50 [0.239]	-0.01 [0.985]	-2.17*** [0.000]	-0.18 [0.817]
10	66.30*** [0.000]	-1.56 [0.722]	-4.20 [0.158]	-0.74** [0.011]	-1.44*** [0.000]	0.23 [0.769]
11	0.27 [0.956]	-3.04 [0.488]	-1.01 [0.733]	-0.55* [0.056]	-1.01*** [0.007]	-0.06 [0.942]
12	22.30*** [0.000]	-4.22 [0.336]	2.02 [0.496]	-0.31 [0.286]	-0.89** [0.018]	0.44 [0.570]

Notes: This table shows abnormal volatility (AV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.1 presents Abnormal Volatility (AV) trend for FBMKLCI and sectoral indices across elections for event window [-12, 12] using Absolute Return as volatility proxy. The trend path illustrates intense fluctuations in abnormal volatility during GE13 and GE15, especially in FBMKLCI, Technology and Property index. It can be observed that sharp spikes occurred in the immediate pre- and post-elections of FBMKLCI on Day -1 and Day 0 during GE13 and GE15 due to heightened investor reactions. On the contrary, GE14 lines reflected more calm volatility response as the trend shows stagnant movement in Figure 1. A possible explanation could be the election outcome becomes less expected. Similarly, the abnormal volatility for Industrial Product & Service and Plantation indices were recorded within narrow band during GE14, whereas GE13 and GE15 had more defined volatility troughs and peaks, suggesting stronger sentiment reactions which generate higher political uncertainty in those elections.

The magnitude and movement of abnormal volatility varied significantly across sectors. The FBMKLCI index was the most volatile among all, with surges exceeding +6.00 points during GE15 and troughs dipping near -6.00 points during GE13. Similarly, the Technology index also demonstrated pronounced volatility patterns where sharp dipped below -3.50 points on Day 0 was spotted during GE13 and peaked over +3.00 on Day 7 and 8 during GE15, indicating sector's sensitivity to election-related policy shifts. It is also acknowledged that the Property index experienced multiple surges around Day 0 and Day 9, rising above +0.60 points, during GE13 and GE15, while the rest remaining stagnant under GE14. This sector may have been influenced by electoral pledges on housing or real estate incentives.

In contrast, the Construction index exhibited limited volatility hovering close to zero throughout all elections. There is a small surge recorded and it barely reached +0.35 points near Day 3 during GE14, indicating neutral investor response. As for Finance and Plantation indices, both have consistent but fluctuation across election, ranging between ± 0.20 points. Such patterns suggest both sector indices are more resilient and less exposure to the election-related policy. The Industrial Product & Services Index recorded moderate fluctuation with a pronounced trough at Day 0 which approximately around -4.00 points, followed by slow recovery especially in GE13.

In comparison, the FBMKLCI has the most notable surge during GE15 with AV surged to nearly +6.00 around Day 1, indicating extreme market reactions, possibly due to election outcome surprises or regime shifts. Another significant surge occurred in Technology index with a rise to around +3.5 at Day 8 during GE15. The index also experienced deepest dip on Day 0 during GE13, where AV fell to -3.50, possibly suggesting fear or speculative withdrawal. Sectoral volatility was more intense in GE13 and GE15, while GE14 exhibited flatter and stable lines across nearly all indices, with only a few mild reactions. Notably, Construction index remained the least reactive index in all periods, suggesting investor indifference or sector insulation from election outcomes. Overall, these trends demonstrate that electoral events significantly influence abnormal volatility, especially in broader market indices and politically exposed sectors.

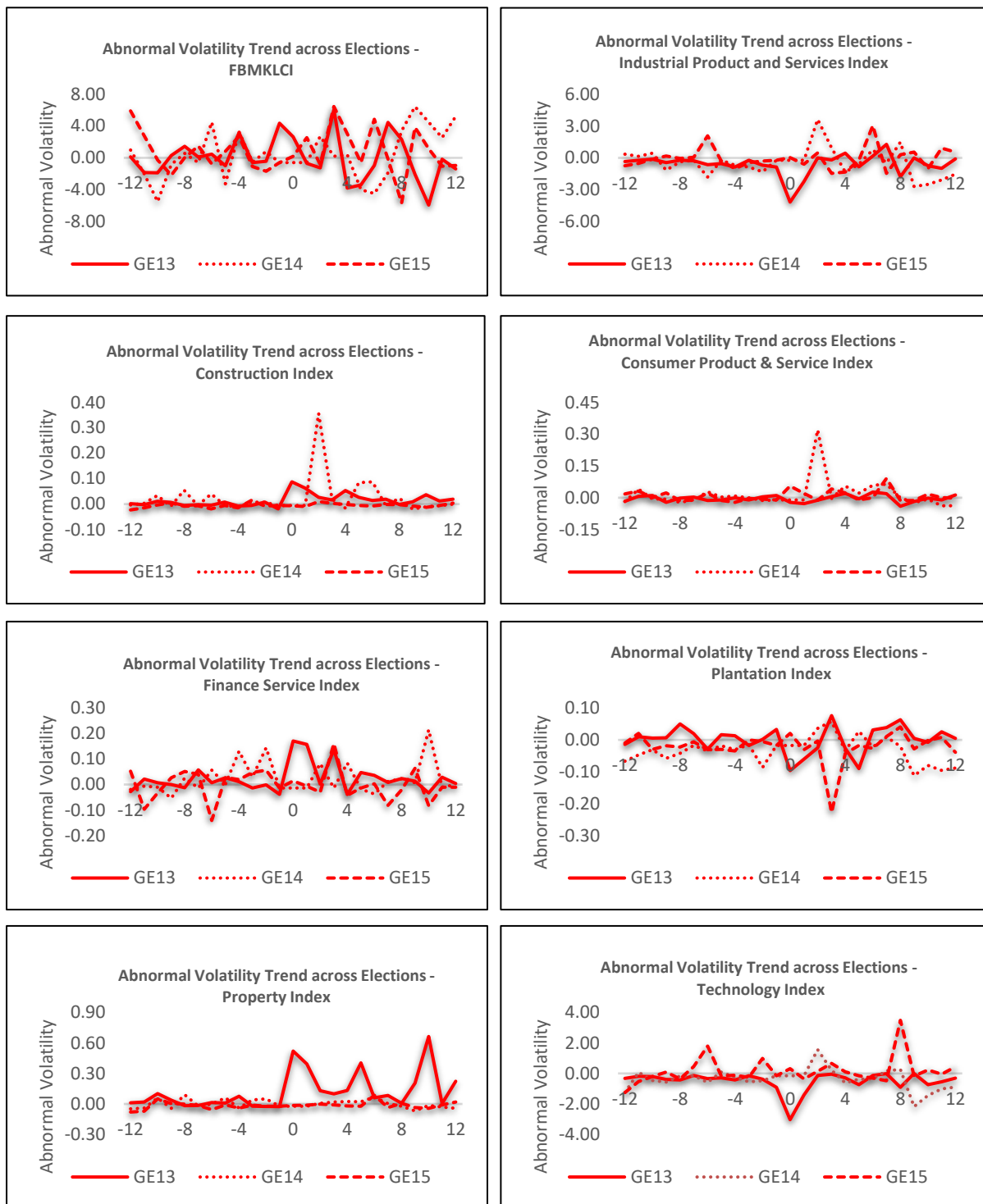


Figure 4.1: Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices across elections (GE13-GE15) using Absolute Return as Volatility Proxy

4.2.1.2 Interpretation of Average Abnormal Volatility (AAV) for All Indices during GE13 – GE15

Table 4.5 presents average abnormal volatility for FBMKLCI and other sectoral indices during event window [-12,12]. The AAV trend for FBMKLCI experiences notable spikes on multiple days: Day -12 (2.33***), Day -1 (1.04***), Day 1 (0.41**), and Day 3 (4.23***). The consistent presence of significant AAV before and after the event day implies heightened uncertainty and sensitivity of the overall market to political events. Similarly, the Finance index shows some of the most intense AAV spikes, particularly around the event day. The trend started to build up strongly during the pre-election, particularly on Day -3 (21.22***), Day -2 (66.44***), it surges on Day -1 (57.02***), and remains elevated until Day 3 (95.01***). Such fluctuations reflect market participants' anticipation and post-election reaction, possibly due to the sector's exposure to regulatory and fiscal policies. A high level of investor attention and political vulnerability within financial market may have caused the AAV values to be significant across nearly every day. For Plantation index, it is reported a strong reaction in the early windows: Day -12 (30.51***), Day -10 (18.13***), Day -3 (11.18***), and post-election period like Day 1 (36.37***), Day 3 (31.08***), and Day 10 (29.83***) indicate persistent and sharp volatility movements. It is believed that such reaction was driven by election-linked rural, commodity, or subsidy policies.

The AAV of Construction index also experiences considerable large significant spikes around pre-election period: Day -10 to Day -1, such as Day -10 (1.39***), Day -6 (1.01***), Day -1 (1.03***) and post-election period: Day 1 (1.57***), Day 3 (1.26***), Day 5 (3.50***). Such trend indicates investor repositioning in response to the government spending on infrastructure projects promised during the election campaigns. The *PR* index

reports significant but moderate AAV responses, with major surges around Day -1 (2.36***), Day 1 (11.90***), Day 3 (3.65***), and Day 10 (20.18***).

Meanwhile, the AAV of *IND* and *CONS* index indices reported to be statistically significant despite maintain a relatively stable trend with smaller magnitude. For instance, *IND* index remains mostly negative (e.g., Day -4: -0.86***, Day 10: -1.42***), indicating possible defensive positioning. Meanwhile, *CONS* index shows low to moderate AAV values like Day 0 (1.63***), and Day 3 (1.36***), suggesting softer market reactions. As for *TE* index, the index demonstrates a significant but negative AAV in most of days within event window such as Day -4 (-0.27***), Day 0 (-0.96***), and Day 9 (-0.79***), reflecting a possible sell-offs behaviour in a speculative sector during political transitions.

In conclusion, the *FIN* index records the highest AAV on Day 3 (95.01***), followed by Day -2 (66.44***), and Day -1 (57.02***), in terms of peak values. Such peak trend explains that financial markets were highly reactive before and after elections. Additionally, the *PL* index also had large swings, particularly on Day -12 (30.51***), and Day 10 (29.83***), reflecting volatile commodity-related expectations. On the contrary, *TE* and *IND* index records the lowest dip, where AAV was consistently negative and significant (e.g., *TE* on Day 0: -0.96***, *IND* on Day -4: -0.86***), indicating sector-specific pessimism or market withdrawal. In addition to this, the fluctuations in the *CONS* and *PR* index show a build-up of anticipation followed by post-election correction, seen through pre-event spikes (e.g., *CONSTR* Day -1: 1.03***), and post-event peaks (e.g., *PR* Day 1: 11.90***). Therefore, the volatility trend highlights heterogeneous reaction from different indices, with Finance, Plantation, and FBMKLCI being the most politically sensitive, while others like Consumer and Industrial showed steadier, less amplified reactions.

Table 4.5: Event Study on Average Abnormal Volatility Using Window [-12,12] with Absolute Return as the Volatility Proxy

Day	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
-12	2.33*** [0.000]	-0.24*** [0.000]	-0.81*** [0.000]	-0.69*** [0.000]	1.41 [0.486]	-30.51*** [0.000]	-3.89*** [0.000]	-0.66*** [0.000]
-11	-0.38*** [0.000]	-0.20*** [0.000]	-0.50*** [0.000]	1.05*** [0.000]	-27.33*** [0.000]	-5.65*** [0.004]	-3.12*** [0.000]	-0.21*** [0.000]
-10	-2.55*** [0.000]	0.07** [0.025]	1.39*** [0.000]	0.79*** [0.000]	-12.15*** [0.000]	-18.13*** [0.000]	7.05*** [0.000]	-0.29*** [0.000]
-9	-0.90*** [0.000]	-0.48*** [0.000]	0.10* [0.067]	-0.06 [0.257]	-9.00*** [0.000]	-23.07*** [0.000]	-0.11 [0.525]	-0.29*** [0.000]
-8	0.68*** [0.000]	-0.21*** [0.000]	1.35*** [0.000]	0.04 [0.381]	21.54*** [0.000]	-4.92** [0.013]	2.36*** [0.000]	-0.32*** [0.000]
-7	0.31*** [0.000]	-0.15*** [0.000]	-0.52*** [0.000]	-0.56*** [0.000]	27.93*** [0.000]	-1.35 [0.493]	-1.74*** [0.000]	0.05** [0.013]
-6	1.39*** [0.000]	-0.12*** [0.000]	0.52*** [0.000]	0.88*** [0.000]	-25.67*** [0.000]	-31.63*** [0.000]	-1.42*** [0.000]	0.29*** [0.000]
-5	-1.15*** [0.000]	-0.35*** [0.000]	-0.11** [0.034]	-0.41*** [0.000]	18.21*** [0.000]	-10.43*** [0.000]	1.87*** [0.000]	-0.12*** [0.000]
-4	3.04*** [0.000]	-0.86*** [0.000]	-1.16*** [0.000]	-0.81*** [0.000]	53.96*** [0.000]	-17.51*** [0.000]	-0.18 [0.298]	-0.27*** [0.000]
-3	-0.75*** [0.000]	-0.51*** [0.000]	0.55*** [0.000]	0.02 [0.665]	21.22*** [0.000]	-11.18*** [0.000]	0.17 [0.344]	-0.32*** [0.000]
-2	-0.44*** [0.000]	-0.76*** [0.000]	0.25*** [0.000]	-0.12** [0.014]	66.04*** [0.000]	-29.99*** [0.000]	0.17 [0.328]	0.04** [0.042]
-1	1.04*** [0.000]	-0.44*** [0.000]	-1.03*** [0.000]	-0.68*** [0.000]	-21.80*** [0.000]	-0.93 [0.636]	-2.36*** [0.000]	-0.40*** [0.000]
0	0.74*** [0.000]	-1.46*** [0.000]	2.50*** [0.000]	1.63*** [0.000]	57.02*** [0.000]	-31.11*** [0.000]	16.17*** [0.000]	-0.96*** [0.000]
1	0.41*** [0.000]	-1.01*** [0.000]	1.57*** [0.000]	0.49*** [0.000]	45.75*** [0.000]	-36.37*** [0.000]	11.90*** [0.000]	-0.64*** [0.000]
2	0.21** [0.019]	1.37*** [0.000]	13.11*** [0.000]	11.49*** [0.000]	18.02*** [0.000]	2.50 [0.203]	4.47*** [0.000]	0.52*** [0.000]
3	4.23*** [0.000]	-0.24*** [0.000]	1.26*** [0.000]	1.36*** [0.000]	95.01*** [0.000]	-31.08*** [0.000]	3.65*** [0.000]	0.28*** [0.000]
4	-0.13 [0.138]	-0.74*** [0.000]	1.21*** [0.000]	2.25*** [0.000]	0.73 [0.717]	-34.47*** [0.000]	4.57*** [0.000]	-0.27*** [0.000]
5	-2.67*** [0.000]	-0.55*** [0.000]	3.50*** [0.000]	1.83*** [0.000]	5.14** [0.012]	-27.07*** [0.000]	13.40*** [0.000]	-0.42*** [0.000]
6	-0.20** [0.022]	1.33*** [0.000]	3.12*** [0.000]	2.99*** [0.000]	0.29 [0.885]	-5.86*** [0.003]	7.17*** [0.000]	-0.27*** [0.000]
7	0.81*** [0.000]	-0.23*** [0.000]	0.38*** [0.000]	3.10*** [0.000]	-20.77*** [0.000]	19.20*** [0.000]	1.66*** [0.000]	-0.10*** [0.000]
8	0.01 [0.941]	0.00 [0.910]	0.64*** [0.000]	-0.58*** [0.000]	8.25*** [0.000]	28.06*** [0.000]	-0.24 [0.165]	0.94*** [0.000]
9	2.73*** [0.000]	-0.72*** [0.000]	-0.62*** [0.000]	-1.22*** [0.000]	28.06*** [0.000]	-45.16*** [0.000]	3.39*** [0.000]	-0.79*** [0.000]
10	-0.10 [0.265]	-1.42*** [0.000]	0.44*** [0.000]	0.36*** [0.000]	32.76*** [0.000]	-29.83*** [0.000]	20.18*** [0.000]	-0.65*** [0.000]
11	0.43*** [0.000]	-0.72*** [0.000]	-0.02 [0.769]	-0.80*** [0.000]	2.42 [0.232]	-20.48*** [0.000]	-1.26*** [0.000]	-0.54*** [0.000]
12	0.95*** [0.000]	-0.36*** [0.000]	0.76*** [0.000]	-0.06 [0.205]	-2.43 [0.230]	-40.97*** [0.000]	6.70*** [0.000]	-0.25*** [0.000]

Notes: This table represents average abnormal volatility (AAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.2 presents average abnormal volatility trend path of FBMKLCI and sectoral indices for event windows [-12,12]. The AAV trend exhibited mixed reaction among the indices suggesting different level of market sensitivity towards election. It is noteworthy that FBMKLCI has the most noticeable swings and elevated volatility response throughout the event window. It fluctuates regularly with several upward and downward trend, surging above 0.08 after Day 4 and showing consistent spikes particularly on Day -6 to Day 0 in the pre-election period, suggesting that broader market sentiment was reactive to political developments. The Plantation Index also shows some visible volatility movements. The index dips to approximately -0.08 points around Day 0, and then again after Day 10 despite experiencing lower amplitude than FBMKLCI. Such trends indicate some market sensitivity which potentially tied to policy speculation affecting commodities or agriculture-related sectors. As compared to FBMKLCI, the Finance Index exhibited relatively restrained reaction in response to the uncertainty with some minor peaks and troughs recorded, despite its inconsistent high magnitude AAV shifts.

On the contrary, sectors such as Industrial Product and Services, Construction, Consumer Product and Services, and Technology reported extremely stagnant AAV trends, hovering closely around the zero line with minimal fluctuations. This implies that these sectors experienced limited average abnormal volatility during the elections, suggesting more stable or less politically exposed dynamics. For instance, the Industrial Product and Services Index maintains near-zero values throughout the entire event window, demonstrating a highly stable volatility profile. Likewise, there is a very minor variation whereby an occasional small surges or dips, none appear to break past the ± 0.02 points occurred in Property and Technology index. These sectors may have absorbed political

signals in a muted fashion or been driven more by fundamental factors than by election-induced sentiments.

To summarize, a minimal AAV patterns were observed and remained within a very narrow band ranging between -0.01 and +0.01 points, with no sharp spikes and drops for FBMKLCI, *IND*, *CONS*, *TE*, *PL* and *CONSTR*. These minimal trends illustrated stable investor behaviour due to weak election-dependencies and more resilience to the electoral events. In contrast, only *FIN* and *PR* index experienced a meaningful election-induced average abnormal volatility with significant surge approximately around +0.10 and +0.05 points, respectively. The remaining indices exhibited relatively flat pattern, indicating that market responses to political uncertainty differ across indices.

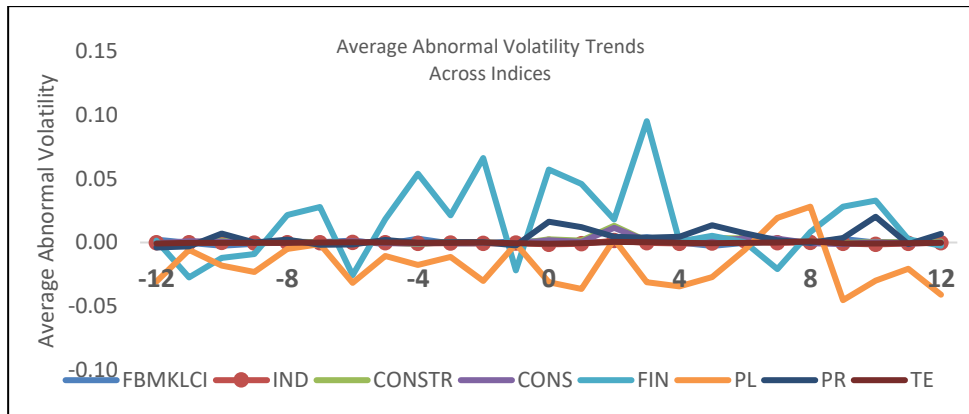


Figure 4.2: Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Absolute Return as Volatility Proxy

4.2.1.3 Interpretation of Cumulative Abnormal Volatility (CAV) for All Indices during GE13 – GE15.

Table 4.6 – Table 4.9 presents Cumulative Abnormal Volatility for FBMKLCI and other sectoral indices across the recent three elections, analyze through both asymmetric and symmetric windows. The results indicate significant variation in CAV across the three elections. Across sectors and windows, GE13 has the highest and most significant positive CAV values. The escalation of political competition and unexpected outcomes have led to increase in market uncertainty and investors' reaction during this election. For instance, the CAV value can surge as high as 556.77 points and 38.14 under the [0,12] event window for *FIN* and *CONTR* index, respectively. Both are statistically significant at 1% level. On the contrary, the GE14 reports mixed results. It can be observed that sector index like *CONS* and *CONSTR* index possessed significant CAV whereas *PR* and *FIN* index experienced otherwise. Such finding explained increase in market maturity as the electoral outcome becomes more predictable due to the political wave that brought a change in government. In GE15, the indices are mostly demonstrated insignificant CAV values since p-values is greater than 0.10 threshold, indicating calm market. A possible explanation could be investors have priced in the electoral risk in advance due to institutional stability when unity government is formed across different political parties.

Sectors wise comparison, CAV have distinct reaction towards elections. The results report that *FIN* and *CONSTR* index have the most prominent and significant CAVs during GE13. It is reported that *FIN* index recorded significantly high CAV values with greater than 500 in multiple symmetric windows in GE13 and all statistically significant at 1% level. This supports the notion that financial markets are particularly sensitive to political shifts, possibly due to concerns over policy changes in regulation, fiscal management, and

institutional control. Similarly, the *CONSTR* index records strong responses around symmetric windows particularly $[-10,10]$ and $[-12,12]$, as the investors expecting post-election infrastructure spending. For instance, GE13 recorded CAV of 36.90 ($p = 0.000$) under $[-12,12]$, suggesting election-induced repricing based on development prospects. In contrast, *IND* and *TE* indices often showed negative and significant CAVs, particularly during GE13 and GE14. For example, *IND* and *TE* index recorded -14.63 and -12.51 in $[-12,12]$ during GE13, respectively. Both are statistically significant at 1% level. The finding suggests market sell-offs or withdrawal from speculative sectors amid political instability. Sectors such as *PR* and *CONS* index displayed election sensitivity in GE13 but faded in significance in later elections. These sectors may have responded to changes in consumption sentiment but became more resilient over time.

In relation to symmetric windows, more significant and stronger CAV values have been captured more frequent around these windows such as $[-12,12]$, $[-10,10]$, $[-5,5]$ especially for *FIN*, *CONSTR*, and *PR* indices during GE13, where most of them are statistically significant at 1% level. The finding suggests wider symmetric windows are better at capturing prolonged volatility episodes before and after the event, reflecting investor repositioning throughout the election cycle. In contrast, asymmetric windows often yielded lower and inconsistent CAVs. Sectors such as *FIN* and *CONSTR* index display sustained volatility in post-election window like $[0,12]$ or $[0,10]$, whereas pre-election windows like $[-12,0]$ or $[-10,0]$ generally indicated anticipatory volatility. Notably, during short windows like the $[-3,0]$ and $[0,3]$ in GE13 and GE14, *IND* index recorded strong negative CAVs, suggesting investors withdrawal before and after election days. As a result, symmetric windows demonstrate more informative for understanding the full spectrum of

market reactions, while asymmetric windows are better at isolating anticipatory or delayed responses.

In summary, the cumulative abnormal volatility results demonstrate that GE13 had the most disruptive impact on market volatility, especially for *FIN*, *CONSTR* and *PR* index which are election-sensitive sectoral. As the electoral contest intensified, these indices become more volatile as compared to the rest. GE14 recorded a weak yet still significant effects in few areas, whereas GE15 exhibited the least market disruption, suggesting an evolving market maturity or reduced political risk premium. Sectoral wise, *FIN* and *CONSTR* index are consistently reactive to election outcomes due to regulated and policy-sensitive industries exhibit greater political risk exposure as suggested by Luo et al. (2017). Meanwhile, *IND* and *TE* indices reported negative reactions due to risk-off sentiment and reduced investor confidence in high-risk sectors. Another important note, a broader and significant reactions are detected mainly in symmetric windows, whereas asymmetric windows provided insights into directional volatility. This directional volatility is either anticipatory (pre-election) or reactive (post-election). These results are consistent with the study of Fama (1970) and Nordhaus (1975), where each theory suggests markets respond rapidly to information, and explains volatility due to shifts in fiscal or regulatory policies around election cycles, respectively (Lin & Wang, 2007).

Table 4.6: Event Study on Cumulative Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Asymmetric Window	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	6.80 [0.184]	-3.98 [0.653]	7.28 [0.428]	-9.63*** [0.000]	-6.15** [0.011]	-1.37 [0.708]
[-10,0]	8.53* [0.083]	-2.93 [0.719]	-1.35 [0.872]	-9.06*** [0.000]	-6.65*** [0.006]	-0.12 [0.972]
[-5,0]	8.10* [0.056]	-1.00 [0.871]	0.34 [0.958]	-7.35*** [0.002]	-3.53* [0.053]	-2.26 [0.395]
[-3,0]	5.95 [0.112]	-0.99 [0.849]	-3.20 [0.562]	-5.96*** [0.008]	-2.61 [0.107]	-0.94 [0.667]
[-1,0]	6.98 [0.168]	-1.22 [0.779]	-0.43 [0.922]	-5.05* [0.085]	-0.45 [0.678]	-0.20 [0.911]
[0,1]	1.94 [0.491]	-1.22 [0.779]	2.71 [0.578]	-6.40* [0.067]	-0.45 [0.678]	-0.57 [0.756]
[0,3]	6.74* [0.086]	1.69 [0.747]	8.32 [0.190]	-6.60*** [0.006]	4.12** [0.037]	-1.54 [0.493]
[0,5]	-0.47 [0.891]	-1.90 [0.758]	10.73 [0.135]	-6.98*** [0.002]	2.19 [0.178]	-3.10 [0.258]
[0,10]	-2.71 [0.554]	6.05 [0.463]	14.76 [0.101]	-8.06*** [0.000]	-1.26 [0.519]	-1.70 [0.617]
[0,12]	-4.29 [0.391]	13.79 [0.135]	12.73 [0.177]	-9.17*** [0.000]	-4.88** [0.035]	-0.22 [0.953]
Symmetric Window						
[-12,12]	-0.13 [0.985]	10.42 [0.392]	19.83 [0.120]	-14.63*** [0.000]	-10.81*** [0.001]	-1.61 [0.748]
[-10,10]	3.17 [0.610]	3.73 [0.737]	13.23 [0.255]	-12.95*** [0.000]	-7.70*** [0.008]	-1.84 [0.690]
[-5,5]	4.99 [0.286]	-2.29 [0.778]	10.88 [0.212]	-10.17*** [0.000]	-1.12 [0.568]	-5.38 [0.133]
[-3,3]	10.05** [0.029]	1.31 [0.843]	4.94 [0.477]	-8.38*** [0.001]	1.73 [0.294]	-2.51 [0.375]

Notes: This table shows cumulative abnormal volatility (CAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.7: Event Study on Cumulative Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Asymmetric Window	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	7.51** [0.045]	9.82 [0.152]	-9.78** [0.022]	-6.19 [0.302]	-1.99 [0.844]	7.11 [0.274]
[-10,0]	7.63** [0.033]	9.85 [0.126]	-5.99 [0.110]	-5.14 [0.354]	-4.18 [0.655]	2.16 [0.713]
[-5,0]	7.06** [0.027]	-1.41 [0.760]	-2.68 [0.336]	-2.79 [0.507]	-2.39 [0.735]	-0.02 [0.996]
[-3,0]	7.08** [0.032]	0.29 [0.939]	-0.58 [0.797]	-1.70 [0.632]	-3.49 [0.569]	3.48 [0.387]
[-1,0]	6.86 [0.121]	-1.20 [0.717]	-1.26 [0.545]	-1.11 [0.710]	-2.08 [0.686]	4.48 [0.317]
[0,1]	14.99* [0.056]	-1.20 [0.717]	-1.59 [0.472]	-4.96 [0.272]	-2.08 [0.686]	7.58 [0.198]
[0,3]	19.24*** [0.002]	36.42*** [0.002]	-0.35 [0.877]	-5.60 [0.177]	29.66** [0.012]	10.50* [0.055]
[0,5]	27.27*** [0.000]	43.31*** [0.000]	-1.13 [0.672]	-4.21 [0.330]	37.34*** [0.003]	11.76** [0.038]
[0,10]	35.00*** [0.000]	50.62*** [0.000]	-4.28 [0.239]	-5.64 [0.311]	46.54*** [0.000]	19.97*** [0.006]
[0,12]	38.14*** [0.000]	49.94*** [0.000]	-4.50 [0.248]	-5.45 [0.362]	39.00*** [0.002]	19.89*** [0.008]
Symmetric Window						
[-12,12]	36.90*** [0.000]	60.35*** [0.000]	-13.62** [0.014]	-9.47 [0.246]	38.06** [0.010]	21.48** [0.020]
[-10,10]	33.87*** [0.000]	61.07*** [0.000]	-9.60* [0.055]	-8.62 [0.252]	43.40*** [0.002]	16.61** [0.048]
[-5,5]	25.57*** [0.000]	42.50*** [0.000]	-3.14 [0.378]	-4.84 [0.382]	35.99*** [0.003]	6.22 [0.301]
[-3,3]	17.57*** [0.000]	37.32*** [0.000]	-0.26 [0.927]	-5.13 [0.269]	27.21*** [0.009]	8.46 [0.113]

Notes: This table shows cumulative abnormal volatility (CAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.8: Event Study on Cumulative Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Asymmetric Window	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	207.02* [0.078]	256.28 [0.176]	50.87 [0.813]	-1.88 [0.986]	-483.79*** [0.000]	-163.57 [0.529]
[-10,0]	213.95* [0.056]	282.58 [0.116]	95.39 [0.632]	2.61 [0.978]	-369.50*** [0.001]	-173.86 [0.471]
[-5,0]	154.46* [0.088]	278.08* [0.070]	151.39 [0.337]	-50.38 [0.497]	-186.20** [0.031]	-66.87 [0.713]
[-3,0]	117.14 [0.144]	146.53 [0.235]	103.76 [0.439]	-79.87 [0.250]	-137.40* [0.075]	-2.35 [0.988]
[-1,0]	132.34 [0.197]	-27.00 [0.765]	0.31 [0.998]	-63.59 [0.355]	-35.52 [0.506]	2.98 [0.981]
[0,1]	328.31* [0.081]	-27.00 [0.765]	6.99 [0.946]	-156.99 [0.158]	-35.52 [0.506]	-9.94 [0.936]
[0,3]	468.56*** [0.004]	41.34 [0.704]	137.48 [0.323]	-105.82 [0.156]	58.41 [0.337]	-240.77 [0.184]
[0,5]	476.40*** [0.001]	107.30 [0.416]	81.31 [0.594]	-222.40** [0.023]	51.00 [0.453]	-301.39 [0.139]
[0,10]	523.95*** [0.000]	325.88* [0.075]	-39.05 [0.844]	-92.70 [0.343]	-174.28* [0.067]	-306.57 [0.216]
[0,12]	556.77*** [0.000]	314.87 [0.103]	-60.90 [0.777]	-61.92 [0.552]	-358.33*** [0.002]	-337.64 [0.206]
Symmetric Window						
[-12,12]	593.04*** [0.001]	584.65** [0.026]	-23.84 [0.935]	32.51 [0.819]	-824.36*** [0.000]	-521.95 [0.149]
[-10,10]	567.15*** [0.000]	621.95** [0.012]	42.54 [0.875]	6.23 [0.962]	-526.02*** [0.000]	-501.17 [0.134]
[-5,5]	460.11*** [0.001]	398.88** [0.035]	218.90 [0.284]	-176.46* [0.087]	-117.44 [0.197]	-389.00 [0.125]
[-3,3]	414.95*** [0.002]	201.37 [0.175]	227.43 [0.191]	-89.38 [0.274]	-61.24 [0.401]	-263.86 [0.204]

Notes: This table shows cumulative abnormal volatility (CAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.9: Event Study on Cumulative Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Absolute Return as the Volatility Proxy

Asymmetric Window	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	68.39*** [0.002]	5.57 [0.730]	-29.06** [0.019]	-7.20*** [0.000]	-3.76** [0.016]	0.59 [0.834]
[-10,0]	65.30*** [0.002]	14.52 [0.340]	-13.90 [0.188]	-6.70*** [0.000]	-3.44** [0.019]	2.37 [0.373]
[-5,0]	53.30*** [0.007]	6.36 [0.578]	-12.15 [0.155]	-5.19*** [0.001]	-1.50 [0.161]	0.61 [0.758]
[-3,0]	44.88** [0.019]	4.51 [0.641]	-6.95 [0.326]	-4.47*** [0.004]	-1.33 [0.173]	0.89 [0.601]
[-1,0]	49.48* [0.088]	-4.49 [0.600]	-3.57 [0.551]	-3.94* [0.066]	-0.29 [0.676]	0.16 [0.906]
[0,1]	91.32** [0.048]	-4.49 [0.600]	-2.63 [0.643]	-4.44* [0.058]	-0.29 [0.676]	-0.04 [0.974]
[0,3]	114.35*** [0.001]	-2.02 [0.832]	-3.76 [0.571]	-4.63*** [0.004]	1.47 [0.143]	0.76 [0.653]
[0,5]	167.96*** [0.000]	2.62 [0.817]	-8.08 [0.317]	-5.67*** [0.000]	0.49 [0.617]	0.72 [0.719]
[0,10]	269.89*** [0.000]	-0.83 [0.955]	-10.12 [0.328]	-7.47*** [0.000]	-3.06** [0.033]	3.47 [0.203]
[0,12]	292.46*** [0.000]	-8.09 [0.617]	-9.11 [0.411]	-8.34*** [0.000]	-4.96*** [0.003]	3.85 [0.190]
Symmetric Window						
[-12,12]	308.76*** [0.000]	-0.28 [0.990]	-36.84** [0.020]	-12.51*** [0.000]	-8.57*** [0.000]	4.13 [0.292]
[-10,10]	283.11*** [0.000]	15.93 [0.436]	-22.69 [0.110]	-11.14*** [0.000]	-6.35*** [0.001]	5.53 [0.131]
[-5,5]	169.17*** [0.000]	11.22 [0.457]	-18.91* [0.083]	-7.83*** [0.000]	-0.87 [0.499]	1.02 [0.697]
[-3,3]	107.15*** [0.000]	4.74 [0.696]	-9.39 [0.277]	-6.07*** [0.000]	0.29 [0.778]	1.35 [0.531]

Notes: This table shows cumulative abnormal volatility (CAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

4.2.1.4 Interpretation of Cumulative Average Abnormal Volatility (CAAV) for All Indices during GE13 – GE15.

Table 4.10 presents the cumulative average abnormal volatility across three elections for all indices, analyzes through both asymmetric and symmetric windows. In GE13 and GE14, an upward trend of volatility with significant CAAV values is reported across all election-related event windows. The FBMKLCI experienced strong and significant positive CAAVs with 7.41 and 10.04 points, respectively, especially in longer windows such as [0,12] and [-12,12]. Both statistically significant at 1% level. This suggests that elections serve as a volatility trigger for the Malaysian equity market, reflecting broader investor reactions during election cycles. Notably, large spikes in volatility for *FIN* index with CAAV values of 270.25 and 410.55 are registered in event window [0, 12] and [-10,10], respectively. Both are significant at 1% level as well. Such results highlight the sector's vulnerability to political outcomes. Nevertheless, the remaining indices such as *CONS* and *TE* experienced market stability due to predictable anticipation and thus, it appeared muted in response during GE15.

Sectoral wise, mixed reaction in volatility is reported. For instance, *FIN* index is believed to be more sensitive to the electoral event as its dependency on economic policy and regulatory stability and thus, has the most volatile behaviour, with significant CAAVs across all windows. In similar, *PR* index exhibited strong and consistent positive volatility for window [-10,10] and [0,12] with CAAVs of 92.11 (p-value = 0.000) and 91.75 (p-value = 0.000), respectively. On the other hand, *PL* index has consistently displayed large and significantly negative CAAVs, such as -252.65 (p=0.000) in [0,12] and -437.93 (p=0.000) in [-12,12], pointing to reduced volatility in this index as the investors' interest has shifted due to unfavourable policy related to plantation industry. The *IND* and *TE* indices also

demonstrated reduced volatility as both reported a negative and significant CAAVs at -3.99 [-10,10] and -9.02 [12,12], respectively. Meanwhile, *CONSTR* and *CONS* indices record a moderate yet significantly positive CAAVs. For instance, *CONSTR* index responds strongly in both symmetric and asymmetric windows such as 27.88 in [-12,12], likely driven by infrastructure spending expectations. The *CONS* index which displays moderate volatility during [-12,12] window with CAAVs of 16.69 points due to possible changes in post-election consumer policies.

To summarize, Malaysian elections consider as significant volatility-inducing events, with strongest effect reported in several indices such as *FIN*, *PR* and *CONSTR* through cumulative average abnormal analysis due to its exposure towards the political and macroeconomic shifts. Whereas *PL*, *IND* and *TE* indices exhibit calm responses in volatility highlighting either resilience or reduced investor appetite during political uncertainty. It is acknowledged that a cumulative volatility can be observed in symmetric window, but asymmetric windows also highlight critical pre- and post-election dynamics. Hence, reject null hypothesis for CAAV is significantly different from zero. These findings are consistent with theoretical expectations under the Efficient Market Hypothesis by Fama et al. (1969), where markets react to political information, and Goodell and Vähämaa (2013) suggests market volatility surrounding elections due to policy uncertainty.

Table 4.10: Event Study on Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Absolute Return as the Volatility Proxy

Asymmetric Window	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
[-12,0]	3.37*** [0.000]	-5.71*** [0.000]	2.51*** [0.000]	-0.36 [0.311]	171.39*** [0.000]	-216.41*** [0.000]	14.97*** [0.000]	-3.46*** [0.000]
[-10,0]	1.42*** [0.000]	-5.28*** [0.000]	3.83*** [0.000]	-2.39*** [0.000]	197.31*** [0.000]	-180.25*** [0.000]	21.97*** [0.000]	-2.59*** [0.000]
[-5,0]	2.48*** [0.000]	-4.38*** [0.000]	0.99*** [0.001]	-1.73*** [0.001]	194.65*** [0.000]	-101.15*** [0.000]	15.84*** [0.000]	-2.03*** [0.000]
[-3,0]	0.59 [0.344]	-3.17*** [0.000]	2.27*** [0.000]	-0.57 [0.367]	122.47*** [0.000]	-73.21*** [0.000]	14.15*** [0.000]	-1.63*** [0.000]
[-1,0]	1.78** [0.043]	-1.90*** [0.000]	1.47*** [0.006]	0.43 [0.629]	35.22* [0.083]	-32.04 [0.104]	13.81*** [0.000]	-1.36*** [0.000]
[0,1]	1.15 [0.192]	-2.47*** [0.000]	4.07*** [0.000]	0.18 [0.840]	102.77*** [0.000]	-67.48*** [0.001]	28.07*** [0.000]	-1.59*** [0.000]
[0,3]	5.58*** [0.000]	-1.34*** [0.000]	18.44*** [0.000]	11.52*** [0.000]	215.79*** [0.000]	-96.06*** [0.000]	36.19*** [0.000]	-0.80*** [0.000]
[0,5]	2.79*** [0.000]	-2.63*** [0.000]	23.15*** [0.000]	14.96*** [0.000]	221.67*** [0.000]	-157.60*** [0.000]	54.17*** [0.000]	-1.49*** [0.000]
[0,10]	6.03*** [0.000]	-3.68*** [0.000]	27.11*** [0.000]	20.29*** [0.000]	270.26*** [0.000]	-191.18*** [0.000]	86.31*** [0.000]	-2.36*** [0.000]
[0,12]	7.41*** [0.000]	-4.76*** [0.000]	27.86*** [0.000]	17.81*** [0.000]	270.25*** [0.000]	-252.63*** [0.000]	91.75*** [0.000]	-3.15*** [0.000]
Symmetric Window								
[-12,12]	10.04*** [0.000]	-9.02*** [0.000]	27.88*** [0.000]	16.69*** [0.000]	384.62*** [0.000]	-437.93*** [0.000]	90.55*** [0.000]	-5.65*** [0.000]
[-10,10]	6.71*** [0.000]	-7.49*** [0.000]	28.45*** [0.000]	17.13*** [0.000]	410.55*** [0.000]	-340.32*** [0.000]	92.11*** [0.000]	-3.99*** [0.000]
[-5,5]	4.53*** [0.000]	-5.55*** [0.000]	21.64*** [0.000]	12.46*** [0.000]	359.30*** [0.000]	-227.63*** [0.000]	53.83*** [0.000]	-2.56*** [0.000]
[-3,3]	5.43*** [0.000]	-3.05*** [0.000]	18.21*** [0.000]	10.18*** [0.000]	281.25*** [0.000]	-138.16*** [0.000]	34.17*** [0.000]	-1.48*** [0.000]
[-1,1]	2.19*** [0.003]	-2.91*** [0.000]	3.04*** [0.000]	-0.16 [0.827]	80.97*** [0.000]	-68.41*** [0.000]	25.70*** [0.000]	-1.99*** [0.000]

Notes: This table represents cumulative average abnormal volatility (CAAV) results from volatility event study using absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.3 presents trend path of cumulative average abnormal volatility across all indices for event window [-12,12]. Notably, *FIN* index exhibits most prominent upward trend in CAAV as it consistently rises above 600 points especially during event day (Day 0). Such upward trend explains the anticipations about changes in fiscal and regulatory policies that directly impact the finance institutions. The significant rise post-election reflects market repricing as investors react to election outcomes, confirming the sector's role as a barometer of political and economic stability. On the contrary, *PL* index reports a consistent sharp and sustained drop in CAAV across event window, dip below -600 points by Day 12, indicating prolonged reduction in uncertainty in this index. Such dip can be interpreted as positive outlook for the market participants on agriculture and commodity-exposed industry during political uncertainty.

The FBMKLCI index shows a gradual surge in the post-election with modest and noticeable positive CAAV as compared to other sectoral indices such as *FIN* and *PL*, despite increase in volatility around election periods. It is also acknowledged that Malaysian elections are significant events that is not only impact the main index but also distributed across sectors with varying intensity. Other sectors such as *CONSTR*, *CONS*, *PR* and *TE* demonstrate relatively flat or slightly upwards volatility trends. For instance, *CONSTR* has muted CAAV response possibly due to already priced-in expectations. Whereas, *CONS* and *PR* index exhibited low but positive CAAV, indicating mild post-election volatility. Similarly, a minimal deviation is detected in *TE* index which entails less sensitive to the political uncertainty. Of all indices, *IND* remains the most stable, with almost no observable change in CAAV. This means that the sector is less likely to be impacted by elections in overall, and such volatility in the index could be driven by global supply chain trends and industrial demand fundamentals.

In conclusion, Malaysian elections have different impact across all indices through CAAV analysis. As mentioned earlier, *FIN* index is highly sensitive to post-election policies as it often shown an upward trajectory, suggesting the index as a politically sensitive industry. The *PL* index sharp decline in CAAV, on the other hand, may reflect declining investor confidence or repositioning away from policy-exposed industries. Meanwhile, main market such as FBMKLCI reports mild reactions, suggesting a composed aggregate market response. The relatively muted or stable volatility in *CONSTR*, *CONS*, *PR* and *TE* index further highlights that market expectations may already have been priced in beyond short-term political noise. Overall, this CAAV trend proposes different level of volatility exposure across indices is highly dependent on how the market respond towards election directly linked to macroeconomic policy and governance, while exhibiting caution or stability in others. This aligns with the Efficient Market Hypothesis, where information is incorporated quickly, but only sectors with higher exposure to political developments react significantly.

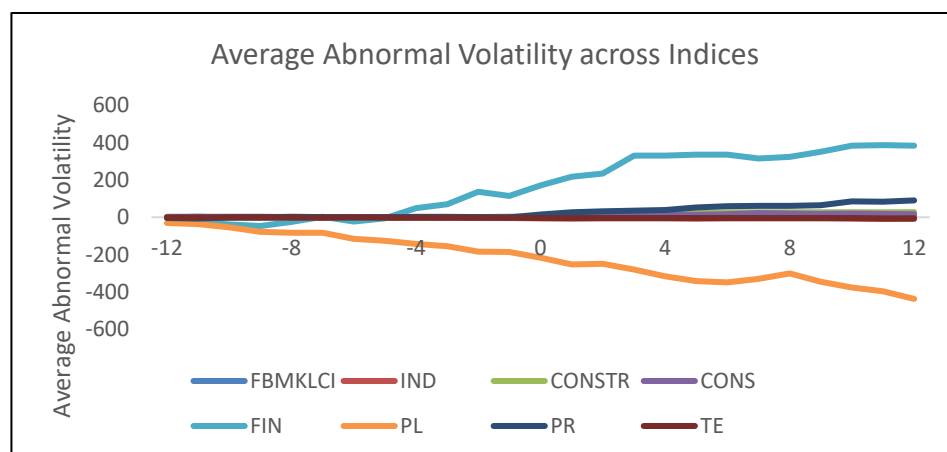


Figure 4.3: Cumulative Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Absolute Return as Volatility proxy

4.2.2 Log Absolute Return-Based Volatility Event Study Analysis

4.2.2.1 Interpretation of Abnormal Volatility (AV) for All Indices during GE13 – GE15.

Table 4.11 – 4.14 present the abnormal volatility trends across recent elections (GE13-GE15) with distinctive patterns among indices. It is noteworthy that the results for AV values are scaled up by $\times 10^3$ as the values are too small. Of all three elections, GE14 appears to be the most volatile which possibly due to political regime change. There was a rapid investors' reactions towards political uncertainty when significant spikes were observed on Day 0 and immediately after, such as in the *PR* index (30.82, or 0.03082 in actual scale) and the *TE* index (22.84, or 0.02284). In contrast, GE15 shows fewer and less intense volatility movements, suggesting a more stable or anticipated political outcome, with the exception of a notable *CONSTR* index spike on Day -3 (13.98, or 0.01398). As for GE13, the indices exhibited less consistent spikes in, despite the political events have impacted the market behaviour, the level of uncertainty or surprise may have been lower than in GE14.

Sector wise, indices show mixed reaction during elections. For instance, *TE* index exhibited the highest abnormal volatility across all elections, particularly during GE13 with AV value of 34.79 or 0.03479 on Day -12, likely due to its speculative nature and exposure to government digital or innovation policies. The *PR* index also reacted sharply to political events, especially during GE14 on Day 0 (30.82 or 0.03082) and Day 1 (22.84 or 0.02284), reflecting investor expectations around housing reforms, and government-linked developments. Meanwhile, *CONSTR* index experienced elevated pre-election volatility during GE15, as shown by Day -3 (13.98 or 0.01398), potentially due to speculation around infrastructure budgets and mega projects. In contrast, the AV values of *FIN* and *PL* index were hovering around ± 5 (i.e., ± 0.005) mostly, which helps to explain limited exposure to direct policy shifts or investor repositioning during election cycles could have been reason

the volatility appears subdued. The *CONS* index displayed mixed responses, with intermittent volatility spikes such as on Day 3 of GE14 (12.33, or 0.01233), possibly reflecting shifts in consumer sentiment linked to election outcomes or subsidies.

It is noteworthy that the volatility magnitude across indices and elections remains economically small but statistically relevant, after taking into account the scaling of AV values ($\times 10^3$). The null hypothesis that abnormal volatility is not significantly different from zero is rejected in several cases, especially during GE14, confirming that political transitions induce meaningful market reactions. These findings are in line with the EMH theory whereby markets adjust rapidly to new political information in semi-strong form market as suggested by Fama et al. (1969). Sector indices such as *TE*, *PR* and *CONSTR* index display strong response in AV trend which industries that tied closely to government regulation tend to be more vulnerable to political uncertainty (Luo et al., 2017). Overall, even though the volatility values are small in scale, their statistical significance and clustering around election events reinforce the idea that elections are pivotal market-moving events in Malaysia's political economy.

Table 4.11: Event Study on Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Day	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.29 [0.839]	-0.39 [0.783]	-3.70*** [0.009]	-0.07 [0.989]	-4.00 [0.418]	6.34 [0.199]
-11	0.76 [0.589]	1.29 [0.356]	1.77 [0.207]	-0.22 [0.965]	-2.97 [0.547]	-3.57 [0.470]
-10	1.23 [0.380]	-2.91** [0.038]	0.05 [0.972]	-1.14 [0.817]	4.34 [0.380]	0.14 [0.978]
-9	-0.30 [0.830]	-0.63 [0.654]	1.10 [0.433]	0.49 [0.921]	-4.86 [0.325]	-1.94 [0.695]
-8	0.88 [0.532]	0.34 [0.809]	0.24 [0.867]	1.37 [0.782]	-7.09 [0.151]	0.54 [0.914]
-7	-0.46 [0.744]	-0.06 [0.963]	1.31 [0.349]	0.29 [0.954]	0.06 [0.991]	1.39 [0.779]
-6	0.35 [0.805]	-2.29 [0.103]	-0.84 [0.548]	-2.26 [0.647]	9.27* [0.061]	10.60** [0.032]
-5	0.37 [0.790]	1.47 [0.294]	-0.95 [0.500]	4.04 [0.414]	-0.12 [0.981]	0.92 [0.853]
-4	1.81 [0.198]	-1.92 [0.172]	-1.99 [0.157]	-3.52 [0.475]	5.81 [0.239]	5.87 [0.235]
-3	-0.06 [0.963]	0.42 [0.767]	0.36 [0.797]	0.06 [0.991]	3.08 [0.533]	2.90 [0.558]
-2	0.05 [0.971]	0.04 [0.979]	2.04 [0.146]	2.78 [0.573]	-5.36 [0.278]	0.80 [0.872]
-1	-2.20 [0.118]	-0.06 [0.963]	-0.06 [0.963]	1.70 [0.730]	0.06 [0.991]	0.06 [0.991]
0	-1.12 [0.426]	-0.06 [0.963]	-0.59 [0.673]	-17.39*** [0.000]	0.06 [0.991]	2.32 [0.638]
1	-1.39 [0.321]	-0.06 [0.963]	-2.11 [0.132]	-9.17* [0.064]	0.06 [0.991]	2.65 [0.592]
2	0.47 [0.740]	1.71 [0.224]	-0.30 [0.829]	7.51 [0.129]	22.38*** [0.000]	3.63 [0.462]
3	-3.76*** [0.008]	-0.45 [0.748]	2.95** [0.036]	2.46 [0.618]	-6.63 [0.180]	-14.25*** [0.004]
4	-2.33* [0.098]	0.13 [0.929]	-2.10 [0.135]	7.73 [0.118]	-5.91 [0.231]	11.51** [0.020]
5	-2.48* [0.077]	2.03 [0.148]	-0.06 [0.963]	-0.02 [0.997]	7.87 [0.111]	0.06 [0.991]
6	0.77 [0.582]	2.25 [0.110]	-3.62** [0.010]	-3.23 [0.514]	-5.83 [0.238]	-17.16*** [0.001]
7	-2.89** [0.040]	-1.82 [0.194]	-0.11 [0.940]	12.05** [0.015]	-1.41 [0.775]	-8.27* [0.094]
8	-1.11 [0.430]	-2.04 [0.146]	-3.68*** [0.009]	8.68* [0.079]	-10.10** [0.041]	1.86 [0.706]
9	-1.07 [0.448]	-2.59* [0.066]	-2.91** [0.038]	2.59 [0.599]	12.94*** [0.009]	-3.44 [0.485]
10	-3.62** [0.010]	-1.99 [0.157]	-1.03 [0.462]	-0.73 [0.882]	12.57** [0.011]	5.56 [0.261]
11	-0.21 [0.879]	0.97 [0.491]	0.26 [0.853]	-10.08** [0.041]	-10.20** [0.039]	7.08 [0.152]
12	0.55 [0.693]	-2.71* [0.054]	0.31 [0.828]	-1.85 [0.708]	7.13 [0.149]	-3.51 [0.477]

Notes: This table shows abnormal volatility (AV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.12: Event Study on Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Day	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-2.30 [0.733]	0.87 [0.897]	8.41 [0.211]	1.22 [0.765]	2.18 [0.595]	-1.85 [0.651]
-11	-0.80 [0.906]	-1.06 [0.875]	-3.78 [0.574]	3.95 [0.334]	-5.98 [0.144]	5.30 [0.195]
-10	-6.48 [0.335]	13.95** [0.038]	2.61 [0.698]	-3.89 [0.342]	-4.95 [0.227]	1.29 [0.753]
-9	-4.30 [0.522]	-2.19 [0.745]	-7.27 [0.280]	2.25 [0.582]	-0.87 [0.832]	-5.84 [0.154]
-8	-5.99 [0.373]	20.68*** [0.002]	-0.72 [0.915]	1.01 [0.805]	-2.51 [0.539]	-1.43 [0.726]
-7	1.96 [0.771]	0.28 [0.967]	-1.60 [0.812]	2.35 [0.565]	-0.23 [0.956]	-0.39 [0.925]
-6	0.48 [0.944]	-13.91** [0.039]	-6.11 [0.363]	-0.95 [0.816]	-4.58 [0.263]	3.02 [0.460]
-5	-4.84 [0.472]	0.29 [0.966]	-0.10 [0.988]	0.02 [0.996]	3.94 [0.335]	1.92 [0.638]
-4	-1.20 [0.858]	3.23 [0.631]	4.84 [0.472]	1.10 [0.787]	-2.38 [0.561]	3.14 [0.443]
-3	0.28 [0.967]	-2.91 [0.665]	-13.98** [0.038]	-0.23 [0.956]	-0.27 [0.948]	3.52 [0.389]
-2	-5.10 [0.448]	2.69 [0.690]	1.06 [0.875]	-2.60 [0.525]	-2.27 [0.579]	-0.65 [0.874]
-1	7.28 [0.279]	0.28 [0.967]	0.28 [0.967]	-3.04 [0.458]	-0.23 [0.956]	-0.23 [0.956]
0	30.82*** [0.000]	0.28 [0.967]	0.78 [0.908]	-5.76 [0.160]	-0.23 [0.956]	-11.76*** [0.004]
1	22.84*** [0.001]	0.28 [0.967]	1.96 [0.771]	-4.76 [0.244]	-0.23 [0.956]	-5.29 [0.196]
2	-11.53* [0.087]	-138.54*** [0.000]	11.54* [0.086]	2.47 [0.546]	47.20*** [0.000]	-2.30 [0.574]
3	9.96 [0.139]	12.27* [0.068]	12.75* [0.058]	3.67 [0.369]	-1.14 [0.781]	2.30 [0.574]
4	21.00*** [0.002]	-6.30 [0.349]	-3.90 [0.562]	4.51 [0.271]	7.95* [0.052]	-4.60 [0.261]
5	9.21 [0.171]	-36.66*** [0.000]	0.28 [0.967]	-0.61 [0.882]	9.67** [0.018]	-0.23 [0.956]
6	-6.69 [0.320]	-39.81*** [0.000]	5.95 [0.376]	6.90* [0.092]	12.33*** [0.003]	5.51 [0.178]
7	9.75 [0.147]	-1.98 [0.768]	4.89 [0.467]	5.11 [0.212]	9.56** [0.020]	15.90*** [0.000]
8	0.73 [0.913]	18.44*** [0.006]	3.41 [0.612]	6.26 [0.126]	4.51 [0.270]	-1.65 [0.687]
9	4.98 [0.459]	7.36 [0.274]	0.73 [0.914]	-2.32 [0.571]	5.94 [0.147]	4.19 [0.306]
10	13.20** [0.050]	3.20 [0.634]	9.63 [0.153]	0.30 [0.942]	2.47 [0.546]	-3.82 [0.351]
11	4.85 [0.471]	-0.68 [0.919]	-0.01 [0.999]	-0.86 [0.833]	-6.53 [0.111]	-2.11 [0.606]
12	-7.93 [0.238]	-1.78 [0.791]	-6.26 [0.352]	-3.79 [0.354]	8.35** [0.042]	-1.06 [0.795]

Notes: This table shows abnormal volatility (AV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.13: Event Study on Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Day	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	0.66 [0.841]	0.37 [0.910]	-1.94 [0.554]	0.05 [0.995]	6.35 [0.409]	0.56 [0.942]
-11	3.19 [0.330]	-0.29 [0.930]	-6.92** [0.035]	-3.19 [0.678]	3.97 [0.605]	4.79 [0.533]
-10	2.72 [0.407]	-0.32 [0.922]	-1.86 [0.570]	-2.66 [0.729]	-1.57 [0.838]	-1.86 [0.808]
-9	-1.09 [0.740]	-2.84 [0.387]	4.76 [0.147]	-2.45 [0.750]	-4.98 [0.517]	3.28 [0.670]
-8	-0.33 [0.920]	1.65 [0.614]	3.27 [0.319]	8.03 [0.296]	-3.36 [0.662]	-0.83 [0.914]
-7	-4.74 [0.149]	-0.33 [0.921]	2.83 [0.388]	-4.51 [0.558]	0.11 [0.989]	-3.62 [0.637]
-6	0.92 [0.779]	-3.83 [0.243]	-9.90*** [0.003]	-3.14 [0.683]	2.36 [0.758]	-2.94 [0.702]
-5	-2.75 [0.401]	-1.03 [0.752]	-2.61 [0.426]	-3.85 [0.616]	0.15 [0.984]	2.04 [0.790]
-4	1.14 [0.727]	-8.17** [0.013]	-1.45 [0.658]	3.42 [0.656]	1.80 [0.815]	11.63 [0.131]
-3	-0.33 [0.921]	-2.46 [0.454]	-3.84 [0.242]	0.11 [0.989]	-0.10 [0.990]	-2.21 [0.774]
-2	-1.01 [0.759]	8.01** [0.015]	6.25* [0.057]	-1.95 [0.800]	-8.75 [0.255]	-1.63 [0.832]
-1	1.45 [0.658]	-0.33 [0.921]	-0.33 [0.921]	-5.11 [0.506]	0.11 [0.989]	0.11 [0.989]
0	10.17*** [0.002]	-0.33 [0.921]	1.99 [0.544]	-13.53* [0.079]	0.11 [0.989]	-5.47 [0.477]
1	9.47*** [0.004]	-0.33 [0.921]	-0.40 [0.902]	-6.73 [0.381]	0.11 [0.989]	3.12 [0.685]
2	-1.18 [0.718]	4.92 [0.134]	-2.03 [0.536]	1.21 [0.875]	6.92 [0.368]	2.05 [0.789]
3	-9.36*** [0.004]	0.99 [0.763]	5.52* [0.093]	13.00* [0.091]	11.25 [0.143]	-39.81*** [0.000]
4	-1.99 [0.544]	4.73 [0.149]	2.48 [0.449]	-1.58 [0.837]	-2.05 [0.789]	4.25 [0.580]
5	3.00 [0.360]	0.13 [0.968]	-0.33 [0.921]	-9.77 [0.204]	-5.40 [0.482]	0.11 [0.989]
6	-3.22 [0.326]	2.05 [0.532]	-0.91 [0.782]	6.95 [0.366]	0.68 [0.929]	1.56 [0.839]
7	-1.58 [0.630]	0.99 [0.762]	-8.56*** [0.009]	-6.62 [0.389]	3.42 [0.656]	-19.66** [0.011]
8	-2.38 [0.468]	5.87* [0.074]	-8.25** [0.012]	-8.91 [0.247]	0.40 [0.958]	8.48 [0.270]
9	1.24 [0.704]	-0.21 [0.950]	-4.55 [0.165]	2.62 [0.733]	12.53 [0.103]	1.82 [0.813]
10	-1.65 [0.615]	-12.17*** [0.000]	4.61 [0.160]	0.53 [0.945]	8.56 [0.265]	-2.01 [0.794]
11	2.07 [0.528]	-0.80 [0.807]	-0.44 [0.893]	4.75 [0.536]	-10.19 [0.185]	-3.72 [0.628]
12	-1.30 [0.691]	-0.53 [0.871]	5.31 [0.106]	-2.36 [0.759]	9.48 [0.218]	3.84 [0.617]

Notes: This table shows abnormal volatility (AV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.14: Event Study on Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Day	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-15.65*** [0.003]	3.76 [0.473]	7.71 [0.141]	0.65 [0.958]	34.79*** [0.005]	29.91** [0.017]
-11	3.73 [0.476]	3.32 [0.525]	-6.82 [0.193]	-0.18 [0.988]	-17.88 [0.152]	-10.37 [0.406]
-10	7.71 [0.141]	7.36 [0.160]	12.42** [0.018]	0.30 [0.981]	-3.92 [0.753]	-5.87 [0.637]
-9	-6.82 [0.193]	-2.77 [0.596]	-4.21 [0.421]	1.50 [0.904]	-2.32 [0.852]	-1.58 [0.899]
-8	12.42** [0.018]	10.19* [0.052]	3.80 [0.468]	-3.61 [0.772]	-15.23 [0.222]	-3.43 [0.783]
-7	-4.21 [0.421]	0.24 [0.964]	-2.96 [0.572]	-0.56 [0.964]	1.63 [0.896]	-12.20 [0.328]
-6	3.80 [0.468]	-0.49 [0.925]	-3.86 [0.460]	-7.49 [0.548]	28.53** [0.022]	27.54** [0.027]
-5	-2.96 [0.572]	-7.10 [0.175]	5.67 [0.279]	-0.67 [0.957]	18.09 [0.147]	3.01 [0.809]
-4	-3.86 [0.460]	3.90 [0.456]	2.58 [0.622]	-12.67 [0.310]	0.13 [0.992]	5.01 [0.688]
-3	5.67 [0.279]	-4.36 [0.405]	-1.56 [0.766]	1.63 [0.896]	3.29 [0.792]	4.51 [0.718]
-2	2.58 [0.622]	5.50 [0.294]	-0.06 [0.991]	5.72 [0.646]	5.20 [0.676]	-16.85 [0.177]
-1	-1.56 [0.766]	0.24 [0.964]	0.24 [0.964]	12.62 [0.311]	1.63 [0.896]	1.63 [0.896]
0	-0.06 [0.991]	0.24 [0.964]	2.44 [0.641]	-29.39** [0.019]	1.63 [0.896]	10.77 [0.388]
1	0.24 [0.964]	0.24 [0.964]	-1.51 [0.773]	-7.09 [0.570]	1.63 [0.896]	6.44 [0.605]
2	2.44 [0.641]	-2.85 [0.586]	3.71 [0.479]	-11.98 [0.337]	55.25*** [0.000]	5.63 [0.652]
3	-1.51 [0.773]	5.39 [0.303]	5.68 [0.278]	18.28 [0.143]	16.48 [0.186]	-5.22 [0.676]
4	3.71 [0.479]	3.79 [0.469]	-0.80 [0.878]	25.56** [0.041]	-11.23 [0.368]	2.33 [0.852]
5	5.68 [0.278]	-3.15 [0.548]	0.24 [0.964]	21.05* [0.092]	15.98 [0.200]	1.63 [0.896]
6	-0.80 [0.878]	12.10** [0.021]	21.94*** [0.000]	-1.97 [0.875]	5.45 [0.662]	8.72 [0.484]
7	0.24 [0.964]	2.37 [0.651]	-1.22 [0.815]	14.37 [0.249]	12.54 [0.315]	-8.03 [0.520]
8	21.94*** [0.000]	4.22 [0.420]	5.16 [0.325]	13.59 [0.276]	26.90** [0.031]	54.28*** [0.000]
9	-1.22 [0.815]	7.98 [0.128]	4.76 [0.363]	25.85** [0.038]	40.95*** [0.001]	13.10 [0.294]
10	5.16 [0.325]	2.16 [0.680]	2.80 [0.593]	2.31 [0.853]	32.91*** [0.008]	-0.12 [0.993]
11	4.76 [0.363]	-15.65*** [0.003]	2.67 [0.610]	4.10 [0.743]	-12.23 [0.327]	4.08 [0.743]
12	2.80 [0.593]	3.73 [0.476]	-6.44 [0.219]	-0.65 [0.958]	26.16** [0.036]	-4.96 [0.691]

Notes: This table shows abnormal volatility (AV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.4 presents trend path of abnormal volatility for FBMKLCI and sectoral indices across elections (GE13-GE15) using Logarithm Absolute Return as volatility proxy. In GE14, the indices demonstrate highest and sharpest volatility spikes on Day 0 to Day 5 with several indices showing surges exceeding 30 points (equivalent to 0.03 in actual volatility scale). For example, the *TE* and *CONS* index showed elevated AV around Day 4 and Day 5 during GE14 as political uncertainty increase due to first transition in political party following prolonged dominance by the BN political party. On the contrary, a moderate fluctuations with smaller peaks and troughs can be observed in the abnormal volatility trend in GE13. Meanwhile, GE15 showed volatility, despite more restrained pattern, possibly due to clearer political expectations. Overall, the AV pattern suggests that elections with uncertain outcomes, for instance during GE14, as it triggered more pronounced market responses.

Sectoral variation in abnormal volatility is evident across all election periods. The *TE* index was the most volatile, particularly in GE14 and GE15. AV reached extreme surge as the volatility hit beyond 45 points post-election. The *PR* index also demonstrated strong AV around Day 8 in GE14 and GE15, with peaks above 20 points. Meanwhile, the *CONS* index showed a significant post-election spike in GE14 (near Day 4), surging above 40 points, likely influenced by anticipated shifts in consumption policy or subsidies. The *IND* index showed volatility across elections, particularly with a sharp negative spike near Day 4 in GE14, plunging almost -130 points, possibly indicating temporary reduction in investor anxiety following the initial shocks. Interestingly, the *FIN* index experienced moderate market movement with no drastic surge, whereas *PL* index exhibited scattered volatility with a sharp drop which nearly -40 points in GE15 post-election.

Overall, the volatility patterns revealed both sector-specific reactions and event-timed clustering. *IND* index recorded the most extreme spikes around Day 4 in GE14, reaching a deep trough of -130 points. Similarly, the *CONS* and *TE* indices reported post-election surges exceeding 40 to 50 points, indicating high investor sensitivity to government transition which eventually led to short-term market instability. In comparison, the volatility in GE13 stayed within narrow band which is around ± 10 points, hence, muted AV. Meanwhile, GE15 showed signs of market anticipation rather than shock, indicated by moderate surges, especially in *TE* and *PR* indices. It can be concluded that certain indices such as *TE* and *PR* indices illustrated high frequency oscillation while *FIN* index displays smoother trend when it exposed to the election-related vulnerability.

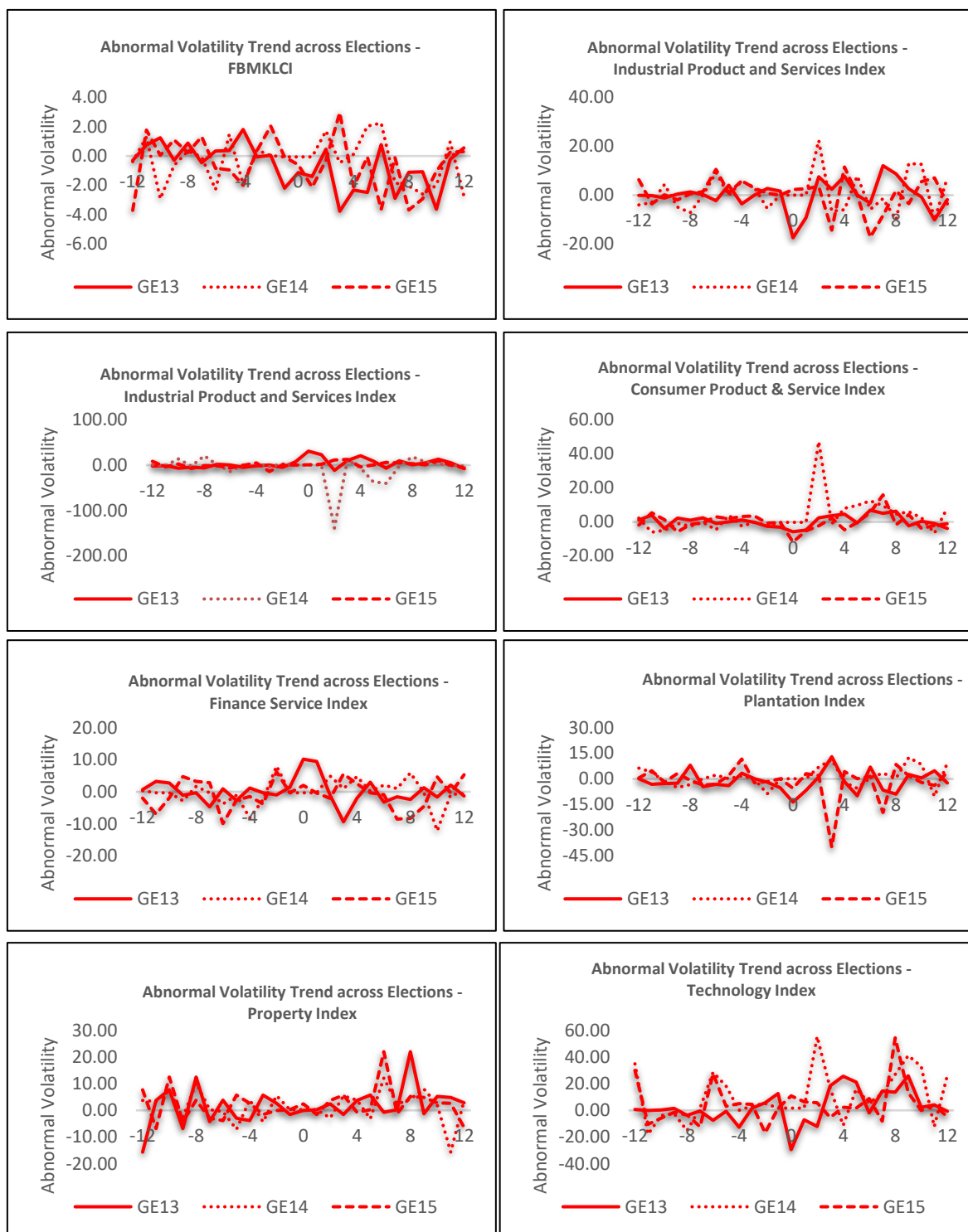


Figure 4.4: Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices across elections (GE13-GE15) using Log Absolute Return as Volatility Proxy

4.2.2.2 Interpretation of Average Abnormal Volatility (AAV) for All Indices during GE13 – GE15

Table 4.15 presents average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with log absolute return as the volatility proxy. The AAV values reported that FBMKLCI considered less volatile as compared to other indices, despite its significant AAV around elections. The index experienced a negative AAV of -1.46 on Day -12, followed by a reversal to 1.27 on Day -11. This rapid turnaround suggests initial investor anxiety followed by possible optimism. On Day -6, FBMKLCI posted a significant negative AAV of -0.93, indicating uncertainty leading up to the election. Another surge appeared on Day 1 with 1.43, highlighting market reaction to the election outcome, though the magnitude remains modest compared to sectoral indices. All are statistically significant at 1% level.

The *TE* index displayed the most consistent and elevated AAV throughout the event window. The index recorded a peak AAV of 16.19 on Day -6, followed by 12.89 on Day 3, reflecting strong post-election reactions. In addition to this, Day -11 (9.48) and Day 0 (12.13) were among the significant spikes, confirming that the tech sector was highly sensitive to political developments and anticipated digital economy reforms. As for *PR* index, a significant AAV was recorded on Day -10 and Day -6 with AAV values of 3.41 and 3.54, respectively. Post-election volatility continued with strong values on Day 0 (8.64) and Day 9 (9.46). All are statistically significant at 1% level. Therefore, the significant findings proposed this index was directly influenced by housing policy expectations or land development decisions tied to the election outcome. Meanwhile, the *PL* index demonstrated largely negative post-election AAV. The index registered -6.30 on Day 0, and further declines on Day 4 (-5.02), Day 6 (-5.02), and Day 12 (-6.03). These results imply investors' optimism over agricultural or commodity-related policy changes.

The *FIN* index showed mild but significant AAV movements. The index recorded a notable pre-election spike with AAV values of 4.42 (Day -2) and a post-election gain of 3.94 on Day 0 suggests financial markets quickly priced in electoral outcomes. However, most of its volatility remains within a ± 5 range, indicating cautious and measured responses. In addition to this, a sudden surge in the post-election was registered under *CONS* index especially on Day 2 (15.79) and Day 3 (8.39), likely reflecting investor optimism about consumption-boosting policies, tax changes, or subsidies. The *CONSTR* and *IND* indices recorded strong average abnormal volatility which concentrated between Day 0 and Day 5. The former index reached 10.63 on Day 0 and 11.66 on Day 1, while the latter index peaked at 11.77 on Day 1. Hence, these indices are traditionally sensitive to infrastructure spending and fiscal announcements, and the AAV spikes likely reflect market anticipation of new development policies.

Overall, all indices including FBMKLCI has recorded significant average abnormal volatility around the election period, particularly from Day -12 to Day 5. It is also noted that highest magnitude in AAV was recorded under *TE*, *PR* and *CONSTR* index with AV values exceeding ± 10 points (i.e., ± 0.01 scaled) during key event days. Meanwhile, *PL* and *CONS* index showed heterogenous reaction, with the former reacting negatively and the latter positively, indicating sector-specific sentiment tied to policy outcomes. The statistical significance of AAV across multiple indices and time points leads to the rejection of the null hypothesis, confirming that average abnormal volatility is significantly different from zero during election periods. These results are consistent with the EMH theory in its semi-strong form, which posits that markets quickly incorporate publicly available information, such as election results (Fama et al., 1969).

Table 4.15: Event Study on Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Day	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
-12	-1.46*** [0.001]	0.76 [0.656]	2.33 [0.275]	0.52 [0.714]	-0.30 [0.774]	2.32 [0.360]	3.27** [0.039]	21.79*** [0.000]
-11	1.27*** [0.004]	-2.25 [0.186]	-1.88 [0.379]	1.09 [0.439]	-1.34 [0.207]	1.86 [0.463]	-2.15 [0.175]	-9.48** [0.011]
-10	-0.54 [0.222]	1.11 [0.514]	3.36 [0.116]	-2.52* [0.075]	0.18 [0.868]	-2.03 [0.422]	3.41** [0.032]	-3.17 [0.397]
-9	0.06 [0.899]	-2.10 [0.217]	-4.59** [0.032]	-1.48 [0.293]	0.28 [0.793]	-1.38 [0.585]	-3.51** [0.027]	-0.80 [0.830]
-8	0.48 [0.276]	-1.73 [0.309]	4.66** [0.030]	-0.98 [0.488]	1.53 [0.150]	1.28 [0.613]	4.56*** [0.004]	-7.42** [0.047]
-7	0.26 [0.553]	0.58 [0.735]	0.21 [0.920]	0.58 [0.681]	-0.74 [0.483]	-2.67 [0.291]	-0.54 [0.731]	-3.71 [0.321]
-6	-0.93** [0.037]	5.87*** [0.001]	-6.52*** [0.002]	-0.84 [0.554]	-4.27*** [0.000]	-1.24 [0.624]	-3.54** [0.026]	16.19*** [0.000]
-5	0.30 [0.499]	1.61 [0.344]	-1.55 [0.468]	1.96 [0.164]	-2.13** [0.045]	-0.55 [0.827]	-0.99 [0.531]	6.81* [0.069]
-4	-0.70 [0.116]	2.72 [0.111]	2.29 [0.284]	0.62 [0.659]	-2.83*** [0.008]	5.62** [0.027]	-2.25 [0.155]	-2.51 [0.502]
-3	0.24 [0.594]	2.01 [0.238]	-5.54*** [0.010]	1.01 [0.474]	-2.21** [0.038]	-0.73 [0.772]	-1.90 [0.231]	3.14 [0.400]
-2	0.71 [0.110]	-0.59 [0.728]	-0.45 [0.832]	-1.84 [0.192]	4.42*** [0.000]	-4.11 [0.105]	3.04* [0.055]	-1.98 [0.597]
-1	-0.78* [0.081]	0.60 [0.722]	2.61 [0.222]	-1.16 [0.409]	0.27 [0.802]	-1.63 [0.519]	4.20*** [0.008]	5.30 [0.157]
0	-0.59 [0.183]	-5.00*** [0.003]	10.63*** [0.000]	-5.92*** [0.000]	3.94*** [0.000]	-6.30** [0.013]	12.13*** [0.000]	-5.66 [0.130]
1	-1.19*** [0.008]	-2.15 [0.206]	8.36*** [0.000]	-3.43** [0.015]	2.91*** [0.006]	-1.17 [0.645]	8.64*** [0.000]	0.33 [0.930]
2	0.62 [0.161]	11.17*** [0.000]	-46.18*** [0.000]	15.79*** [0.000]	0.57 [0.593]	3.39 [0.180]	-3.28** [0.038]	16.30*** [0.000]
3	-0.42 [0.345]	-6.14*** [0.000]	11.66*** [0.000]	1.61 [0.253]	-0.95 [0.370]	-5.18** [0.041]	7.19*** [0.000]	9.85*** [0.009]
4	-1.43*** [0.001]	4.44*** [0.009]	3.60* [0.092]	2.62* [0.064]	1.74 [0.101]	0.21 [0.935]	4.32*** [0.007]	5.56 [0.137]
5	-0.17 [0.700]	2.64 [0.122]	-9.06*** [0.000]	2.94** [0.037]	0.93 [0.379]	-5.02** [0.048]	8.22*** [0.000]	12.89*** [0.001]
6	-0.20 [0.653]	-8.74*** [0.000]	-13.52*** [0.000]	8.25*** [0.000]	-0.69 [0.514]	3.07 [0.226]	9.49*** [0.000]	4.07 [0.276]
7	-1.61*** [0.000]	0.79 [0.643]	4.22** [0.048]	10.19*** [0.000]	-3.05*** [0.004]	-7.62*** [0.003]	3.06* [0.054]	6.29* [0.092]
8	-2.28*** [0.000]	0.15 [0.932]	7.53*** [0.000]	3.04** [0.031]	-1.59 [0.135]	-0.01 [0.998]	3.41** [0.031]	31.59*** [0.000]
9	-2.19*** [0.000]	4.03** [0.018]	4.36** [0.042]	2.60* [0.065]	-1.17 [0.270]	5.66** [0.026]	9.46*** [0.000]	26.63*** [0.000]
10	-2.22*** [0.000]	5.80*** [0.001]	8.68*** [0.000]	-0.35 [0.804]	-3.07*** [0.004]	2.36 [0.351]	16.51*** [0.000]	11.70*** [0.002]
11	0.34 [0.446]	-4.40*** [0.010]	1.39 [0.516]	-3.17** [0.025]	0.28 [0.794]	-3.05 [0.228]	-4.41*** [0.006]	-1.35 [0.717]
12	-0.62 [0.165]	0.59 [0.728]	-5.32** [0.013]	1.16 [0.409]	1.16 [0.276]	3.66 [0.149]	-6.03*** [0.000]	6.85* [0.067]

Notes: This table represents average abnormal volatility (AAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 2.5 presents average abnormal volatility trend path of FBMKLCI and sectoral indices for event windows [-12,12] using absolute return as volatility proxy. Of all the indices, *TE* index is the most volatile with sharp spikes and dips spotted throughout the window, especially on Day -12 pre-election peak near 15 points and a large post-election peak near +30 points around Day +9. This trend suggests that the technology sector is highly responsive to political news. The *CONSTR* index experienced a dramatic dip as it plunged close to -55 points immediately in the post-election (around Day 2). A partial recovery is seen shortly after, but the index remains more volatile than most others. The *PR* index reported strong upward surges with multiple peaks beyond 20 points, notably Days 4 and 9. However, the index follows irregular trajectory, reflecting persistent but short-lived investor reactions. As compared to *TE* and *PR*, the amplitude of changes is rather less fluctuated in *CONS* index. The index exhibited moderate volatility, with positive spikes around Day 4 and Day 8. Meanwhile, *FIN* and *PL* indices show comparatively stable trends with smaller deviations. The *FIN* index fluctuates within ± 5 points for most of the window, whereas *PL* index is muted in response during elections. The AAV trend also demonstrated medium-scale volatility in *IND* index peaking around Day 4 with a rise near 15 points, and again around Day 9, which may reflect optimism regarding industrial policy or export-related projections. Lastly, the FBMKLCI index reported minimal abnormal volatility throughout the window as it hovering around baseline, consistent with the diversified nature of the index, which smooths out sector-specific shocks.

In conclusion, there is a mixed reaction in AAV trends across indices in response to elections. Starting with *TE* index, peak volatility was recorded at nearly 30 points particularly around Day 9, whereas *CONSTR* index has the deepest trough as the index experienced a sharp dropped nearly -55 points following the election. Other indices such as

PR and *IND* showed noticeable volatility spikes between 10 to 20 points, while *CONS* experienced milder surges in the same range. In contrast, the AAV trends of *FIN*, *PL* and FBMKLCI were lingering around ± 5 points which making it seen stable in movement, indicating market resilience to the electoral context. Therefore, the findings confirm that average abnormal volatility spikes are sector-specific, with *TE*, *CONSTR* and *PR* have a pronounce reaction in response to the election-related events. These patterns support the view that political uncertainty and anticipated policy changes drive investor behaviour differently across sectors that is consistent with Fama et al. (1969) and Goodell and Vähämaa (2013).

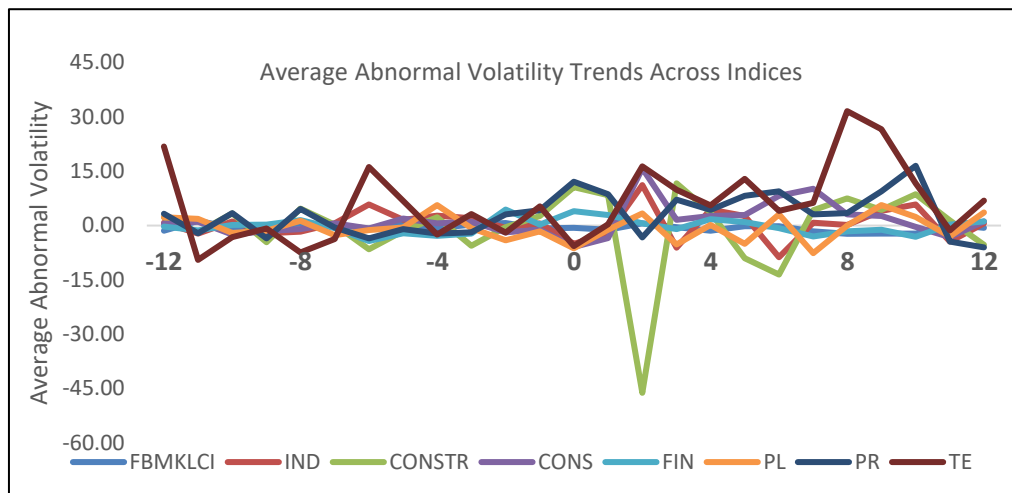


Figure 4.5: Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows $[-12,12]$ using Log Absolute Return as Volatility Proxy

4.2.2.3 Interpretation of Cumulative Abnormal Volatility (CAV) for All Indices during GE13 – GE15

Table 4.16 – 4.19 presents cumulative abnormal volatility for FBMKLCI and other sectoral indices using window [-12,12] with log absolute return as the volatility proxy. The indices experienced divergence reaction in response to the political events. It is noted that GE14 has the highest cumulative abnormal volatility, particularly within short event windows due to historic political regime change in 2018. For example, *TE* index records CAV of 198.50 in the [0,10] window and 212.43 in the [0,12] window, both significant at 1%, indicating a strong and prolonged reaction to electoral uncertainty and policy shifts. On the other hand, the indices appear positive and less intense CAV during GE13 and demonstrate fewer significant surge with moderate volatility in GE15, which possibly due to predictable election outcome.

Sector wise, the volatility response varied across indices. *TE* exhibits the largest CAV across all elections, peaking at 266.38 in the symmetric [-12,12] window during GE14 and 109.99 during GE15, confirming its sensitivity to political and economic policy changes. The *PR* index also shows notable CAV for event window [0,10] with 161.76 and 52.05 during GE13 and GE14, respectively. Similarly, there was extreme pre- and post-election spikes reported in *CONSTR* index. The index was reportedly with 104.60 in the [0,10] window for GE13 and 181.47 in GE14, highlighting the sector's dependence on government-led projects and fiscal policies. The *CONS* index also experienced significant response when the CAV value peaked at 81.72 in [-12,12] and 83.71 in [-10,10]. In contrast, the *PL* index has mixed results in which negative (positive) values in most windows during GE14 (GE15). Whereas, *FIN* index shows moderate but statistically significant CAV in shorter event windows, such as 10.11 in [0,3] during GE13. Lastly, the FBMKLCI shows significant

negative CAV during GE14, particularly in symmetrical windows such as -9.36 in [-12,12] and -8.53 in [-10,10], indicating political uncertainty from the government transitioning. Notably, the main index reported a stable market during GE13, despite its significant positive CAV in [0,10] (18.52) and [0,12] (18.18), suggesting market confidence as the long-standing ruling party secure another term in office.

CAV patterns differ between symmetrical and asymmetrical windows. Symmetrical windows such as [-5,5] or [-10,10] managed to capture both pre- and post-election effects, with GE14 often showing the highest negative or positive spikes. For example, the *TE* index records 235.45 in [-10,10] during GE14. In contrast, asymmetrical windows such as [0,10] or [0,12] highlight post-election adjustments. These windows show that sectors such as *TE*, *CONSTR*, *PR* and *PR* indices continue to experience elevated volatility even 10–12 days post-election, while *FBMKLCI* and *FIN* indices recover faster.

Overall, the analysis shows that GE14 produced the highest cumulative abnormal volatility, particularly for *TE*, *CONSTR* and *CONS* indices, indicating strong investor reactions to political transitions and policy uncertainty. GE13 displayed moderate but positive CAV, reflecting investor confidence in the incumbent government, while GE15 saw more muted responses, indicating market resilience. Symmetrical windows often show sharp initial shocks, while asymmetrical windows reveal prolonged adjustments in politically sensitive sectors. These findings confirm that elections have sector-specific impacts, and that the magnitude of volatility is closely tied to the level of political uncertainty.

Table 4.16: Event Study on Cumulative Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Asymmetric Window	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	1.02 [0.579]	-4.77 [0.365]	-1.26 [0.589]	-13.88 [0.750]	-1.73 [0.280]	26.35 [0.758]
[-10,0]	0.55 [0.427]	-5.68 [0.321]	-0.90 [0.244]	-13.60 [0.459]	5.24 [0.351]	23.58 [0.530]
[-5,0]	-1.15** [0.024]	-0.12 [0.819]	0.01 [0.973]	-12.33 [0.280]	3.53 [0.901]	12.86 [0.642]
[-3,0]	-3.33*** [0.001]	0.32 [0.981]	4.07 [0.912]	-12.85 [0.143]	-2.16 [0.750]	6.07 [0.200]
[-1,0]	-3.31*** [0.000]	-0.13 [0.955]	1.67 [0.951]	-15.69 [0.117]	0.11 [0.945]	2.38** [0.018]
[0,1]	-2.51*** [0.000]	-0.13 [0.955]	1.59 [0.951]	-26.55* [0.061]	0.11 [0.945]	4.97*** [0.001]
[0,3]	-5.80*** [0.000]	1.13*** [0.000]	5.08 [0.701]	-16.58 [0.581]	15.86*** [0.000]	-5.65** [0.017]
[0,5]	-10.61*** [0.000]	3.29*** [0.000]	7.24 [0.361]	-8.87 [0.961]	17.82*** [0.000]	5.91** [0.013]
[0,10]	-18.52*** [0.000]	-2.91*** [0.000]	-10.42 [0.550]	10.50 [0.230]	25.98*** [0.000]	-15.55 [0.882]
[0,12]	-18.18*** [0.000]	-4.66*** [0.000]	-5.55 [0.380]	-1.43 [0.436]	22.91*** [0.000]	-11.98 [0.700]
Symmetric Window						
[-12,12]	-16.04*** [0.001]	-9.36*** [0.000]	-13.66 [0.526]	2.07 [0.533]	21.12*** [0.001]	12.05 [0.870]
[-10,10]	-16.86*** [0.000]	-8.53*** [0.000]	-12.30 [0.461]	14.29 [0.515]	31.16*** [0.000]	5.70 [0.872]
[-5,5]	-10.64*** [0.000]	3.23*** [0.000]	-2.82 [0.559]	-3.81 [0.691]	21.29*** [0.000]	16.45 [0.230]
[-3,3]	-8.01*** [0.000]	1.52*** [0.000]	2.28 [0.497]	-12.04 [0.329]	13.64*** [0.001]	-1.90 [0.126]
[-1,1]	-4.71*** [0.000]	-0.19 [0.944]	-2.77 [0.828]	-24.85** [0.049]	0.17 [0.933]	5.03*** [0.005]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.17: Event Study on Cumulative Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Asymmetric Window	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	9.80 [0.579]	22.47 [0.210]	-15.58 [0.401]	1.02 [0.579]	-18.36 [0.294]	-3.94 [0.916]
[-10,0]	12.89 [0.427]	22.65 [0.401]	-20.21 [0.357]	0.55 [0.427]	-14.56 [0.264]	-7.40 [0.727]
[-5,0]	27.23** [0.024]	3.85 [0.110]	-7.13 [0.590]	-1.15** [0.024]	-1.43 [0.171]	-4.05 [0.750]
[-3,0]	33.27*** [0.001]	0.32** [0.021]	-11.86 [0.452]	-3.33*** [0.001]	-2.99* [0.081]	-9.12 [0.811]
[-1,0]	38.10*** [0.000]	0.55*** [0.000]	1.06 [0.888]	-3.31*** [0.000]	-0.46*** [0.003]	-11.99 [0.986]
[0,1]	53.66*** [0.000]	0.55*** [0.000]	2.74 [0.888]	-2.51*** [0.000]	-0.46*** [0.000]	-17.06 [0.986]
[0,3]	52.10*** [0.000]	-125.72** [0.041]	27.03 [0.421]	-5.80*** [0.000]	45.61** [0.025]	-17.05* [0.081]
[0,5]	82.31*** [0.000]	-168.69* [0.063]	23.40 [0.206]	-10.61*** [0.000]	63.22 [0.324]	-21.88 [0.109]
[0,10]	104.26*** [0.000]	-181.47 [0.732]	48.01 [0.539]	-18.52*** [0.000]	98.04 [0.388]	-1.75* [0.085]
[0,12]	101.18*** [0.000]	-183.93 [0.680]	41.74 [0.652]	-18.18*** [0.000]	99.85 [0.914]	-4.93 [0.162]
Symmetric Window						
[-12,12]	80.16*** [0.001]	-161.74 [0.778]	12.05 [0.870]	12.33 [0.400]	81.72 [0.910]	2.89 [0.352]
[-10,10]	86.34*** [0.000]	-159.10 [0.882]	5.70 [0.872]	11.81 [0.480]	83.71 [0.396]	2.61 [0.134]
[-5,5]	78.72*** [0.000]	-165.12 [0.240]	16.45 [0.230]	-5.21 [0.700]	62.02 [0.754]	-14.17 [0.157]
[-3,3]	54.55*** [0.000]	-125.68 [0.116]	-1.90 [0.126]	-10.24 [0.510]	42.84 [0.216]	-14.41 [0.256]
[-1,1]	60.94*** [0.000]	0.83*** [0.000]	5.03*** [0.005]	-13.56 [0.859]	-0.68*** [0.000]	-17.28 [0.983]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.18: Event Study on Cumulative Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Asymmetric Window	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	10.00 [0.000]	-9.88 [0.365]	-9.76 [0.589]	-28.80 [0.844]	-3.80** [0.050]	3.84 [0.794]
[-10,0]	6.15 [0.000]	-9.96 [0.321]	-0.90 [0.244]	-25.66 [0.910]	-14.12* [0.057]	-1.50 [0.292]
[-5,0]	8.68 [0.000]	-4.30 [0.819]	0.01 [0.973]	-20.92 [0.785]	-6.68** [0.036]	4.47 [0.499]
[-3,0]	10.28 [0.000]	4.90** [0.981]	4.07 [0.912]	-20.49 [0.624]	-8.64** [0.012]	-9.20 [0.285]
[-1,0]	11.62 [0.000]	-0.65*** [0.955]	1.67 [0.951]	-18.64 [0.794]	0.21*** [0.001]	-5.36 [0.970]
[0,1]	19.64 [0.000]	-0.65** [0.955]	1.59 [0.951]	-20.26 [0.282]	0.21*** [0.000]	-2.35 [0.970]
[0,3]	9.09 [0.000]	5.25*** [0.000]	5.08 [0.701]	-6.05 [0.987]	18.38 [0.456]	-40.11** [0.024]
[0,5]	10.10 [0.000]	10.11*** [0.000]	7.24 [0.361]	-17.39 [0.610]	10.92* [0.081]	-35.75 [0.269]
[0,10]	2.51 [0.000]	6.64*** [0.000]	-10.42 [0.550]	-22.81** [0.022]	36.52* [0.091]	-45.56*** [0.007]
[0,12]	3.28 [0.000]	5.30*** [0.000]	-5.55 [0.380]	-20.42** [0.044]	35.81 [0.163]	-45.43** [0.014]
Symmetric Window						
[-12,12]	3.12 [0.000]	-4.25*** [0.000]	-17.30 [0.526]	-35.69 [0.125]	31.90* [0.079]	-36.12 [0.115]
[-10,10]	-1.50 [0.000]	-3.00*** [0.000]	-13.31 [0.461]	-34.94 [0.132]	22.29* [0.061]	-41.59 [0.228]
[-5,5]	8.61 [0.000]	6.13*** [0.000]	5.26 [0.559]	-24.78 [0.633]	4.13* [0.066]	-25.81 [0.757]
[-3,3]	9.21 [0.000]	10.48*** [0.000]	7.16 [0.497]	-13.00 [0.628]	9.64 [0.226]	-43.84 [0.367]
[-1,1]	21.09 [0.000]	-0.98*** [0.944]	1.26 [0.828]	-25.37 [0.369]	0.32*** [0.000]	-2.24 [0.964]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.19: Event Study on Cumulative Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Asymmetric Window	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	11.79	20.02	15.37	-32.14	55.58	32.09
	[0.929]	[0.539]	[0.225]	[0.451]	[0.463]	[0.202]
[-10,0]	16.40	12.94	14.48	-32.60	38.67	12.54
	[0.970]	[0.353]	[0.393]	[0.440]	[0.419]	[0.334]
[-5,0]	34.97	-1.59***	9.31	-22.75	29.98	8.09
	[0.879]	[0.008]	[0.887]	[0.502]	[0.445]	[0.310]
[-3,0]	49.75	1.61***	1.06	-9.41	11.75	0.06
	[0.702]	[0.000]	[0.860]	[0.925]	[0.699]	[0.626]
[-1,0]	45.83	0.47***	2.68	-16.76	3.26	12.40
	[0.753]	[0.000]	[0.942]	[0.738]	[0.330]	[0.848]
[0,1]	60.89	0.47***	0.93	-36.47	3.26**	17.21
	[0.890]	[0.000]	[0.942]	[0.907]	[0.035]	[0.848]
[0,3]	60.70*	3.01***	10.31	-30.18	75.00	17.62***
	[0.097]	[0.000]	[0.741]	[0.362]	[0.215]	[0.002]
[0,5]	98.24	3.66***	9.75	16.44	79.75	21.59***
	[0.226]	[0.000]	[0.743]	[0.482]	[0.581]	[0.007]
[0,10]	161.76	32.50***	43.19**	70.59**	198.50*	89.54***
	[0.254]	[0.000]	[0.033]	[0.022]	[0.081]	[0.000]
[0,12]	146.14	20.58***	39.41	74.03*	212.43*	88.66***
	[0.296]	[0.000]	[0.212]	[0.054]	[0.092]	[0.000]
Symmetric Window						
[-12,12]	124.23	40.37***	52.34*	71.28*	266.38	109.98***
	[0.548]	[0.000]	[0.078]	[0.065]	[0.241]	[0.000]
[-10,10]	144.47	45.20***	55.23**	67.37**	235.54	91.32***
	[0.451]	[0.000]	[0.032]	[0.034]	[1.212]	[0.000]
[-5,5]	99.52	1.83***	16.62	23.07	108.10	18.91***
	[0.518]	[0.000]	[0.904]	[0.376]	[0.573]	[0.007]
[-3,3]	76.76	4.39***	8.93	-10.20	85.12***	6.92***
	[0.169]	[0.000]	[0.717]	[0.550]	[-0.318]	[0.008]
[-1,1]	73.03	0.71***	1.17	-23.85	4.90***	18.84
	[0.914]	[0.000]	[0.928]	[0.905]	[-1.135]	[0.814]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

4.2.2.4 Interpretation of Cumulative Average Abnormal Volatility (CAAV) for All Indices during GE13 – GE15.

Table 4.20 presents cumulative average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with log absolute return as the volatility proxy. Of all the indices, *TE* index was reportedly to have the most substantial and consistent cumulative average abnormal volatility across all event windows. The highest CAAV was observed in the symmetric window [-12,12], reaching 149.22, followed by 131.41 in [-10,10], and 125.04 in the post-election asymmetric window [0,12]. All are statistically significant at 1% level. Finding suggests the index is vulnerable to political events and tends to experience extended periods of volatility around elections. The *PR* index also experienced substantial abnormal volatility with CAAV reached 72.31 in [-12,12] and 68.71 in [0,12]. Similar pattern can be detected in the *CONS* index, which recorded 32.32 in [-12,12] and 35.33 in [0,12], suggesting volatility stemming from shifting in tax policies. Other than that, high CAAV value also reported in *CONSTR* index with 23.64 in [-5,5] and 37.43 in [0,5]. As for *IND* and *FIN* indices, both showed comparatively moderate but still statistically significant volatility in shorter windows, whereas the *PL* index showed significant negative volatility in pre-election windows such as [-12,0] with CAAV value of -9.59. Last but not least, the FBMKLCI index demonstrated significant abnormal volatility across windows, particularly in [-12,12] and [0,12] with CAAV of -13.02 and -11.94, respectively, indicating that general elections induce market-wide volatility and reflect uncertainty beyond sector-specific responses.

Symmetrical windows such as [-12,12], [-10,10], and [-5,5] have consistently capture the magnitude of election-induced volatility across pre- and post-event periods. *TE*, *PR*, and *CONS* indices display the highest CAAV under symmetric windows. For instance, the *TE*

index recorded 149.22 in [-12,12] and 131.41 in [-10,10], reflecting prolonged volatility clustering. In contrast, asymmetrical windows such as [0,5], [0,10], and [0,12] often highlight the post-election persistence of volatility. The *TE* index registered 125.04 in [0,12], and the *PR* index hit 68.71, emphasizing sustained investor reactions even after elections. Conversely, windows like [-12,0] reveal pre-election anxiety, with *CONS*, *PL*, and *FBMKLCI* experiencing negative CAAVs, consistent with heightened uncertainty and risk-off behaviour before election day.

To conclude, the analysis confirms that general elections generate statistically significant and prolonged abnormal volatility, particularly in politically sensitive sectors. *TE* and *PR* indices consistently recorded the highest CAAV across both symmetric and asymmetric windows. These trends affirm that investor sentiment is not only heightened around the election day but often persists well after, especially in sectors closely tied to government policy and spending. Symmetric windows reflect the total cumulative market disruption, while asymmetric windows reveal lasting post-election adjustment periods. These findings support the rejection of the null hypothesis that CAAV is not significantly different from zero, affirming that cumulative volatility surrounding elections is non-random and influenced by political developments, consistent with the semi-strong form of the Efficient Market Hypothesis theory (Fama, 1970).

Table 4.20: Event Study on Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Log Absolute Return as the Volatility Proxy

Asymmetric Window	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
[-12,0]	-1.67*** [0.000]	3.58** [0.037]	5.56*** [0.010]	-8.95*** [0.000]	-3.21*** [0.003]	-9.59*** [0.000]	15.73*** [0.000]	18.51*** [0.000]
[-10,0]	-1.49*** [0.001]	5.07*** [0.003]	5.11** [0.018]	-10.56*** [0.000]	-1.57 [0.141]	-13.76*** [0.000]	14.61*** [0.000]	6.20* [0.098]
[-5,0]	-0.82* [0.067]	1.35 [0.428]	7.98*** [0.000]	-5.32*** [0.000]	1.46 [0.170]	-7.71*** [0.003]	14.23*** [0.000]	5.11 [0.173]
[-3,0]	-0.42 [0.346]	-2.98* [0.081]	7.25*** [0.001]	-7.91*** [0.000]	6.42*** [0.000]	-12.77*** [0.000]	17.47*** [0.000]	0.80 [0.830]
[-1,0]	-1.37*** [0.002]	-4.40** [0.010]	13.24*** [0.000]	-7.08*** [0.000]	4.21*** [0.000]	-7.93*** [0.002]	16.33*** [0.000]	-0.37 [0.922]
[0,1]	-1.78*** [0.000]	-7.16*** [0.000]	18.98*** [0.000]	-9.34*** [0.000]	6.86*** [0.000]	-7.47*** [0.004]	20.77*** [0.000]	-5.33 [0.155]
[0,3]	-1.58*** [0.000]	-2.12 [0.213]	-15.53*** [0.000]	8.06*** [0.000]	6.47*** [0.000]	-9.26*** [0.000]	24.68*** [0.000]	20.82*** [0.000]
[0,5]	-3.18*** [0.000]	4.96*** [0.004]	-20.99*** [0.000]	13.62*** [0.000]	9.15*** [0.000]	-14.07*** [0.000]	37.22*** [0.000]	39.26*** [0.000]
[0,10]	-11.67*** [0.000]	6.98*** [0.000]	-9.73*** [0.000]	37.36*** [0.000]	-0.42 [0.690]	-10.62*** [0.000]	79.15*** [0.000]	119.54*** [0.000]
[0,12]	-11.94*** [0.000]	3.17* [0.064]	-13.67*** [0.000]	35.35*** [0.000]	1.01 [0.342]	-10.01*** [0.000]	68.71*** [0.000]	125.04*** [0.000]
Symmetric Window								
[-12,12]	-13.02*** [0.000]	11.75*** [0.000]	-18.73*** [0.000]	32.32*** [0.000]	-6.15*** [0.000]	-13.30*** [0.000]	72.31*** [0.000]	149.22*** [0.000]
[-10,10]	-12.56*** [0.000]	17.05*** [0.000]	-15.25*** [0.000]	32.71*** [0.000]	-5.94*** [0.000]	-18.08*** [0.000]	81.63*** [0.000]	131.41*** [0.000]
[-5,5]	-3.41*** [0.000]	11.31*** [0.000]	-23.64*** [0.000]	14.21*** [0.000]	6.67*** [0.000]	-15.49*** [0.000]	39.32*** [0.000]	50.03*** [0.000]
[-3,3]	-1.41*** [0.002]	-0.10 [0.953]	-18.91*** [0.000]	6.07*** [0.000]	8.95*** [0.000]	-15.73*** [0.000]	30.03*** [0.000]	27.28*** [0.000]
[-1,1]	-2.56*** [0.000]	-6.55*** [0.000]	21.59*** [0.000]	-10.51*** [0.000]	7.12*** [0.000]	-9.10*** [0.000]	24.97*** [0.000]	-0.04 [0.992]

Notes: This table represents cumulative average abnormal volatility (CAAV) results from volatility event study using log absolute return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.6 presents trend path of cumulative average abnormal volatility across all indices when using log absolute return as volatility proxy. Of all the indices, *TE* index possessed most volatile as compared to the rest. The index is believed to be vulnerable to political events since it has the largest amplitude in both positive and negative directions. Notably, there are several significant spikes in Days -12, -8, 3, 5, and 10, with CAAV values hovering around 1.00 (or 0.001 in actual scale), reflecting strong market reactions both before and after election day. Similarly, *PR* index illustrated multiple sharp upward and downward trends of CAAV, indicating considerable cumulative volatility. The CAAV values are reportedly surge on certain days such as Day -8 and Days 4 to 10 following the elections. It is reportedly that both indices follow closely in volatility intensity, despite slightly difference in terms of frequency and magnitude. As for *CONSTR* index, a notable dip post-election including sharp volatility can be spotted around Days -4 to 4. While not as volatile as *TE* or *PR*, *CONSTR* index still reflects heightened sensitivity to political transitions.

On the contrary, *FIN*, *IND* and *CONS* exhibit more moderate volatility trends. The indices fluctuated closely to zero baseline throughout the event window. For example, the *FIN* and *IND* indices show minor upward deviations near Day 5, potentially reflecting cautious optimism about post-election fiscal or monetary policies, but overall remain relatively stable. The *PL* index shows slight dips around Days -10 and +5 but does not display pronounced volatility. The index is less reactive to election outcomes as the cumulative movements display less volatile. Lastly, the FBMKLCI index remains relatively consistent CAAV trend with smaller fluctuations compared to the sectoral indices. This indicates that while election-related volatility exists at the aggregate market level, it is dampened due to sectoral diversification.

Overall, the uneven volatility trend across indices were illustrated through the CAAV graph. It is concluded that *TE* and *PR* indices emerge as the most volatile, highlighting their heightened sensitivity to political risk and policy changes. This suggests that investors perceive these sectors as either beneficiaries or victims of new political regimes, causing elevated cumulative volatility. *CONSTR* index also experiences election-linked volatility, likely reflecting changes in development priorities. Meanwhile, the CAAV movement of *FIN*, *PL*, *IND* and *CONS* indices were stable due to its market resilience to the political transitions. This also happened to the main index as it shows the least volatility due to its broad composition, absorbing and averaging out sector-specific reactions. As a result, the cumulative average abnormal volatility during elections is sector-specific, with the highest exposure seen in industries reliant on policy direction or government expenditure.

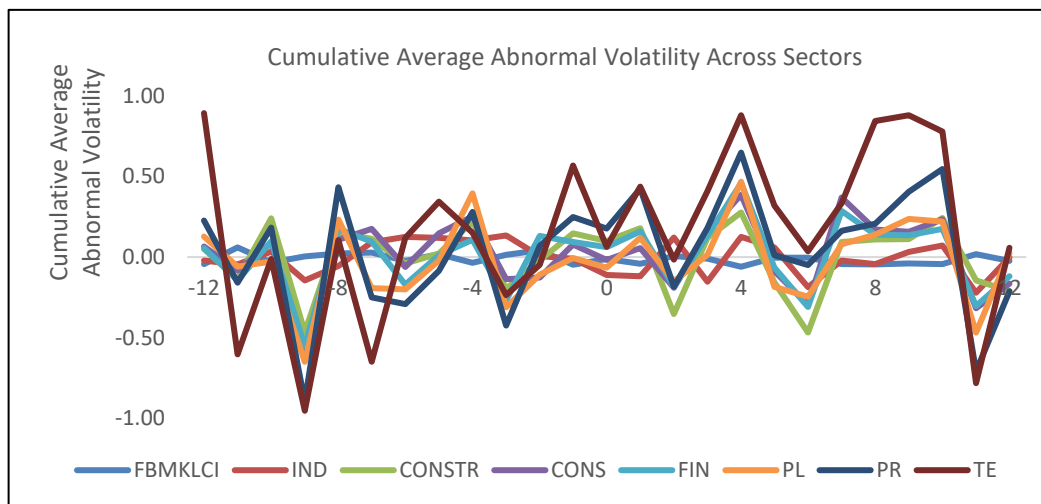


Figure 4.6: Cumulative Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Log Absolute Return as Volatility proxy

4.2.3 Range-based Volatility Event Study

4.2.3.1 Interpretation of Abnormal Volatility (AV) for All Indices during GE13 – GE15.

Table 4.21 – 4.24 presents abnormal volatility for FBMKLCI and across all indices index using window [-12,12] with range-based volatility as the volatility proxy. The FBMKLCI, CONSTR, and FIN indices exhibit notable spikes in abnormal volatility on event day (Day 0) and the days following, suggesting heightened uncertainty during GE13 as there is a close fight between the two ruling parties. For instance, the main index recorded a significant positive AV of 8.67 at 1% level, indicating increased market turbulence. The pattern intensified as *CONSTR* and *IND* indices displayed extreme large AVs particularly on Day 0 with 23.73 and 24.54, respectively during GE14. A possible explanation could be due to regime change. In addition to this, the indices continue to fluctuate following the post-election days especially Days 1 and 2. On the contrary, the indices reported muted response with minimal fluctuation during GE15. For instances, *PL* and *PR* registered significant positive AVs on and after Day 0, despite lower AV as compared to the one in GE14.

For cross sectoral analysis, indices which vulnerable towards electoral events tends to exhibit greater abnormal volatility. For example, *CONSTR* index has the most persistent and significant spikes on multiple days with AV values of 16.15 on Day -2 and Day -1, and 23.73 on Day 0 during GE14. All are statistically significant at 1% level. Furthermore, *IND* sector also exhibited consistent volatility with values such as 24.54 (Day 0) and 22.98 (Day 1) in the same election year, reflecting market realignment due to changes in industrial policy direction. *PL* and *PR* indices reported heightened volatility during GE15. The former index recorded 12.20 on Days 4 and 5, whereas *PR* peaking at 38.12 on Day 8, implying significant investor repositioning likely tied to anticipated changes in land or commodity policies.

Interestingly, *TE* showed high volatility preceding GE15, with large negative AVs such as -17.02 on Day -12 and -15.85 on Day 7. Meanwhile, *CONS* and *FIN* indices had more stable reactions. While *FIN* showed a brief significant spike on Day -6 with AV value of 5.41 during GE14, it did not react strongly during the event windows, possibly due to their more defensive nature and lower exposure to political uncertainty.

In conclusion, GE14 demonstrated heightened market responses as compared to GE13 and GE15 based on abnormal volatility analysis. Following that, it is noteworthy that sectoral indices which are vulnerable to electoral events are *CONSTR*, *IND* and *PR* with sharp and significant surges in AV around election dates, implying the political transition in shaping market behaviour. Meanwhile, FBMKLCI, representing the broader market, also showed spikes in AV during key events but to a lesser degree than specific sectors. The volatility spikes generally concentrated around Day 0 and subsequent days, aligning with literature whereby immediate post-election reactions due to shifts in policy expectations as suggested by Pastor and Veronesi (2012). GE14 remains the most turbulent among the three elections, reflecting the significant political regime change that occurred. Hence, the null hypothesis is rejected in some cases that abnormal volatility is not significantly different from zero. The findings support the EMH theory in its semi-strong form, where markets quickly absorb and react to politically relevant information as proposed by Fama (1970).

Table 4.21: Event Study on Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Day	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	0.25 [0.844]	1.83 [0.150]	2.06 [0.105]	-2.16 [0.596]	0.93 [0.819]	-7.75* [0.058]
-11	-0.08 [0.947]	-1.05 [0.407]	0.37 [0.770]	-2.54 [0.533]	2.04 [0.616]	-2.19 [0.591]
-10	-0.26 [0.836]	0.99 [0.437]	0.11 [0.932]	-0.49 [0.903]	7.56* [0.064]	-2.85 [0.484]
-9	-0.82 [0.520]	0.99 [0.437]	0.77 [0.542]	-1.24 [0.760]	7.56* [0.064]	-2.34 [0.565]
-8	0.15 [0.905]	-0.35 [0.780]	0.78 [0.539]	-2.20 [0.589]	-2.03 [0.618]	-1.07 [0.792]
-7	0.40 [0.753]	0.63 [0.619]	1.17 [0.358]	-4.32 [0.289]	-1.17 [0.775]	-2.21 [0.587]
-6	1.24 [0.327]	1.46 [0.249]	-0.59 [0.640]	-0.56 [0.890]	-1.38 [0.734]	9.58** [0.019]
-5	-0.28 [0.825]	1.61 [0.206]	1.32 [0.297]	-1.17 [0.774]	-3.92 [0.336]	-0.67 [0.869]
-4	2.12* [0.095]	0.30 [0.814]	1.01 [0.426]	-3.53 [0.387]	-11.81*** [0.004]	-3.70 [0.364]
-3	2.12* [0.095]	0.30 [0.814]	0.47 [0.712]	-3.53 [0.387]	-11.81*** [0.004]	-0.72 [0.860]
-2	0.66 [0.604]	0.30 [0.814]	-0.15 [0.904]	4.42 [0.278]	-21.62*** [0.000]	-4.68 [0.251]
-1	1.15 [0.364]	0.30 [0.814]	-0.15 [0.904]	-6.51 [0.110]	-21.62*** [0.000]	-4.68 [0.251]
0	8.67*** [0.000]	5.90*** [0.000]	0.26 [0.838]	24.54*** [0.000]	-0.50 [0.902]	0.01 [0.998]
1	-3.27** [0.010]	-0.39 [0.756]	1.43 [0.259]	-7.69* [0.059]	7.45* [0.068]	-4.65 [0.254]
2	-0.03 [0.980]	1.58 [0.214]	1.12 [0.376]	-0.34 [0.934]	-6.02 [0.140]	0.13 [0.975]
3	1.91 [0.133]	-3.08** [0.016]	0.83 [0.515]	-2.13 [0.601]	-5.67 [0.164]	-12.36*** [0.003]
4	-0.58 [0.649]	-2.31* [0.069]	14.47*** [0.000]	7.33* [0.072]	2.21 [0.587]	12.88*** [0.002]
5	-1.28 [0.313]	1.13 [0.373]	14.47*** [0.000]	1.86 [0.647]	-3.48 [0.393]	12.88*** [0.002]
6	-1.64 [0.195]	0.61 [0.629]	4.17*** [0.001]	-0.55 [0.893]	6.67 [0.102]	13.91*** [0.001]
7	1.85 [0.145]	0.87 [0.491]	1.95 [0.124]	5.87 [0.150]	-12.54*** [0.002]	-2.81 [0.491]
8	-1.02 [0.423]	-0.22 [0.864]	0.93 [0.465]	-7.62* [0.062]	-11.62*** [0.004]	4.49 [0.271]
9	0.48 [0.703]	-1.12 [0.375]	1.96 [0.123]	-1.17 [0.773]	-1.75 [0.667]	1.39 [0.734]
10	-3.10** [0.015]	0.95 [0.452]	0.17 [0.896]	-3.98 [0.329]	-5.68 [0.163]	-5.04 [0.216]
11	-0.88 [0.486]	0.95 [0.452]	0.40 [0.755]	-4.31 [0.290]	-5.68 [0.163]	0.97 [0.812]
12	-0.11 [0.930]	-0.91 [0.472]	0.39 [0.758]	7.05* [0.084]	-8.29** [0.042]	-2.46 [0.546]

Notes: This table represents abnormal volatility (AV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.22: Event Study on Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Day	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	1.51 [0.757]	1.75 [0.720]	-4.51* [0.355]	-2.21 [0.526]	2.62 [0.451]	1.88 [0.589]
-11	-1.14 [0.815]	3.36 [0.491]	-5.64* [0.248]	1.03 [0.768]	-0.56 [0.872]	5.46 [0.117]
-10	-0.15 [0.975]	16.15*** [0.001]	3.83* [0.432]	1.98 [0.569]	0.43 [0.902]	-0.94 [0.788]
-9	-1.16 [0.812]	16.15*** [0.001]	2.15* [0.660]	-2.14 [0.539]	0.43 [0.902]	4.94 [0.156]
-8	-1.74 [0.721]	2.57 [0.597]	-2.38* [0.625]	-1.46 [0.675]	-2.25 [0.519]	-2.65 [0.447]
-7	-3.68 [0.450]	-2.54 [0.602]	-1.02* [0.835]	0.03 [0.993]	1.45 [0.678]	-1.53 [0.660]
-6	-3.01 [0.537]	-1.25 [0.797]	-3.02* [0.536]	-0.73 [0.833]	-1.55 [0.657]	0.64 [0.854]
-5	0.14 [0.978]	-2.01 [0.681]	-0.31* [0.950]	-1.09 [0.753]	-0.07 [0.985]	-1.57 [0.651]
-4	-5.78 [0.236]	-2.59 [0.594]	-3.59* [0.461]	2.31 [0.507]	0.00 [0.999]	-2.40 [0.491]
-3	-5.78 [0.236]	-2.59 [0.594]	8.76* [0.073]	2.31 [0.507]	0.00 [0.999]	0.37 [0.915]
-2	1.61 [0.741]	-20.27*** [0.000]	-1.60* [0.742]	-1.67 [0.632]	-13.76*** [0.000]	-1.31 [0.707]
-1	-6.92 [0.156]	-20.27*** [0.000]	-1.60* [0.742]	4.93 [0.157]	-13.76*** [0.000]	-1.31 [0.707]
0	10.86** [0.026]	23.73*** [0.000]	-6.22* [0.202]	-1.44 [0.678]	16.01*** [0.000]	0.47 [0.892]
1	22.98*** [0.000]	28.28*** [0.000]	0.00* [0.999]	- [0.030]	3.00 [0.389]	5.20 [0.136]
2	12.40** [0.011]	-3.73 [0.444]	-1.23* [0.800]	-5.32 [0.127]	5.97* [0.087]	-2.39 [0.493]
3	2.80 [0.566]	32.20*** [0.000]	22.12*** [0.000]	-1.80 [0.604]	1.02 [0.770]	-0.48 [0.890]
4	8.73* [0.074]	40.58*** [0.000]	19.74*** [0.000]	-2.52 [0.469]	5.09 [0.144]	9.64*** [0.006]
5	6.93 [0.155]	5.90 [0.226]	19.74*** [0.000]	-0.80 [0.819]	1.64 [0.638]	9.64*** [0.006]
6	13.53*** [0.006]	12.98*** [0.008]	1.03* [0.833]	-0.69 [0.844]	-1.68 [0.630]	-2.81 [0.420]
7	2.09 [0.668]	-3.67 [0.452]	0.21* [0.965]	0.37 [0.915]	-2.46 [0.480]	9.40*** [0.007]
8	2.88 [0.555]	2.00 [0.681]	-0.05* [0.991]	-2.39 [0.493]	-1.95 [0.576]	3.74 [0.282]
9	1.98 [0.685]	5.05 [0.300]	1.39* [0.776]	-0.37 [0.915]	-1.59 [0.649]	1.37 [0.694]
10	9.19* [0.060]	4.23 [0.386]	-3.96* [0.417]	-0.54 [0.876]	-0.13 [0.971]	1.89 [0.588]
11	3.14 [0.520]	4.23 [0.386]	-1.68* [0.730]	-1.84 [0.597]	-0.13 [0.971]	0.38 [0.913]
12	3.98 [0.414]	70.23*** [0.000]	1.70* [0.727]	-1.26 [0.717]	-14.20*** [0.000]	-0.67 [0.846]

Notes: This table represents abnormal volatility (AV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.23: Event Study on Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Day	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	2.25 [0.388]	2.59 [0.320]	4.02 [0.123]	-0.24 [0.970]	-5.93 [0.360]	0.97*** [0.000]
-11	0.05 [0.985]	-0.87 [0.737]	-3.69 [0.156]	-1.17 [0.857]	-6.36 [0.326]	0.86*** [0.000]
-10	-0.45 [0.863]	-0.21 [0.936]	3.26 [0.210]	2.02 [0.754]	-3.93 [0.544]	0.75*** [0.000]
-9	-0.31 [0.905]	-0.21 [0.936]	-3.47 [0.183]	2.15 [0.739]	-3.93 [0.544]	0.74*** [0.000]
-8	-1.72 [0.508]	0.90 [0.730]	3.05 [0.242]	8.95 [0.167]	-3.38 [0.601]	0.17*** [0.000]
-7	-0.93 [0.719]	3.76 [0.149]	1.41 [0.587]	0.19 [0.976]	-2.63 [0.684]	0.98*** [0.000]
-6	-1.33 [0.609]	5.41** [0.038]	2.04 [0.433]	-1.23 [0.849]	-1.44 [0.824]	0.85*** [0.000]
-5	2.47 [0.342]	0.60 [0.819]	0.79 [0.762]	-0.47 [0.942]	-1.03 [0.874]	0.94*** [0.000]
-4	-1.32 [0.612]	8.65*** [0.001]	1.02 [0.694]	1.28 [0.843]	-12.90** [0.046]	0.84*** [0.000]
-3	-1.32 [0.612]	8.65*** [0.001]	1.54 [0.555]	1.28 [0.843]	-12.90** [0.046]	0.84*** [0.000]
-2	-1.14 [0.662]	-14.78*** [0.000]	-0.59 [0.821]	-0.44 [0.946]	-23.19*** [0.000]	0.95*** [0.000]
-1	-1.81 [0.487]	-14.78*** [0.000]	-0.59 [0.821]	4.14 [0.523]	-23.19*** [0.000]	0.52*** [0.000]
0	11.40*** [0.000]	26.81*** [0.000]	-3.12 [0.231]	-28.25*** [0.000]	-10.41 [0.108]	0.00*** [0.000]
1	5.64** [0.030]	0.71 [0.785]	-0.56 [0.831]	-12.68* [0.050]	6.73 [0.298]	0.05*** [0.000]
2	-1.35 [0.603]	9.40*** [0.000]	-0.62 [0.811]	-1.20 [0.852]	-5.62 [0.385]	0.85*** [0.000]
3	4.57 [0.079]	-2.28 [0.381]	2.70 [0.300]	-0.70 [0.914]	-2.06 [0.750]	0.91*** [0.000]
4	-2.19 [0.401]	-2.40 [0.356]	12.20*** [0.000]	-12.88** [0.047]	-4.64 [0.473]	0.05*** [0.000]
5	2.61 [0.316]	3.71 [0.154]	12.20*** [0.000]	-10.96* [0.091]	-3.94 [0.542]	0.09*** [0.000]
6	1.53 [0.557]	2.93 [0.261]	-1.03 [0.693]	6.35 [0.326]	-4.11 [0.525]	0.33*** [0.000]
7	0.96 [0.712]	0.83 [0.751]	-5.55** [0.033]	2.46 [0.703]	-18.27*** [0.005]	0.70*** [0.000]
8	0.60 [0.819]	15.34*** [0.000]	4.15 [0.111]	5.39 [0.405]	-25.43*** [0.000]	0.41*** [0.000]
9	0.55 [0.833]	-0.05 [0.986]	4.81 [0.065]	-0.30 [0.963]	-5.41 [0.403]	0.96*** [0.000]
10	-2.03 [0.436]	1.61 [0.535]	0.72 [0.782]	-4.18 [0.518]	-7.60 [0.240]	0.52*** [0.000]
11	-0.75 [0.774]	1.61 [0.535]	0.38 [0.885]	2.13 [0.742]	-7.60 [0.240]	0.74*** [0.000]
12	3.25 [0.212]	6.44** [0.014]	3.96 [0.129]	2.38 [0.713]	-21.02*** [0.001]	0.71*** [0.000]

Notes: This table represents abnormal volatility (AV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.24: Event Study on Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Day	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.48 [0.895]	1.63 [0.652]	-2.29 [0.527]	-0.71 [0.939]	-3.55** [0.701]	-17.02* [0.066]
-11	-1.54 [0.670]	0.50 [0.891]	-6.88* [0.058]	-1.64 [0.859]	-7.87** [0.394]	-8.36 [0.365]
-10	8.74** [0.016]	8.78** [0.016]	6.24* [0.085]	-1.22 [0.895]	4.01** [0.664]	-4.92 [0.594]
-9	0.22 [0.951]	8.78** [0.016]	0.84 [0.817]	-4.32 [0.640]	4.01** [0.664]	-8.06 [0.383]
-8	-2.11 [0.560]	3.10 [0.392]	1.16 [0.748]	-6.14 [0.506]	-0.18** [0.984]	-5.02 [0.587]
-7	-2.43 [0.503]	-0.36 [0.921]	2.56 [0.481]	-1.95 [0.832]	7.96** [0.389]	-9.48 [0.305]
-6	-2.56 [0.480]	-1.00 [0.782]	0.02 [0.996]	-6.47 [0.484]	-1.16** [0.900]	15.81* [0.087]
-5	0.28 [0.939]	5.10 [0.159]	-0.76 [0.834]	-0.79 [0.932]	-0.04** [0.997]	-3.91 [0.672]
-4	4.50 [0.215]	0.64 [0.861]	-2.68 [0.460]	-3.24 [0.726]	3.16** [0.732]	-6.38 [0.490]
-3	4.50 [0.215]	0.64 [0.861]	0.26 [0.943]	-3.24 [0.726]	3.16** [0.732]	-6.60 [0.475]
-2	-1.39 [0.702]	-17.03*** [0.000]	-0.33 [0.927]	4.20 [0.649]	-30.01*** [0.001]	2.95 [0.749]
-1	-5.93 [0.102]	-17.03*** [0.000]	-0.33 [0.927]	-7.15 [0.439]	-30.01*** [0.001]	2.95 [0.749]
0	-3.57 [0.325]	-7.35** [0.043]	0.33 [0.928]	-32.23*** [0.001]	19.37* [0.036]	-4.18 [0.651]
1	26.60*** [0.000]	1.50 [0.678]	-1.71 [0.637]	7.77 [0.400]	1.93** [0.834]	-10.03 [0.278]
2	3.86 [0.287]	-1.09 [0.763]	-0.62 [0.864]	-0.97 [0.916]	-5.86** [0.525]	-7.76 [0.401]
3	8.69** [0.017]	1.20 [0.741]	1.88 [0.604]	3.42 [0.711]	-12.98** [0.160]	9.76 [0.291]
4	5.32 [0.142]	4.60 [0.204]	7.43** [0.041]	14.00 [0.130]	-2.18** [0.813]	12.07 [0.191]
5	19.42*** [0.000]	1.80 [0.620]	7.43** [0.041]	16.18* [0.080]	-7.99 [0.387]	12.07 [0.191]
6	9.40*** [0.010]	-1.31 [0.719]	9.21** [0.011]	7.49 [0.417]	7.27** [0.431]	-5.07 [0.583]
7	3.12 [0.389]	-4.44 [0.221]	-4.84 [0.182]	-2.80 [0.762]	-18.03** [0.051]	-15.85* [0.086]
8	1.92 [0.596]	-5.69 [0.116]	1.04 [0.774]	-2.46 [0.790]	7.94** [0.390]	38.12*** [0.000]
9	12.54*** [0.001]	3.49 [0.335]	-0.96 [0.791]	17.76* [0.055]	-8.66 [0.348]	1.10 [0.905]
10	36.62*** [0.000]	-2.03 [0.576]	1.27 [0.727]	-8.34 [0.366]	-10.08** [0.275]	1.19 [0.898]
11	4.40 [0.225]	-2.03 [0.576]	-1.79 [0.620]	-7.91 [0.391]	-10.08** [0.275]	5.92 [0.522]
12	16.86*** [0.000]	15.05*** [0.000]	4.70 [0.194]	5.31 [0.565]	-32.65*** [0.000]	-6.40 [0.488]

Notes: This table represents abnormal volatility (AV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.7 presents abnormal volatility trend path of FBMKLCI and sectoral indices across elections (GE13-GE15) using range-based as volatility proxy. It can be observed that there are varying market responses to the electoral events but the most pronounced abnormal volatility occurred during GE14. Sectoral indices such as *FIN*, *CONS* and *IND* reported elevated volatility post-election, indicating sells-off behaviours among investors as new ruling party administered new term in office. Meanwhile, there is no dramatic surges or troughs during GE13 as the volatility appeared moderate due to expected outcome despite close votes between two ruling parties. GE15, however, displays mixed reactions. While it lacks the volatility magnitude of GE14, there are visible surges in indices like *TE* and *PR* in the post-election period especially on Days 8 to 12, likely due to policy speculation or leadership uncertainty. Overall, GE14 stands out as the election that triggered the highest abnormal volatility, highlighting the market's sensitivity to unprecedented political shifts.

Sectoral wise, indices demonstrated significant abnormal volatility, suggesting different sensitivity to electoral-related events. For instance, FBMKLCI displayed a sharp peak approximately 8.67 points around Day 0 for GE13 and another prominent spike reaching 14 points around Day 4 in GE15. In GE14, the trend remains relatively calm, indicating that the broader market was slower or more stable in response compared to sectoral indices. However, *IND* reported extreme high abnormal volatility with 20 points and above on Day 0 and again later. GE15 shows erratic movement but no sustained pattern, while GE13 has a sharp peak around Day 0 with approximately around 22 points, highlighting this sector's political sensitivity. Another index namely *CONS* exhibited significant dips and plunge to -15 points on Day 0 during GE14 and rebounding to over 10 points on Day 1. This suggests a swift sentiment reversal, possibly linked to consumption policy announcements. GE13 and GE15 display relatively calmer trends. As for *FIN* index,

a sharp trough has been recorded on Day -1 with roughly around -15 points, followed by a major spike with 25 points on Day 0, then tapering off during GE14. The volatility movement in GE13 and GE15 show milder movements, implying that financial markets reacted sharply to policy transition risks in GE14.

In GE13 and GE15, *PL* index illustrated stable volatility. However, it is reported that a steep trough reached as low as -30 points in the pre-election around Days -2 to 0 during GE14. *PR* index, on the other hand, exhibited massive spikes post-election in GE13 with approximately 20 points on Day 2 and GE15 with around 30 points on Day 8. Interestingly, *TE* index reported a volatile movement particularly during GE14 and GE15. The index has plummeted to as far as -30 points on Day -4, before rebounding post-election during GE14. A similar pattern was observed in GE15 where there is an election spike with as much as 40 points, indicating high investor speculation in a volatile sector.

Across the charts, GE14 triggers the most turbulent market conditions, with multiple indices such as *IND*, *FIN* and *TE* recording extreme swings exceeding ± 25 –30 points. The peak abnormal volatility is seen in the *TE* index during GE15, spiking to approximately 40 points around Day 8. The deepest trough occurs in the *PL* index during GE14, falling below -30 points pre-election. Volatility trends commonly surge around Day 0, with some sectors experiencing pre-emptive responses (Day -2 to -1), while others, particularly *PR* and *TE* indices show delayed peaks (Day 4 to 12), suggesting lagged investor reactions or policy interpretation delays. In conclusion, the trend reveals that sector-specific volatility intensifies during periods of political uncertainty, and such magnitude and direction of abnormal volatility explained how markets price in political information differently across time and sectors, supporting the EMH theory in its semi-strong form (Fama et al., 1969).

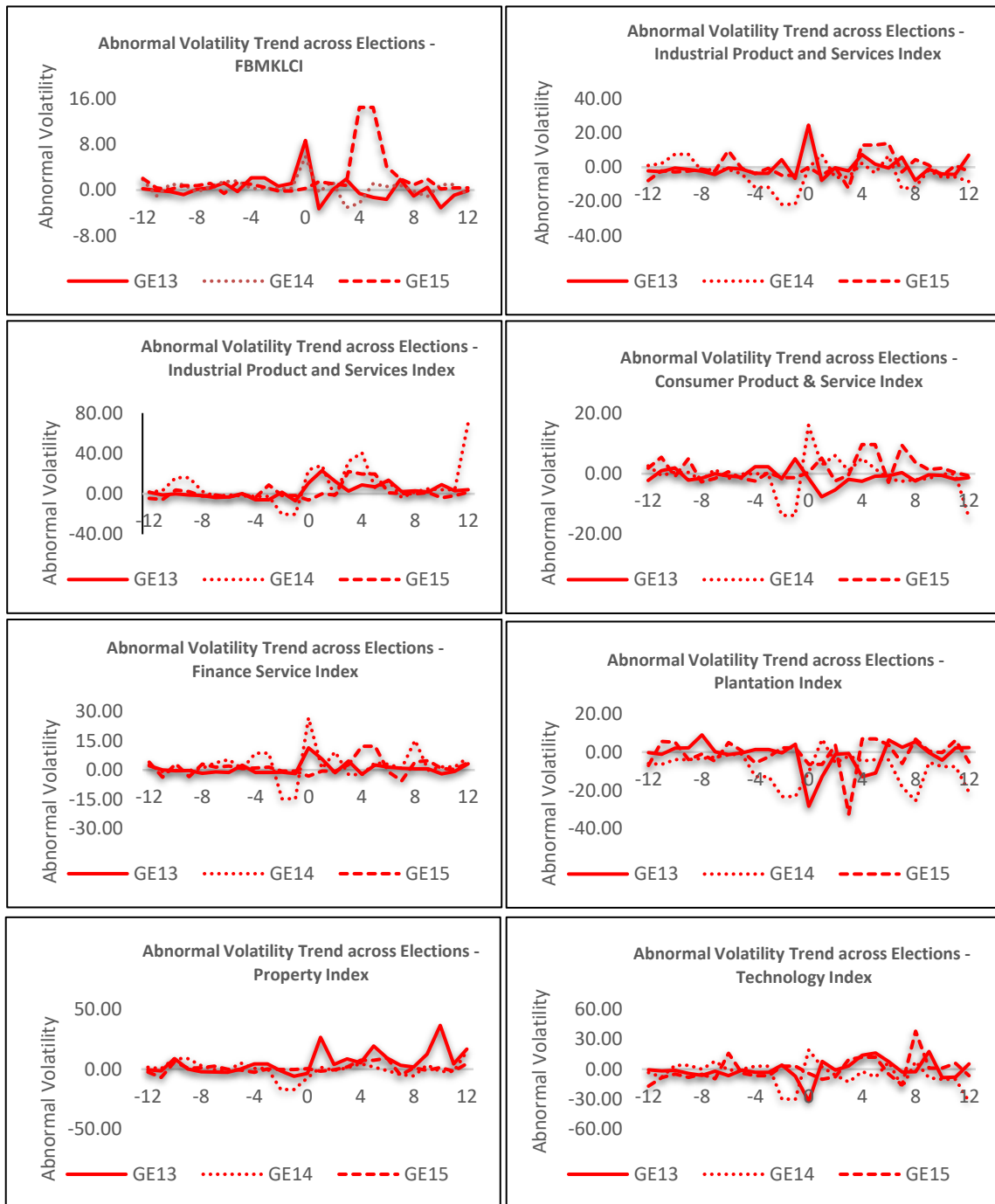


Figure 4.7: Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices across elections (GE13-GE15) using Range-based as Volatility Proxy

4.2.3.2 Interpretation of Average Abnormal Volatility (AAV) for All Indices during GE13 – GE15.

Table 4.25 presents average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with range-based volatility as the volatility proxy. Looking at the main index, FBMKLCI, the average abnormal volatility shows significant spikes on multiple days with moderate movement. For instance, the index experienced sharp increase around election date, particularly on Day 0 (4.94), Day 4 (3.86), and Day 5 (4.77). All are statistically significant at 1% level, suggesting market uncertainty increase due to regime change with market repricing.

Sectoral wise, *IND* index reported persistent negative AAV in the pre-election period, particularly on Day -4 to -1, reaching a trough with -10.93 points on Day -1, suggesting cautious investor sentiment and potential withdrawal. However, the index rebounded post-election, showing significant positive spikes on Day 0 (8.02) and Day +4 (7.48), possibly reflecting market optimism toward industrial reform and spending expectations post-election. Another sharp significant AAV values also reported in *CONSTR* index on Day 0 (9.46), Day 1 (17.08), Day 4 (23.01), and peaking at Day 12 (25.30). While *CONS* index has mild and more stable AAV trend, *FIN* index displayed a substantial increase in average abnormal volatility immediately around the election with significant AAV appeared on Day 0 (11.70), Day 5 (6.18), and Day 8 (6.70). Similarly to *FIN* index, *PL* index demonstrated significant AAV recorded on Day 4 (5.78), Day 5 (9.55), and Day 6 (5.77), indicating high volatility post-election. On the contrary, *PR* index recorded significant positive AAV on Day 4 (7.96) and especially on Day 12 (14.54), presented sharp fluctuations throughout the window. Notably, a significant dip was recorded on Day 12 (-11.25), implying post-speculation correction. Lastly, the *TE* index exhibited more volatile and

scattered AAV movements. The index experienced a dramatic drop in the pre-election period on Day -1 (-11.40), followed by sharp spikes post-election on several days such as Day 8 (14.54) and Day 12 (-11.25). This reflects high speculative behaviour, likely due to uncertainty over tech policies under the new government.

Overall, the analysis of average abnormal volatility analysis across indices demonstrated mixed reaction. There are indices experienced significant surge more above 25 points in the post-election windows (Days 0 to 12) like *CONS*, *FIN* and *IND* indices. The *TE* and *PR* indices also experienced large swings, though these were more scattered and included both surges and corrections, indicating heightened investor speculation and later adjustment. The FBMKLCI also showed meaningful volatility, despite with smaller magnitudes (around 4 to 5 points), supporting the view that while elections affect the general market, sectoral behaviour provides sharper insights into investor reactions. Hence, the null hypothesis is rejected for average abnormal volatility is not significantly different from zero. These findings confirm the semi-strong form of EMH, where markets absorb political news rapidly (Fama et al., 1969).

Table 4.25: Event Study on Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Day	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
-12	1.38* [0.074]	-2.99 [0.155]	-0.42 [0.826]	0.76 [0.605]	2.95* [0.069]	-4.37 [0.137]	-0.38 [0.776]	-7.09 [0.147]
-11	-0.26 [0.587]	-0.89 [0.574]	-1.14 [0.567]	1.98 [0.257]	-1.50 [0.207]	-0.65 [0.755]	-2.64 [0.152]	-5.95 [0.192]
-10	0.28 [0.559]	1.40 [0.405]	6.61* [0.059]	0.49 [0.734]	0.87 [0.399]	1.07 [0.615]	7.92** [0.021]	-0.71 [0.839]
-9	0.31 [0.513]	1.32 [0.428]	5.71* [0.076]	1.08 [0.482]	-1.33 [0.245]	-1.90 [0.405]	3.28 [0.107]	-2.79 [0.459]
-8	0.19 [0.676]	-1.77 [0.318]	-0.52 [0.787]	-2.12 [0.234]	0.74 [0.460]	1.52 [0.490]	0.72 [0.602]	-3.78 [0.343]
-7	0.73 [0.207]	-2.57 [0.196]	-2.41 [0.286]	-0.02 [0.989]	1.41 [0.226]	-2.41 [0.315]	-0.08 [0.953]	-1.16 [0.742]
-6	0.71 [0.218]	2.54 [0.198]	-2.43 [0.285]	-0.55 [0.706]	2.04 [0.130]	0.77 [0.711]	-1.18 [0.418]	2.73 [0.468]
-5	0.88 [0.157]	-1.92 [0.288]	-0.73 [0.707]	-0.91 [0.544]	1.29 [0.256]	-0.32 [0.876]	1.54 [0.319]	-1.58 [0.657]
-4	1.14 [0.103]	-6.34** [0.042]	-3.99 [0.140]	-0.03 [0.983]	2.79* [0.076]	-5.79* [0.086]	0.82 [0.556]	-2.15 [0.555]
-3	0.96 [0.137]	-5.35* [0.057]	0.13 [0.945]	0.89 [0.551]	2.96* [0.068]	-4.70 [0.122]	1.80 [0.264]	-2.23 [0.544]
-2	0.27 [0.570]	-7.29** [0.032]	-6.76* [0.056]	-5.58** [0.047]	-5.50** [0.021]	-7.14* [0.059]	-6.25** [0.033]	-7.62 [0.131]
-1	0.43 [0.391]	-10.93** [0.015]	-9.60** [0.029]	-3.38 [0.115]	-5.72** [0.020]	-5.62* [0.090]	-7.77** [0.022]	-11.40* [0.065]
0	4.94*** [0.006]	8.02** [0.027]	9.46** [0.030]	5.01* [0.058]	11.70*** [0.005]	-15.01** [0.014]	-3.53* [0.094]	-5.68 [0.205]
1	-0.75 [0.202]	-1.63 [0.348]	17.08*** [0.009]	0.20 [0.886]	1.93 [0.142]	-4.14 [0.149]	8.80** [0.017]	-0.11 [0.975]
2	0.89 [0.155]	-2.08 [0.261]	2.48 [0.277]	-0.58 [0.692]	2.48* [0.094]	-1.07 [0.615]	0.72 [0.602]	-4.86 [0.254]
3	-0.11 [0.800]	-6.72** [0.038]	19.04*** [0.008]	-0.42 [0.769]	1.66 [0.179]	-11.69** [0.023]	3.92* [0.078]	0.07 [0.984]
4	3.86** [0.010]	7.48** [0.031]	23.01*** [0.005]	4.07* [0.084]	2.54* [0.090]	-3.54 [0.189]	5.78** [0.038]	7.96 [0.122]
5	4.77*** [0.007]	3.76 [0.107]	10.86** [0.023]	3.49 [0.109]	6.18** [0.017]	-2.67 [0.278]	9.55** [0.015]	6.75 [0.159]
6	1.05 [0.119]	6.68** [0.038]	9.18** [0.032]	-1.72 [0.304]	1.14 [0.296]	1.97 [0.390]	5.77** [0.039]	3.23 [0.403]
7	1.56* [0.059]	-3.16 [0.143]	-0.45 [0.812]	2.44 [0.192]	-1.26 [0.264]	-7.28* [0.057]	-2.05 [0.221]	-12.23* [0.058]
8	-0.10 [0.821]	-4.92* [0.067]	1.61 [0.438]	-0.20 [0.891]	6.70** [0.015]	-4.46 [0.133]	-0.91 [0.517]	14.54** [0.042]
9	0.44 [0.384]	-0.51 [0.739]	2.81 [0.236]	-0.20 [0.891]	1.77 [0.163]	-1.75 [0.436]	5.02* [0.050]	3.40 [0.383]
10	-0.66 [0.239]	-4.90* [0.067]	3.15 [0.201]	0.41 [0.778]	0.10 [0.911]	-4.02 [0.157]	11.95*** [0.009]	-5.74 [0.202]
11	0.16 [0.734]	-3.01 [0.154]	1.90 [0.375]	-0.53 [0.715]	0.41 [0.662]	0.24 [0.908]	0.19 [0.883]	-4.02 [0.320]
12	-0.21 [0.649]	-1.23 [0.455]	25.30*** [0.004]	-5.38* [0.051]	4.55** [0.031]	-7.95** [0.048]	12.21*** [0.009]	-11.25* [0.067]

Notes: This table represents average abnormal volatility (AAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.8 presents average abnormal volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using range-based as volatility proxy. Based on the graph, the indices demonstrated varied reaction in response to the electoral events. For instances, *CONSTR* index experienced highest volatility throughout the windows. There are two significant spikes reported here: Days 4 and 12 with AAV values of 20 and 28 points, respectively. Similarly, *PL* index also registered noticeable AAV trends as the index spotted to have significant drop around Day -2 (approximately -12 points), followed by a rebound near Day 5, reaching close to 10 points. This behaviour could reflect market concerns about agricultural policy uncertainty and later optimism tied to potential reforms or subsidies. Following that, *PR* index encountered the same experience by reporting a deep trough which occurred near Day 0, falling below -10 points, indicating market anxiety during the immediate election period. However, this is followed by a sharp upward correction around Day 6 to Day 8, reaching about 15 points. Indices such as *FIN* and *IND* have significant fluctuation with modest AAV trend. According to Figure 4.8, the former index recorded a mild trough around Day -2 and a consistent upward climb post-election, peaking near Day 6 with values close to 10 points. This suggests that the finance sector gradually adjusted its expectations in response to political developments, likely reflecting anticipation of fiscal reform.

On the contrary, the FBMKLCI and *CONS* indices exhibit more muted volatility. While the main market registered noticeable peaks around Day 0 and Day 5, the index generally under 10 points, suggesting relatively stable market-wide sentiment. The *CONS* index stays mostly within a narrow range of ± 5 points throughout the window, reinforcing its classification as a defensive sector with limited exposure to political shifts. *TE* index

shows erratic swings, with a sharp plunge near Day 8 (approx. -15 points) followed by a sharp rise.

In conclusion, *CONS* index leads in magnitude, with two significant surges based on volatility pattern. The index reported approximately 25-28 points following the election as well as at the end of the observation window. Meanwhile, *PL* and *TE* indices have the deepest trough with as low as -12 to -15 points around Day -2 to Day 8. *PR* index also exhibits a clear V-shaped pattern, falling sharply near Day 0 and rising quickly afterward, with changes as large as 20–25 points over a few days. On the other hand, *FBMKLCI*, *CONS*, and *FIN* indices show relatively controlled movements, fluctuating mostly within a ± 5 to 10-point range, signaling more resilience or delayed market reaction. Overall, the graph explained the significant volatility across indices was mainly driven by electoral events. Hence, the null hypothesis is rejected for the *AAV* is not significantly from zero. The findings suggested *CONS*, *PR*, *TE* and *PL* are policy-sensitive sectors especially during elections, whereas *FBMKLCI* exhibited steadier trends which support the semi-strong form of EMH theory, where markets adjust quickly but unevenly to new information (Fama et al., 1969).

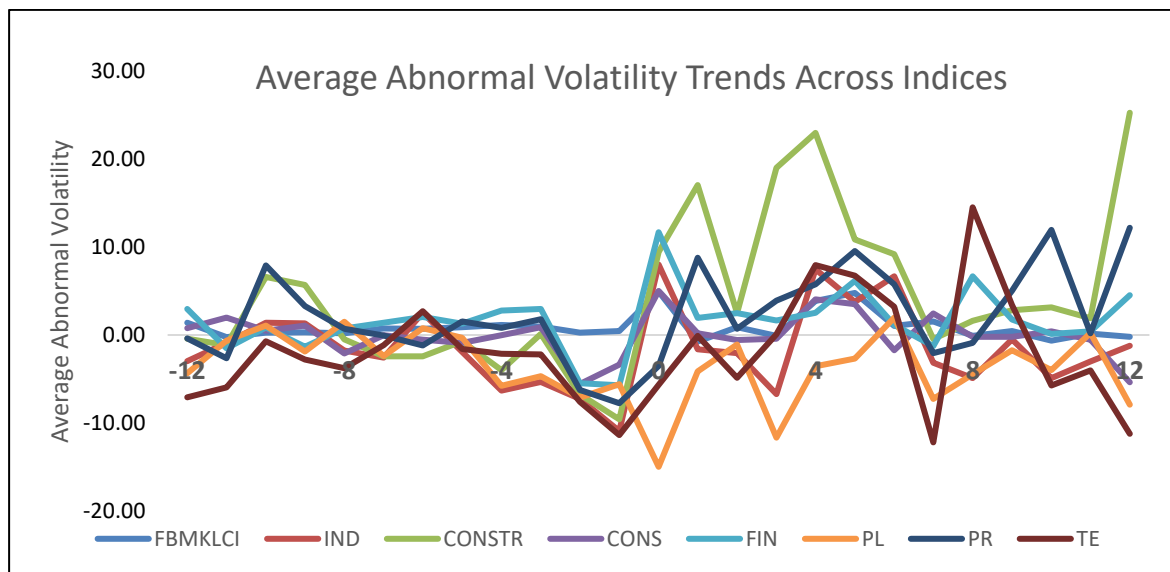


Figure 4.8: Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows $[-12, 12]$ using Range-based as Volatility Proxy

4.2.3.3 Interpretation of Cumulative Abnormal Volatility (CAV) for All Indices during GE13 – GE15.

Table 4.26 – 4.29 presents cumulative abnormal volatility for FBMKLCI and other sectoral indices using window [-12,12] with range-based volatility as the volatility proxy. Of all the elections, GE14 consistently produced the highest and most significant cumulative abnormal volatility (CAV), especially in *CONSTR*, *FIN*, *PL*, and *PR* indices. A possible explanation could be due to regime change that triggered strong market reaction. For instance, the CAV for CONSTR during GE14 reached 210.46, while FBMKLCI soared to 11.26 points in the symmetric window [-12,12]. By contrast, GE13, although statistically significant in many indices, showed relatively smaller magnitudes, and GE15 had more muted responses, indicating an anticipated electoral outcome.

For cross sector analysis, the CAV trend displayed most volatile and reactive response in *CONSTR* and *PL* indices. The former index reported persistent and significant spikes in both asymmetric and symmetric windows, especially in GE14 and GE15. For example, CAV values reached 222.02 points for GE14 and 52.78 points for GE15 for windows [0,12]. These reflect investors' reallocation expectations tied to infrastructure and development policy post-election. Similarly, both *FIN* and *PR* index displayed strong market reaction when the CAV recorded 64.39 points in GE14 and 146.97 points in GE13, respectively, for the window [-12,12]. All are statistically significant at 1% level. Following that, two significant spikes occurred in asymmetric windows such as [-12,0] and [0,1] in which the CAV values generated 26.53 and 27.52 points, respectively for *FIN* index. On the contrary, *CONS* and *TE* indices had fewer significant results. For example, TE exhibited erratic but statistically weak volatility in both GE13 and GE15 at certain windows. Lastly,

the main market, FBMKLCI reported modest yet significant CAV across all elections in most symmetric windows.

In comparison, asymmetric windows often capture earlier market responses since most of CAV values experienced significant around windows $[-12,0]$ and $[-10,0]$, highlighting pre-election uncertainty. This pattern can be evident from *IND* index with CAV value recorded 60.73 points in $[-10,0]$, whereas *CONSTR* index spiked only after the election, showing a lagged market response during GE14. As for symmetric windows, stronger realized volatility was observed in windows $[-12,12]$, $[10,10]$ and $[-5,5]$. For instance, the CAV analysis revealed that *CONSTR* index had extreme spike which is 210.46 points in window $[-12,12]$, confirming that both pre- and post-election effects contributed to overall market turbulence. Interestingly, windows like $[0,12]$ reveal delayed reactions and this can be evident from *PR* index where the index showed significant CAV at 145.17 points, suggesting that some investor responses crystallized after election results were confirmed, consistent with post-election policy expectations.

In summary, the cumulative abnormal volatility analysis reveals substantial electoral influence on Malaysian sectoral stock indices, particularly during GE14, reflecting the market's adjustment to the unprecedented political shift. The highest and most sustained volatility indices are reported in *CONSTR*, *PL* and *PR* indices in long symmetric and post-election asymmetric windows. The main market, however, has relatively moderate CAV yet notable, indicating general market-wide reactions. As such, these findings are rejected for null hypothesis as the CAV is significantly different from zero in some cases. These patterns support the semi-strong form of EMH theory whereby rapid adjustment to public information into the stock as proposed by Fama et al. (1969).

Table 4.26: Event Study on Cumulative Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Asymmetric Window	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	15.32*** [0.001]	13.19** [0.015]	7.42 [0.147]	0.71 [0.956]	-57.76*** [0.001]	-23.27 [0.202]
[-10,0]	15.16*** [0.001]	12.41** [0.016]	4.99 [0.283]	5.41 [0.654]	-60.73*** [0.000]	-13.34 [0.420]
[-5,0]	14.45*** [0.001]	8.70** [0.040]	2.76 [0.435]	14.23 [0.160]	-71.26*** [0.000]	-14.43 [0.273]
[-3,0]	12.60*** [0.006]	6.80* [0.078]	0.42 [0.884]	18.93* [0.075]	-55.54*** [0.004]	-10.06 [0.370]
[-1,0]	9.83* [0.084]	6.20 [0.182]	0.11 [0.964]	18.03 [0.172]	-22.12 [0.137]	-4.67 [0.616]
[0,1]	5.40 [0.152]	5.50 [0.204]	1.69 [0.533]	16.85 [0.183]	6.95 [0.386]	-4.64 [0.617]
[0,3]	7.27** [0.029]	4.01 [0.218]	3.64 [0.264]	14.38 [0.134]	-4.74 [0.537]	-16.87 [0.176]
[0,5]	5.42* [0.063]	2.83 [0.412]	32.58*** [0.000]	23.58** [0.041]	-6.01 [0.504]	8.89 [0.482]
[0,10]	1.99 [0.531]	3.93 [0.380]	41.75*** [0.000]	16.12 [0.198]	-30.94** [0.021]	20.82 [0.219]
[0,12]	1.00 [0.770]	3.97 [0.410]	42.54*** [0.000]	18.86 [0.164]	-44.91*** [0.003]	19.33 [0.284]
Symmetric Window						
[-12,12]	7.65 [0.112]	11.26* [0.094]	49.70*** [0.000]	-4.97 [0.780]	-102.17*** [0.000]	-3.95 [0.870]
[-10,10]	8.48* [0.060]	10.44* [0.093]	46.48*** [0.000]	-3.01 [0.854]	-91.17*** [0.000]	7.48 [0.737]
[-5,5]	11.19*** [0.005]	5.63 [0.218]	35.07*** [0.000]	13.27 [0.283]	-76.77*** [0.000]	-5.55 [0.734]
[-3,3]	11.20*** [0.004]	4.90 [0.201]	3.80 [0.320]	8.77 [0.383]	-59.78*** [0.001]	-26.94* [0.077]
[-1,1]	6.55* [0.055]	5.80 [0.122]	1.54 [0.572]	10.34 [0.232]	-14.66 [0.131]	-9.32 [0.378]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.27: Event Study on Cumulative Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Asymmetric Window	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	-15.23 [0.293]	12.17 [0.522]	-15.14 [0.450]	1.84 [0.855]	-11.01 [0.527]	2.07 [0.832]
[-10,0]	-15.61 [0.249]	7.06 [0.686]	-4.99 [0.785]	3.03 [0.746]	-13.07 [0.420]	-5.28 [0.560]
[-5,0]	-5.86 [0.561]	-24.01 [0.113]	-4.56 [0.743]	5.35 [0.461]	-11.58 [0.359]	-5.74 [0.415]
[-3,0]	-0.22 [0.979]	-19.41 [0.154]	-0.66 [0.955]	4.13 [0.505]	-11.51 [0.307]	-1.77 [0.760]
[-1,0]	3.94 [0.601]	3.46 [0.716]	-7.82 [0.491]	3.49 [0.533]	2.25 [0.792]	-0.83 [0.860]
[0,1]	33.84 [0.101]	52.01* [0.088]	-6.22 [0.564]	-9.04 [0.258]	19.01 [0.213]	5.68 [0.370]
[0,3]	49.04*** [0.008]	80.48*** [0.004]	14.67 [0.266]	-16.16* [0.060]	26.00* [0.069]	2.80 [0.632]
[0,5]	64.70*** [0.001]	126.96*** [0.000]	54.15*** [0.009]	-19.48** [0.034]	32.74** [0.036]	22.09** [0.019]
[0,10]	94.37*** [0.000]	147.56*** [0.000]	52.76** [0.014]	-23.09** [0.029]	24.94 [0.140]	35.68*** [0.002]
[0,12]	101.48*** [0.000]	222.02*** [0.000]	52.78** [0.019]	-26.19** [0.021]	10.61 [0.542]	35.38*** [0.003]
Symmetric Window						
[-12,12]	75.39*** [0.001]	210.46*** [0.000]	43.85 [0.116]	-22.91 [0.107]	-16.41 [0.490]	36.98*** [0.010]
[-10,10]	67.90*** [0.001]	130.90*** [0.000]	53.98** [0.040]	-18.62 [0.153]	-4.14 [0.849]	29.93** [0.022]
[-5,5]	47.97*** [0.004]	79.23*** [0.001]	55.80** [0.011]	-12.68 [0.193]	5.15 [0.747]	15.87* [0.100]
[-3,3]	37.95*** [0.010]	37.35** [0.033]	20.22 [0.205]	-10.58 [0.195]	-1.52 [0.907]	0.56 [0.938]
[-1,1]	26.92* [0.056]	31.74* [0.070]	-7.82 [0.489]	-4.11 [0.478]	5.25 [0.584]	4.37 [0.440]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.28: Event Study on Cumulative Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Asymmetric Window	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	5.85 [0.397]	26.53** [0.018]	5.68 [0.614]	-11.78 [0.435]	-111.21*** [0.000]	-10.62 [0.726]
[-10,0]	3.55 [0.575]	24.81** [0.019]	5.35 [0.608]	-10.37 [0.457]	-98.93*** [0.000]	-9.26 [0.740]
[-5,0]	8.30 [0.126]	15.16* [0.069]	-0.95 [0.904]	-22.46* [0.073]	-83.62*** [0.000]	-9.65 [0.651]
[-3,0]	7.14 [0.149]	5.91 [0.350]	-2.76 [0.681]	-23.27* [0.064]	-69.69*** [0.002]	-4.45 [0.804]
[-1,0]	9.60 [0.169]	12.03 [0.194]	-3.71 [0.548]	-24.11 [0.148]	-33.60* [0.088]	-4.18 [0.780]
[0,1]	17.05* [0.097]	27.52* [0.087]	-3.67 [0.550]	-40.93* [0.088]	-3.68 [0.574]	-12.85 [0.467]
[0,3]	20.26** [0.012]	34.64*** [0.008]	-1.59 [0.810]	-42.83** [0.013]	-11.36 [0.183]	-41.56* [0.085]
[0,5]	20.69*** [0.006]	35.96*** [0.003]	22.81** [0.028]	-66.66*** [0.001]	-19.94* [0.056]	-27.79 [0.225]
[0,10]	22.29*** [0.005]	56.62*** [0.000]	25.91** [0.028]	-56.94*** [0.002]	-80.76*** [0.000]	-23.28 [0.412]
[0,12]	24.80*** [0.003]	64.67*** [0.000]	30.25** [0.017]	-52.43*** [0.004]	-109.38*** [0.000]	-22.31 [0.465]
Symmetric Window						
[-12,12]	19.24** [0.048]	64.39*** [0.000]	39.04** [0.017]	-35.97* [0.088]	-210.19*** [0.000]	-26.56 [0.523]
[-10,10]	14.44 [0.103]	54.62*** [0.000]	34.38** [0.023]	-39.07** [0.048]	-169.29*** [0.000]	-26.17 [0.494]
[-5,5]	17.58** [0.017]	24.31** [0.021]	24.99** [0.033]	-60.88*** [0.001]	-93.15*** [0.000]	-31.06 [0.280]
[-3,3]	16.00** [0.017]	13.74 [0.101]	-1.24 [0.883]	-37.85** [0.012]	-70.64*** [0.000]	-39.63 [0.117]
[-1,1]	15.24** [0.041]	12.74 [0.111]	-4.26 [0.504]	-36.79** [0.034]	-26.87** [0.042]	-10.65 [0.531]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.29: Event Study on Cumulative Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Asymmetric Window	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	-1.77 [0.894]	-13.61 [0.289]	-1.87 [0.892]	-64.89* [0.090]	-31.15 [0.361]	-52.22 [0.127]
[-10,0]	0.25 [0.984]	-15.74 [0.193]	7.29 [0.571]	-62.54* [0.082]	-19.73 [0.527]	-26.84 [0.382]
[-5,0]	-1.62 [0.861]	-35.04*** [0.008]	-3.52 [0.718]	-42.44 [0.136]	-34.36 [0.183]	-15.17 [0.515]
[-3,0]	-6.39 [0.440]	-40.77*** [0.009]	-0.08 [0.992]	-38.41 [0.143]	-37.48 [0.131]	-4.88 [0.800]
[-1,0]	-9.50 [0.313]	-24.38 [0.124]	-0.01 [0.999]	-39.38 [0.214]	-10.63 [0.560]	-1.23 [0.938]
[0,1]	23.03 [0.138]	-5.85 [0.438]	-1.39 [0.837]	-24.46 [0.327]	21.31 [0.346]	-14.21 [0.460]
[0,3]	35.58** [0.016]	-5.74 [0.461]	-0.13 [0.987]	-22.01 [0.341]	2.46 [0.901]	-12.20 [0.540]
[0,5]	60.31*** [0.001]	0.66 [0.940]	14.73 [0.170]	8.17 [0.746]	-7.71 [0.743]	11.95 [0.605]
[0,10]	123.90*** [0.000]	-9.30 [0.429]	20.45 [0.131]	19.82 [0.554]	-29.27 [0.354]	31.44 [0.309]
[0,12]	145.17*** [0.000]	3.72 [0.767]	23.36 [0.110]	17.22 [0.633]	-72.00** [0.048]	30.95 [0.351]
Symmetric Window						
[-12,12]	146.97*** [0.000]	-2.54 [0.883]	21.16 [0.271]	-15.44 [0.754]	-122.52** [0.013]	-17.09 [0.703]
[-10,10]	127.72*** [0.000]	-17.69 [0.270]	27.42 [0.127]	-10.49 [0.817]	-68.37 [0.116]	8.78 [0.831]
[-5,5]	62.26*** [0.000]	-27.03** [0.038]	10.89 [0.402]	-2.05 [0.951]	-61.45* [0.069]	0.95 [0.975]
[-3,3]	32.75** [0.014]	-39.16*** [0.005]	-0.54 [0.959]	-28.19 [0.316]	-54.40* [0.064]	-12.90 [0.601]
[-1,1]	17.09 [0.111]	-22.88* [0.060]	-1.72 [0.816]	-31.61 [0.202]	-8.70 [0.636]	-11.26 [0.539]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

4.2.3.4 Interpretation of Cumulative Average Abnormal Volatility (CAAV) for All Indices during GE13 – GE15

Table 4.30 presents cumulative average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with range-based volatility as the volatility proxy. The cumulative average abnormal volatility (CAAV) varies significantly across indices, demonstrating sector-specific responses to political events. According to Table 4.30, *CONSTR* index exhibits the most intense and statistically significant positive CAAV across nearly all windows. The CAAV values for the index revealed that windows around [0,12], [0,10] and [0,5], appeared to be extreme each generated 125.43, 98.23 and 81.94 points, respectively. All are statistically significant at 1% level. Similarly, the *FIN* index also demonstrates large positive CAAV, with significant values like 39.91 in [0,12] and 34.94 in [0,10]. On the contrary, *PL* and *TE* indices display substantial negative CAAV, particularly in longer windows. For instance, former index reported -61.37 points in [0,12] and -53.66 in [0,10], indicating strong sell-off or market uncertainty related to policy. Likewise, the later index shows a CAAV of -61.37 in [-12,0], and -51.68 in [-12,12]. The FBMKLCI exhibits consistently positive and significant CAAV across all windows, such as 22.87 in [-12,12] and 15.89 in [0,10], suggesting volatility induced by macro-political transitions. On the other hand, *IND* and *CONS* indices reflect more muted and mixed results. The result revealed that the CAAV of *IND* index was predominantly negative, for instance, -23.82 points in [-5,0], whereas *CONS* index exhibits a combination of modest negative and some positive values, indicating more stable market.

In comparison, a significant and elevated volatility is mainly reported in symmetric window. For instance, *CONSTR* recorded 109.90 points in [-12,12] and 84.26 points in [-10,10], showing that volatility spikes occur before and after elections, affirming both

anticipation and realization effects. In similar windows, FBMKLCI's symmetric CAAV values generated 22.87 and 21.80, respectively. All are significant at 1% level. Such pattern is consistent with aggregate market volatility is driven by prolonged election influence, rather than short bursts. In asymmetric windows, the pre-election period $[-12,0]$ particularly for indices like *TE* (-49.42) and *PL* (-44.54), shows significant negative CAAVs, highlighting investor uncertainty before results are announced. Post-election windows such as $[0,5]$ and $[0,12]$ capture sharp rebounds, as seen in *FIN* (26.49 to 39.91) and *CONSTR* (81.94 to 125.43), reflecting optimism and policy-driven market repositioning. Notably, CAAV is often stronger in longer windows like $[0,12]$ and $[-12,12]$ indicating sustained volatility reactions over time, rather than brief shocks.

Overall, the CAAV analysis reveals that electoral events in Malaysia have a substantial and differentiated impact on sectoral volatility. The *CONSTR* and *FIN* have the highest positive cumulative abnormal volatility, particularly in the post-election periods. In contrast, sectors like *PL*, *TE* and *PR* indices exhibit large and statistically significant negative CAAV, especially in the pre-election window, suggesting risk-off behaviour and heightened uncertainty. With regards to the event windows, higher and more persistent volatility often occurred in symmetric windows as compared to asymmetric windows, as such windows better at capturing both anticipatory and reactionary effects. The FBMKLCI consistently reacts with moderate but significant volatility, confirming the impact from the general election. Therefore, the null hypothesis is rejected for CAAV is not significantly different from zero in certain cases. As such, these findings support the semi-strong form of the Efficient Market Hypothesis theory where markets incorporate political news quickly (Fama et al., 1969).

Table 4.30: Event Study on Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Range-based Volatility as the Volatility Proxy

Asymmetric Window	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
[-12,0]	11.98*** [0.000]	-26.77*** [0.000]	-6.07*** [0.000]	-2.37*** [0.000]	12.68*** [0.000]	-44.54*** [0.000]	-5.75*** [0.000]	-49.42*** [0.000]
[-10,0]	10.85*** [0.000]	-22.89*** [0.000]	-4.51*** [0.000]	-5.11*** [0.000]	11.24*** [0.000]	-39.52*** [0.000]	-2.73*** [0.000]	-36.37*** [0.000]
[-5,0]	8.63*** [0.000]	-23.82*** [0.000]	-11.48*** [0.000]	-3.99*** [0.000]	7.50*** [0.000]	-38.58*** [0.000]	-13.39*** [0.000]	-30.66*** [0.000]
[-3,0]	6.61*** [0.000]	-15.56*** [0.000]	-6.76*** [0.000]	-3.05*** [0.006]	3.43*** [0.000]	-32.47*** [0.000]	-15.75*** [0.000]	-26.93*** [0.000]
[-1,0]	5.38*** [0.000]	-2.92* [0.077]	-0.14 [0.946]	1.63 [0.290]	5.97*** [0.000]	-20.63*** [0.000]	-11.30*** [0.000]	-17.08*** [0.000]
[0,1]	4.20*** [0.000]	6.39*** [0.000]	26.54*** [0.000]	5.22*** [0.001]	13.63*** [0.000]	-19.15*** [0.000]	5.27*** [0.000]	-5.79 [0.125]
[0,3]	4.97*** [0.000]	-2.41** [0.039]	48.06*** [0.000]	4.22*** [0.000]	17.77*** [0.000]	-31.92*** [0.000]	9.90*** [0.000]	-10.58*** [0.000]
[0,5]	13.61*** [0.000]	8.82*** [0.000]	81.94*** [0.000]	11.78*** [0.000]	26.49*** [0.000]	-38.13*** [0.000]	25.23*** [0.000]	4.13* [0.058]
[0,10]	15.89*** [0.000]	2.00*** [0.005]	98.23*** [0.000]	12.51*** [0.000]	34.94*** [0.000]	-53.66*** [0.000]	45.02*** [0.000]	7.33*** [0.000]
[0,12]	15.83*** [0.000]	-2.24*** [0.001]	125.43*** [0.000]	6.60*** [0.000]	39.91*** [0.000]	-61.37*** [0.000]	57.42*** [0.000]	-7.94*** [0.000]
Symmetric Window								
[-12,12]	22.87*** [0.000]	-37.03*** [0.000]	109.90*** [0.000]	-0.78* [0.076]	40.89*** [0.000]	-90.90*** [0.000]	55.20*** [0.000]	-51.68*** [0.000]
[-10,10]	21.80*** [0.000]	-28.90*** [0.000]	84.26*** [0.000]	2.39*** [0.000]	34.48*** [0.000]	-78.18*** [0.000]	45.82*** [0.000]	-23.36*** [0.000]
[-5,5]	17.30*** [0.000]	-23.02*** [0.000]	61.00*** [0.000]	2.78*** [0.000]	22.29*** [0.000]	-61.70*** [0.000]	15.37*** [0.000]	-20.85*** [0.000]
[-3,3]	6.64*** [0.000]	-25.98*** [0.000]	31.84*** [0.000]	-3.84*** [0.000]	9.50*** [0.000]	-49.38*** [0.000]	-2.32*** [0.003]	-31.83*** [0.000]
[-1,1]	4.63*** [0.000]	-4.55*** [0.001]	16.94*** [0.000]	1.84 [0.146]	7.91*** [0.000]	-24.77*** [0.000]	-2.50** [0.034]	-17.19*** [0.000]

Notes: This table represents cumulative average abnormal volatility (CAAV) results from volatility event study using range-based volatility as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The coefficient is scaled up to $\times 10^3$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.9 presents cumulative average abnormal volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using range-based as volatility proxy. The CAAV trend revealed that TE index is the most stable index as compared to the rest as it displayed negative CAAVs throughout the period. The index was in a downward trend as low as -1.10 points around Day -2, reflecting strong negative investor sentiment, likely due to political uncertainty. Despite a minor rebound near Day 0, the downward trend remains significant, with continuous volatility compression until Day 8, before a partial recovery at Day 12.

In contrast, the *PR*, *FIN* and *CONSTR* indices exhibited the highest positive CAAV, peaking between Day 4 and Day 5. The *CONSTR index* in particular, spikes to over 0.06 points of CAAV. Following a similar pattern, *FIN* and *PR* indices peaked as much as 0.50 to 0.55 points, showing that these sectors are highly reactive to post-election policy direction. Meanwhile, FBMKLCI demonstrated a moderate positive CAAV trend. After a drop around Day -2, it rises sharply following the election event (Day 0), climbing steadily toward Day 4 to 6 where it peaks above 0.30 points reflecting general market confidence and post-election stabilization. Other sectoral indices such as *PL* and *IND* indices possessed flat trend in which it moved around baseline. As for *CONS* index, it appeared relatively stable with small amplitude changes, oscillating between ± 0.10 points, showing limited sensitivity to political changes in overall.

The CAAV trends across sectors indicate varied sensitivity to political shocks. As mentioned earlier, *CONSTR* index encountered peak positive CAAV around Day 5 with CAAV values above 0.60 points and this pattern followed closely by *PR* and *FIN*, as both indices registered the volatility beyond 0.50 points on the same period. These peaks align with market optimism over post-election spending or policy reforms. In terms of troughs,

the *TE* index exhibits the deepest decline, hitting nearly -0.11 points of CAAV just before the election (around Day -2 to Day 0). This dramatic drop suggests high uncertainty or a risk-off reaction, perhaps due to concerns over regulatory frameworks or funding for digital sectors. The FBMKLCI shows a V-shaped pattern, dipping just before the election and surging thereafter, indicating an initial sell-off behaviour followed by market relief once electoral outcomes are confirmed. This recovery phase peaks near 0.30 points on Day 4.

Overall, the CAAV pattern reveals sharp fluctuations around the election period, with most volatility occurring between Day -2 and Day 6. The positive trends observed in *CONSTR*, *PR*, and *FIN* align with investor expectations of economic stimulus and sectoral support, while the persistent negative trend in *TE* highlights sector-specific apprehension. This pattern supports the semi-strong form of EMH theory in terms of rapid adjustment to public news (Fama et al., 1969).

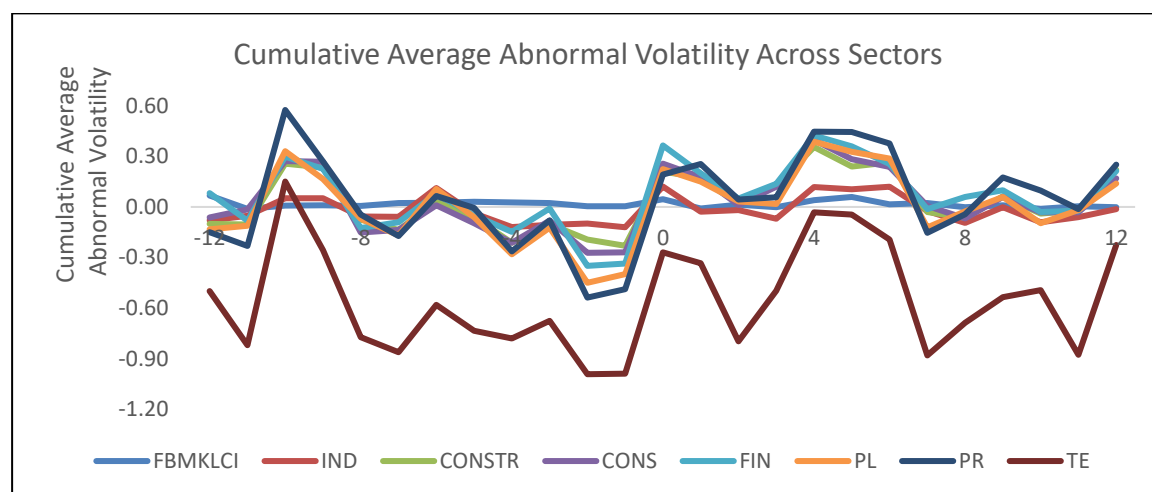


Figure 4.9: Cumulative Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Range-based as Volatility proxy

4.2.4 GARCH (1,1) Volatility Event Study

4.2.4.1 Interpretation of Abnormal Volatility (AV) for All Indices during GE13 – GE15.

Table 4.31 – 4.34 presents abnormal volatility for all indices across elections using window [-12,12] with GARCH (1,1) as the volatility proxy. The abnormal volatility (AV) results presented offer detailed insights into the day-by-day volatility reactions across different general elections (GE13, GE14, and GE15), indices, and highlight the distinct patterns observed around election periods.

Comparatively, GE14 stands out as having consistently higher abnormal volatility values across the majority of indices, indicating pronounced market uncertainty and speculative investor behaviors. This is especially evident in *CONSTR*, *IND*, *TE*, and *PR* indices, which displayed considerable spikes both pre- and post-election days. In contrast, GE13 is characterized by relatively lower volatility, suggesting comparatively less market uncertainty or speculative trading activity. GE15 exhibited a mixed volatility profile with negative abnormal volatility prominently observed in *PL* and *TE* indices, highlighting investor caution and market pessimism around election uncertainty and potential policy shifts during this period.

The FBMKLCI index, reflecting broader market trends, showed modest yet statistically significant volatility, particularly heightened during GE14 from Day -12 until Day 12. GE13 and GE15 demonstrated relatively mild fluctuations, except a pronounced negative volatility (-0.44) on Day 1 post-GE13, signifying brief market disruption or investor uncertainty. The *IND* index displayed significant volatility during GE14, prominently observed pre-election days (Days -12 to -2), indicating investor anticipation and uncertainty regarding industrial policies or economic outlooks. However, the *CONSTR* index showed

the most dramatic volatility spikes across the event window during GE14, peaking remarkably at Day -1 (7.91) and Day 2 (10.09), underscoring the extreme sensitivity of the construction sector to electoral outcomes.

The *CONS* index had moderate volatility levels across elections but exhibited notable peaks during GE14, particularly around Days 1 (9.30) and 2 (10.09), reflecting short-term investor reactions to consumer-related policy uncertainties. Conversely, the *FIN* index portrayed minimal volatility pre-election, but exhibited prominent spikes post-GE13 (Day 2: 6.77, Day 3: 3.52), highlighting its responsiveness to post-election clarity or fiscal policy announcements. The *PL* index uniquely showed persistent negative volatility during GE15, suggesting sustained pessimism, caution, or perceived adverse policy impacts on plantation sectors throughout this election period. The *PR* index displayed consistently significant volatility during GE13 with values above 2.00 across several days, indicating prolonged investor speculation or uncertainty over property-related policy outcomes. The *TE* index had significant fluctuations during GE14, with strong positive volatility pre-election (Days -12 to -9), emphasizing investor speculation, but significant negative volatility post-GE13 (Day 1: -2.42), reflecting sudden pessimistic market sentiment or risk-off behaviour.

Overall, the abnormal volatility results underscore considerable variability and sector-specific volatility reactions across election periods. GE14 notably emerged as the most turbulent election, characterized by extreme volatility spikes in indices such as *CONSTR*, *IND*, *CONS*, and *TE*, signifying significant market uncertainty and speculative trading activity. GE13 appeared relatively stable, although selected indices like *PR* and *FIN* did experience moderate-to-high post-election volatility spikes, indicating targeted investor concerns post-event. Indices such as *PL* and *TE* during GE15 showed significant negative

volatility, emphasizing market pessimism, reduced speculative interest, and investor caution. The broader FBMKLCI demonstrated resilience, with only moderate fluctuations, illustrating general market stability despite specific sector disruptions.

In summary, abnormal volatility analysis demonstrates substantial heterogeneity in investor reactions, volatility patterns, and market dynamics. Sector-specific sensitivities significantly dictate volatility responses, with industries like Construction, Industrial, and Consumer Products highly responsive to election-driven uncertainty, while sectors like Plantation and Technology reflected cautious or pessimistic investor sentiments during certain elections. These findings highlight the differential impacts of political events on market stability and investor behavior, providing a nuanced understanding of election-related market volatility.

Table 4.31: Event Study on Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Day	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.08** [0.018]	0.08** [0.021]	0.00 [0.412]	0.10 [0.352]	0.54* [0.066]	-0.25 [0.124]
-11	0.00 [0.961]	0.08** [0.027]	0.01* [0.084]	-0.02 [0.835]	0.59** [0.045]	-0.21 [0.187]
-10	-0.01 [0.673]	0.09** [0.011]	0.01* [0.077]	-0.03 [0.757]	0.65** [0.026]	-0.21 [0.193]
-9	-0.02 [0.619]	0.10*** [0.004]	0.01 [0.136]	-0.02 [0.834]	0.58** [0.049]	-0.22 [0.170]
-8	0.00 [0.957]	0.11*** [0.002]	0.01 [0.217]	-0.03 [0.805]	0.52* [0.075]	-0.23 [0.153]
-7	0.02 [0.605]	0.12*** [0.001]	0.01 [0.239]	0.00 [0.992]	0.43 [0.138]	-0.24 [0.142]
-6	0.00 [0.888]	0.13*** [0.000]	0.01 [0.264]	-0.04 [0.728]	0.33 [0.264]	-0.25 [0.129]
-5	0.00 [0.965]	0.11*** [0.002]	0.00 [0.634]	-0.04 [0.691]	0.29 [0.326]	0.00 [0.977]
-4	-0.02 [0.559]	0.12*** [0.001]	0.00 [0.691]	-0.05 [0.644]	0.19 [0.523]	-0.04 [0.819]
-3	0.06* [0.073]	0.12*** [0.001]	0.00 [0.550]	-0.05 [0.627]	0.09 [0.753]	-0.08 [0.621]
-2	-0.01 [0.756]	0.13*** [0.000]	0.00 [0.590]	-0.04 [0.731]	0.08 [0.794]	-0.11 [0.487]
-1	-0.01 [0.731]	0.12*** [0.000]	0.00 [0.764]	-0.05 [0.632]	0.09 [0.763]	-0.14 [0.380]
0	0.16*** [0.000]	0.14*** [0.000]	0.00 [0.659]	0.01 [0.940]	-0.02 [0.948]	-0.16 [0.310]
1	-0.44*** [0.000]	0.15*** [0.000]	0.00 [0.688]	-0.72*** [0.000]	-0.13 [0.657]	-0.18 [0.256]
2	-0.20*** [0.000]	0.16*** [0.000]	0.00 [0.702]	-0.15 [0.144]	-0.24 [0.404]	-0.21 [0.207]
3	-0.01 [0.676]	0.17*** [0.000]	0.00 [0.731]	0.01 [0.920]	-0.15 [0.605]	-0.21 [0.203]
4	0.09*** [0.007]	0.19*** [0.000]	0.00 [0.439]	-0.04 [0.725]	-0.25 [0.392]	-0.08 [0.635]
5	-0.09*** [0.007]	0.20*** [0.000]	0.00 [0.392]	0.35*** [0.001]	-0.36 [0.223]	-0.12 [0.455]
6	-0.20*** [0.000]	0.22*** [0.000]	0.00 [0.509]	0.13 [0.214]	-0.47 [0.106]	-0.15 [0.359]
7	-0.01 [0.870]	0.25*** [0.000]	0.00 [0.470]	0.01 [0.936]	-0.57* [0.051]	0.00 [0.989]
8	0.04 [0.184]	0.27*** [0.000]	0.00 [0.657]	0.24** [0.021]	-0.72** [0.014]	-0.05 [0.753]
9	0.05* [0.094]	0.28*** [0.000]	0.00 [0.958]	-0.15 [0.152]	-0.78*** [0.008]	-0.07 [0.685]
10	-0.02 [0.492]	0.19*** [0.000]	0.00 [0.819]	0.02 [0.877]	-0.43 [0.137]	-0.08 [0.637]
11	-0.18*** [0.000]	0.14*** [0.000]	0.00 [0.865]	0.02 [0.825]	-0.33 [0.251]	-0.12 [0.473]
12	-0.01 [0.856]	0.13*** [0.000]	0.00 [0.800]	-0.05 [0.667]	-0.32 [0.265]	-0.12 [0.443]

Notes: This table represents abnormal volatility (AV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.32: Event Study on Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Day	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	0.24 [0.123]	3.02** [0.021]	-0.08 [0.562]	-0.05 [0.397]	0.25 [0.247]	-0.09 [0.591]
-11	0.20 [0.194]	3.44** [0.027]	-0.09 [0.493]	-0.03 [0.617]	0.31 [0.151]	0.17 [0.315]
-10	0.11 [0.501]	3.91** [0.011]	-0.10 [0.453]	-0.01 [0.866]	0.31 [0.154]	0.28* [0.099]
-9	0.11 [0.483]	4.10*** [0.004]	-0.11 [0.437]	0.01 [0.820]	0.34 [0.119]	0.17 [0.333]
-8	0.09 [0.568]	4.57*** [0.002]	-0.09 [0.499]	-0.04 [0.478]	0.38* [0.074]	0.13 [0.434]
-7	0.04 [0.776]	4.66*** [0.001]	-0.10 [0.450]	-0.01 [0.826]	0.42** [0.049]	0.05 [0.788]
-6	0.00 [0.993]	5.06*** [0.000]	-0.12 [0.405]	-0.02 [0.733]	0.46** [0.033]	-0.02 [0.907]
-5	-0.04 [0.799]	5.41*** [0.002]	-0.13 [0.349]	-0.03 [0.661]	0.48** [0.025]	0.13 [0.441]
-4	0.00 [0.979]	5.88*** [0.001]	-0.13 [0.335]	-0.02 [0.697]	0.52** [0.016]	0.04 [0.797]
-3	-0.04 [0.798]	6.43*** [0.001]	-0.14 [0.297]	-0.01 [0.830]	0.56*** [0.009]	-0.02 [0.927]
-2	-0.05 [0.762]	7.10*** [0.000]	-0.07 [0.601]	-0.03 [0.678]	0.63*** [0.003]	-0.06 [0.718]
-1	0.00 [0.998]	7.91*** [0.000]	-0.09 [0.523]	0.01 [0.908]	0.74*** [0.001]	-0.10 [0.576]
0	-0.22 [0.171]	8.58*** [0.000]	-0.10 [0.474]	0.06 [0.372]	0.80*** [0.000]	-0.12 [0.470]
1	2.39*** [0.000]	9.30*** [0.000]	-0.11 [0.422]	-0.47*** [0.000]	0.86*** [0.000]	0.04 [0.816]
2	4.36*** [0.000]	10.09*** [0.000]	-0.12 [0.378]	-0.21*** [0.001]	0.93*** [0.000]	0.04 [0.794]
3	3.15*** [0.000]	0.40*** [0.000]	-0.08 [0.553]	-0.02 [0.766]	-0.24 [0.258]	-0.02 [0.915]
4	1.99*** [0.000]	0.38*** [0.000]	0.49*** [0.000]	-0.01 [0.812]	-0.26 [0.229]	0.98*** [0.000]
5	1.93*** [0.000]	0.52*** [0.000]	0.45*** [0.001]	0.07 [0.270]	-0.33 [0.119]	0.81*** [0.000]
6	1.41*** [0.000]	-0.28*** [0.000]	0.38*** [0.007]	-0.05 [0.387]	-0.37* [0.088]	0.54*** [0.002]
7	1.08*** [0.000]	-1.24*** [0.000]	0.31** [0.025]	0.03 [0.643]	-0.45** [0.037]	0.35** [0.040]
8	0.71*** [0.000]	-1.31*** [0.000]	0.29** [0.034]	0.00 [0.974]	-0.54** [0.012]	0.79*** [0.000]
9	0.32** [0.043]	-1.50*** [0.000]	0.26* [0.066]	-0.10 [0.110]	-0.58*** [0.008]	0.53*** [0.002]
10	0.32** [0.043]	-0.45*** [0.000]	0.21 [0.138]	-0.02 [0.728]	-0.36* [0.091]	0.34** [0.050]
11	0.53*** [0.001]	0.09*** [0.000]	0.16 [0.259]	-0.02 [0.789]	-0.27 [0.202]	0.28 [0.100]
12	0.43*** [0.007]	0.43*** [0.000]	0.12 [0.397]	-0.04 [0.519]	-0.20 [0.345]	0.16 [0.346]

Notes: This table represents abnormal volatility (AV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.33: Event Study on Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Day	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.43 [0.168]	-0.11 [0.655]	-0.01 [0.825]	-0.01 [0.970]	-0.07* [0.089]	-0.64 [0.594]
-11	-0.11 [0.732]	-0.06 [0.814]	0.05 [0.387]	-0.06 [0.760]	-0.06 [0.166]	-0.38 [0.754]
-10	-0.07 [0.820]	0.01 [0.962]	0.03 [0.651]	-0.04 [0.830]	-0.05 [0.199]	-0.26 [0.827]
-9	-0.10 [0.749]	-0.12 [0.615]	0.01 [0.884]	-0.05 [0.813]	-0.05 [0.213]	-0.52 [0.662]
-8	-0.06 [0.858]	-0.14 [0.562]	0.00 [0.974]	-0.01 [0.967]	-0.04 [0.316]	-0.72 [0.549]
-7	-0.06 [0.846]	-0.11 [0.639]	0.00 [0.946]	0.30 [0.117]	-0.04 [0.360]	-0.86 [0.473]
-6	0.18 [0.573]	-0.18 [0.465]	-0.01 [0.848]	0.02 [0.912]	-0.04 [0.377]	-0.96 [0.422]
-5	0.02 [0.946]	0.11 [0.658]	-0.03 [0.630]	-0.07 [0.725]	-0.04 [0.342]	-0.90 [0.452]
-4	0.12 [0.699]	-0.13 [0.601]	-0.03 [0.614]	0.01 [0.968]	-0.04 [0.341]	-1.00 [0.402]
-3	0.03 [0.914]	0.16 [0.513]	-0.02 [0.703]	0.09 [0.650]	-0.04 [0.366]	-1.06 [0.377]
-2	0.00 [0.990]	0.09 [0.695]	-0.02 [0.717]	-0.05 [0.779]	-0.06 [0.127]	-1.10 [0.360]
-1	-0.03 [0.929]	0.64*** [0.008]	-0.02 [0.708]	-0.04 [0.840]	-0.04 [0.336]	-1.14 [0.342]
0	-0.41 [0.184]	-0.05 [0.843]	-0.03 [0.605]	0.34* [0.077]	-0.04 [0.349]	-1.18 [0.324]
1	1.81*** [0.000]	-0.19 [0.430]	-0.03 [0.549]	0.08 [0.660]	-0.04 [0.363]	-1.16 [0.332]
2	6.77*** [0.000]	-0.23 [0.344]	-0.04 [0.499]	0.15 [0.443]	-0.04 [0.378]	-1.20 [0.317]
3	3.52*** [0.000]	-0.16 [0.497]	-0.04 [0.459]	-0.03 [0.891]	-0.07 [0.110]	-1.21 [0.315]
4	2.31*** [0.000]	-0.25 [0.308]	0.28*** [0.000]	0.37* [0.054]	-0.13*** [0.001]	-1.33 [0.266]
5	0.75** [0.017]	-0.02 [0.929]	0.22*** [0.000]	0.01 [0.942]	-0.14*** [0.001]	-1.32 [0.269]
6	0.46 [0.137]	-0.21 [0.387]	0.16*** [0.004]	-0.16 [0.393]	-0.20*** [0.000]	-1.33 [0.266]
7	0.70** [0.026]	-0.29 [0.233]	0.12** [0.032]	0.06 [0.753]	-0.21*** [0.000]	-1.34 [0.265]
8	0.27 [0.393]	-0.30 [0.207]	0.08 [0.135]	0.05 [0.791]	-0.24*** [0.000]	-1.15 [0.339]
9	0.19 [0.544]	-0.29 [0.223]	0.06 [0.297]	0.62*** [0.001]	-0.25*** [0.000]	-0.91 [0.448]
10	0.33 [0.290]	0.52** [0.031]	0.05 [0.367]	0.10 [0.588]	-0.20*** [0.000]	-1.01 [0.399]
11	-0.24 [0.449]	1.53*** [0.000]	0.03 [0.634]	0.12 [0.544]	-0.18*** [0.000]	-1.00 [0.403]
12	0.12 [0.711]	0.31 [0.203]	0.01 [0.861]	0.27 [0.162]	-0.16*** [0.000]	-1.06 [0.377]

Notes: This table represents abnormal volatility (AV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCL, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.34: Event Study on Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Day	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	1.73*** [0.000]	0.22* [0.082]	-1.35 [0.384]	-0.29 [0.788]	4.80** [0.025]	-1.35 [0.384]
-11	1.86*** [0.000]	0.20 [0.108]	-1.51 [0.332]	-0.35 [0.743]	4.25** [0.047]	-1.51 [0.332]
-10	2.01*** [0.000]	0.19 [0.119]	-1.50 [0.335]	-0.42 [0.694]	4.97** [0.021]	-1.50 [0.335]
-9	2.12*** [0.000]	0.19 [0.132]	-1.52 [0.330]	-0.45 [0.674]	3.90* [0.068]	-1.52 [0.330]
-8	2.28*** [0.000]	0.16 [0.186]	-1.51 [0.333]	-0.46 [0.666]	3.14 [0.142]	-1.51 [0.333]
-7	2.46*** [0.000]	0.18 [0.146]	-1.52 [0.329]	-0.45 [0.672]	2.40 [0.261]	-1.52 [0.329]
-6	2.65*** [0.000]	0.13 [0.286]	-1.43 [0.359]	-0.45 [0.675]	1.54 [0.470]	-1.43 [0.359]
-5	2.84*** [0.000]	0.13 [0.310]	0.77 [0.620]	-0.45 [0.672]	1.12 [0.599]	0.77 [0.620]
-4	3.06*** [0.000]	0.10 [0.418]	0.29 [0.854]	-0.42 [0.692]	0.56 [0.794]	0.29 [0.854]
-3	3.25*** [0.000]	0.06 [0.645]	-0.04 [0.978]	-0.41 [0.699]	-0.01 [0.995]	-0.04 [0.978]
-2	3.49*** [0.000]	0.07 [0.553]	-0.36 [0.817]	-0.43 [0.688]	-0.22 [0.919]	-0.36 [0.817]
-1	3.75*** [0.000]	0.13 [0.288]	-0.27 [0.864]	-0.49 [0.643]	0.02 [0.993]	-0.27 [0.864]
0	4.03*** [0.000]	0.08 [0.516]	-0.53 [0.734]	-0.81 [0.445]	-0.63 [0.766]	-0.53 [0.734]
1	2.97*** [0.000]	0.03 [0.822]	-0.67 [0.668]	-2.42** [0.024]	-1.25 [0.557]	-0.67 [0.668]
2	2.58*** [0.000]	-0.03 [0.834]	-0.85 [0.583]	0.80 [0.451]	-1.84 [0.387]	-0.85 [0.583]
3	2.71*** [0.000]	-0.08 [0.520]	-0.93 [0.548]	0.67 [0.531]	0.64 [0.764]	-0.93 [0.548]
4	2.88*** [0.000]	-0.13 [0.301]	1.83 [0.241]	0.48 [0.652]	-0.10 [0.961]	1.83 [0.241]
5	3.03*** [0.000]	-0.15 [0.222]	1.21 [0.437]	2.89*** [0.007]	-0.87 [0.683]	1.21 [0.437]
6	2.78*** [0.000]	-0.19 [0.123]	0.60 [0.702]	4.23*** [0.000]	-1.60 [0.452]	0.60 [0.702]
7	2.97*** [0.000]	-0.22* [0.082]	0.11 [0.946]	0.87 [0.415]	-2.38 [0.265]	0.11 [0.946]
8	3.18*** [0.000]	-0.28** [0.026]	-0.26 [0.866]	0.33 [0.759]	-2.98 [0.164]	-0.26 [0.866]
9	3.41*** [0.000]	-0.34*** [0.006]	2.82* [0.071]	-0.60 [0.571]	-3.32 [0.120]	2.82* [0.071]
10	3.55*** [0.000]	-0.20 [0.103]	1.90 [0.222]	1.81* [0.090]	-2.57 [0.229]	1.90 [0.222]
11	2.87*** [0.000]	-0.14 [0.254]	1.27 [0.415]	0.61 [0.567]	-2.45 [0.250]	1.27 [0.415]
12	3.09*** [0.000]	-0.13 [0.292]	0.68 [0.664]	0.32 [0.760]	-2.54 [0.235]	0.68 [0.664]

Notes: This table represents abnormal volatility (AV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.10 presents Abnormal Volatility trend path of FBMKLCI and sectoral indices across elections (GE13-GE15) using GARCH (1,1) as volatility proxy. The AV trends demonstrate distinct behaviours across general elections (GE13, GE14, GE15) and sectoral indices, highlighting market sensitivity, investor sentiment, and sector-specific reactions to electoral uncertainties.

Across elections, GE14 consistently exhibited heightened volatility compared to GE13 and GE15, reflecting greater investor sensitivity and market uncertainty. Specifically, indices such as Industrial Products & Services, Finance, Property, and Technology showed pronounced volatility spikes, suggesting speculative behavior or significant market repositioning due to perceived policy uncertainty or political transitions during GE14. Conversely, GE15 showed more varied responses, with volatility typically lower than GE14 but characterized by sharp fluctuations, especially in the Technology and Plantation sectors, reflecting investor caution or market apprehension. GE13 represented the calmest election period, with volatility trends remaining predominantly flat or slightly fluctuating, indicating more stable investor sentiment and lower market disruption compared to later elections.

The FBMKLCI, representing the broad market index, maintained relatively low volatility across all elections, though notable negative volatility emerged around day 2 post-GE15, indicating market uncertainty or investor pessimism specific to that election. The Industrial Products & Services index experienced highly divergent volatility: a moderate trend in GE13, significantly elevated in GE14, particularly from day 0 to day 4, and predominantly negative and lower volatility in GE15. Such patterns underscore intense sector-specific sensitivity and speculative investor behavior, especially during GE14.

The Consumer Products & Services index displayed moderate volatility with notable peaks and fluctuations during GE14, reflecting periodic uncertainty or market reactions tied closely to election dynamics. The Finance index exhibited a distinctive spike around day 1 post-GE14, sharply exceeding other elections, emphasizing its sensitivity to immediate post-election uncertainties. The Plantation sector revealed consistently negative volatility during GE15, indicating persistent pessimism or risk aversion throughout the event period. Conversely, this sector showed minimal volatility during GE13 and moderate fluctuations in GE14.

The Property index revealed consistently rising volatility during GE13, reaching a peak around day 4 post-event, suggesting investor speculation and prolonged uncertainty specific to property-related policy impacts. In contrast, GE14 and GE15 showed moderate to lower volatility patterns. Finally, the Technology index exhibited substantial fluctuations, characterized by sharp negative volatility before day 0 in GE15 and prominent positive volatility spikes during GE14. These trends suggest heightened speculative trading and rapid investor sentiment shifts influenced by policy or political expectations surrounding elections.

In summary, the abnormal volatility analysis highlights substantial differences across elections and sectors. GE14 clearly represented the most volatile period across multiple sectors, characterized by pronounced peaks such as the Finance index spike at day 1 and Industrial Products & Services at days 0-4. GE15 revealed strong negative volatility in Plantation and Technology sectors, reflecting investor caution or pessimism. GE13 generally remained stable across indices, with mild fluctuations indicating modest market uncertainty.

Sector-wise, Industrial Products & Services and Finance emerged as highly sensitive sectors, marked by prominent volatility peaks and pronounced investor reactions. Plantation consistently experienced negative volatility, especially in GE15, signifying sustained cautiousness or pessimistic sentiment. Property showed prolonged and rising volatility in GE13, indicative of sustained investor uncertainty or speculative behaviour. Technology displayed frequent fluctuations, signalling rapidly changing investor expectations and market sensitivity to political and policy shifts.

Overall, these findings underline significant sector-specific volatility responses across different elections, driven by varying investor sentiment, speculative behaviours, and perceptions of uncertainty and policy implications surrounding electoral events.

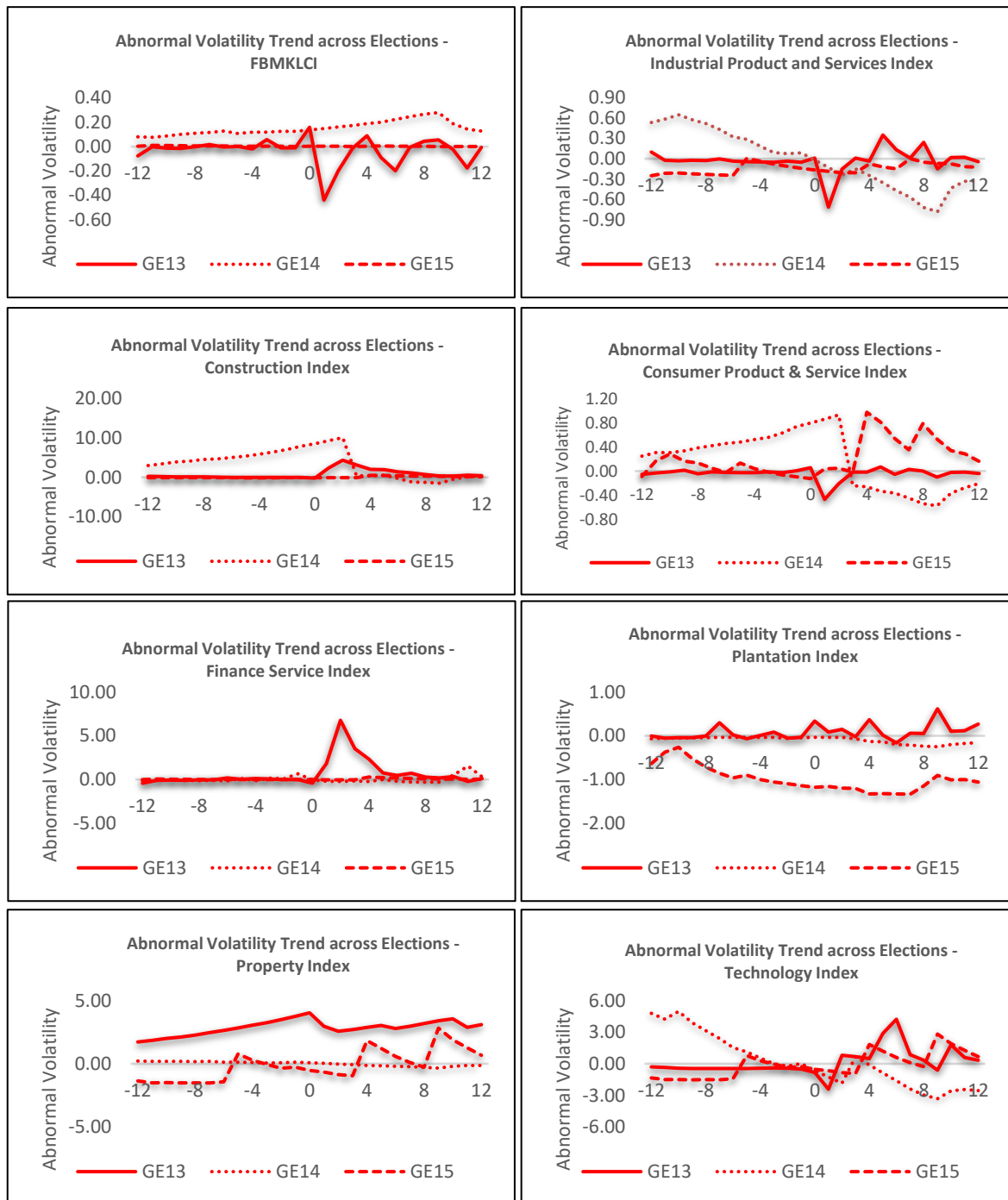


Figure 4.10: Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices across elections (GE13-GE15) using GARCH (1,1) as Volatility Proxy

4.2.4.2 Interpretation of Average Abnormal Volatility (AAV) for All Indices during GE13 – GE15.

Table 4.35 presents on average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with GARCH (1,1) as the volatility proxy. The *IND* index exhibited exceptionally high and statistically significant volatility values, starting from Day -12 (1.01) and continuously rising to peak sharply at Day 0 (2.83). Such sustained and incremental volatility emphasizes high investor uncertainty and speculative activities preceding the event. Post-event, volatility remains elevated until Day 3, with a notable secondary peak at Day 2 (3.27), after which it rapidly declines. This behaviour underscores substantial market speculation and investor recalibration surrounding the event.

The *PR* index similarly displayed consistent positive volatility from day -12 (0.65) and steadily rose, reaching a primary peak at Day -2 (1.17), indicating early investor reactions or speculative positioning. After the event date, *PR* volatility exhibited fluctuations, with secondary peaks around Day 5 (1.10), indicating persistent but moderate volatility, suggesting investors' continued uncertainty concerning policy or market implications post-event.

The *TE* index displayed significant initial volatility, peaking prominently at Day -10 (1.02). Subsequently, volatility declined and fluctuated, showing both negative (-1.45 at day 1) and positive volatility peaks (1.08 at day 5). The negative volatility at Day 1 suggests a sharp, immediate negative investor sentiment or risk-off behaviour post-event. The subsequent positive rebound highlights investors quickly recalibrating or returning to speculative positions.

The *CONSTR* index presented moderate but consistent volatility, with noticeable peaks at day -2 (0.18) and day 2 (1.78), demonstrating event-sensitive volatility patterns and heightened investor speculation around immediate event days. Post-event, volatility rapidly normalized, reflecting sector-specific short-lived uncertainty.

Indices such as *FIN*, *PL*, and *CONS* exhibited relatively lower volatility, with values generally below 0.5. Notably, *PL* consistently displayed negative significant volatility from Day -12 to Day 12, emphasizing persistent investor caution or diminished speculative activities. *CONS* had occasional spikes (2.16 at Day 2), signifying short-term sector-specific uncertainty, whereas *FIN* maintained lower, more stable volatility levels.

Finally, the FBMKLCI index, representing broader market sentiment, displayed minimal yet statistically significant volatility, peaking moderately at Day 0 (0.10) and Day 9 (0.11). Such moderate volatility signals general market stability, despite individual sector fluctuations, and indicates relatively balanced investor sentiment across the broader index.

In summary, significant contrasts were observed across indices. The *IND* index dominated volatility patterns with the highest peaks, notably day 0 (2.83) and day 2 (3.27), clearly demonstrating investor sensitivity and pronounced market reactions. *PR* and *TE* indices also displayed substantial volatility, highlighting investor speculation and market repositioning. The *CONSTR* sector showed moderate peaks closely aligned with immediate event dates, emphasizing short-term volatility responses.

Conversely, indices such as *PL*, *FIN*, *CONS*, and the broader FBMKLCI maintained relatively stable volatility profiles. Particularly, *PL* consistently exhibited negative abnormal volatility throughout the event window, suggesting persistent investor pessimism or cautious

market approaches. FBMKLCI's modest volatility fluctuations indicated broader market resilience and limited sensitivity to event-driven uncertainty.

Overall, these results underline sectoral heterogeneity in market reactions, highlighting highly sensitive indices like *IND* and *PR* with pronounced speculative volatility, moderately reactive indices like *CONSTR* and *TE*, and consistently stable indices such as *FIN*, *CONS*, *PL*, and FBMKLCI. These patterns emphasize the nuanced and differentiated nature of investor behaviour in response to event-induced uncertainty, reflecting varying levels of investor confidence and sector-specific expectations.

Table 4.35: Event Study on Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Day	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
-12	0.00 [0.814]	1.01*** [0.000]	0.13** [0.011]	-0.08 [0.160]	0.03 [0.693]	-0.24*** [-1.032]	0.65*** [0.000]	1.05* [0.070]
-11	0.03*** [0.001]	1.11*** [0.000]	0.23*** [0.000]	0.03 [0.639]	0.18** [0.028]	-0.16*** [-0.708]	0.68*** [0.000]	0.80 [0.168]
-10	0.03*** [0.001]	1.26*** [0.000]	0.23*** [0.000]	0.09 [0.115]	0.20** [0.012]	-0.12*** [-0.514]	0.72*** [0.000]	1.02* [0.078]
-9	0.03*** [0.000]	1.32*** [0.000]	0.20*** [0.000]	0.02 [0.741]	0.16** [0.044]	-0.21*** [-0.894]	0.79*** [0.000]	0.65 [0.262]
-8	0.04*** [0.000]	1.48*** [0.000]	0.20*** [0.000]	-0.02 [0.781]	0.15* [0.055]	-0.26*** [-1.105]	0.82*** [0.000]	0.39 [0.499]
-7	0.05*** [0.000]	1.52*** [0.000]	0.17*** [0.001]	-0.03 [0.654]	0.12 [0.125]	-0.20*** [-0.859]	0.89*** [0.000]	0.14 [0.804]
-6	0.04*** [0.000]	1.64*** [0.000]	0.15*** [0.006]	-0.07 [0.227]	0.16** [0.042]	-0.33*** [-1.407]	0.93*** [0.000]	-0.11 [0.849]
-5	0.04*** [0.000]	1.75*** [0.000]	0.19*** [0.000]	0.07 [0.240]	0.09 [0.243]	-0.34*** [-1.451]	0.99*** [0.000]	0.48 [0.405]
-4	0.03*** [0.000]	1.90*** [0.000]	0.19*** [0.000]	-0.04 [0.554]	0.09 [0.248]	-0.35*** [-1.489]	1.04*** [0.000]	0.14 [0.807]
-3	0.06*** [0.000]	2.08*** [0.000]	0.17*** [0.001]	0.04 [0.475]	0.03 [0.666]	-0.34*** [-1.455]	1.09*** [0.000]	-0.16 [0.788]
-2	0.04*** [0.000]	2.33*** [0.000]	0.18*** [0.001]	0.00 [0.971]	0.02 [0.830]	-0.41*** [-1.748]	1.17*** [0.000]	-0.33 [0.562]
-1	0.04*** [0.000]	2.59*** [0.000]	0.22*** [0.000]	0.18*** [0.002]	0.01 [0.872]	-0.41*** [-1.753]	1.27*** [0.000]	-0.25 [0.668]
0	0.10*** [0.000]	2.83*** [0.000]	0.15*** [0.004]	-0.04 [0.520]	-0.15* [0.055]	-0.29*** [-1.269]	1.34*** [0.000]	-0.66 [0.254]
1	-0.10*** [0.000]	2.83*** [0.000]	1.10*** [0.000]	-0.21*** [0.001]	0.55*** [0.000]	-0.37*** [-1.606]	0.97*** [0.000]	-1.45** [0.013]
2	-0.01 [0.151]	3.27*** [0.000]	1.78*** [0.000]	-0.13** [0.030]	2.16*** [0.000]	-0.36*** [-1.571]	0.82*** [0.000]	-0.63 [0.274]
3	0.05*** [0.000]	0.11 [0.410]	0.96*** [0.000]	-0.07 [0.265]	1.11*** [0.000]	-0.43*** [-1.869]	0.85*** [0.000]	0.13 [0.828]
4	0.09*** [0.000]	0.28** [0.036]	0.90*** [0.000]	0.24*** [0.000]	0.78*** [0.000]	-0.37*** [-1.576]	1.09*** [0.000]	0.73 [0.204]
5	0.04*** [0.000]	0.44*** [0.001]	0.80*** [0.000]	0.29*** [0.000]	0.20** [0.012]	-0.48*** [-2.085]	1.10*** [0.000]	1.08* [0.062]
6	0.01 [0.246]	0.08 [0.568]	0.53*** [0.000]	0.09 [0.121]	0.05 [0.522]	-0.57*** [-2.444]	0.97*** [0.000]	1.07* [0.065]
7	0.08*** [0.000]	-0.31** [0.021]	0.33*** [0.000]	0.03 [0.598]	0.08 [0.300]	-0.50*** [-2.146]	1.06*** [0.000]	-0.47 [0.416]
8	0.10*** [0.000]	-0.26* [0.052]	0.32*** [0.000]	0.16*** [0.007]	-0.12 [0.125]	-0.44*** [-1.913]	1.08*** [0.000]	-0.97* [0.093]
9	0.11*** [0.000]	-0.47*** [0.001]	0.09* [0.079]	0.05 [0.451]	-0.18** [0.027]	-0.18*** [-0.781]	1.12*** [0.000]	-0.37 [0.526]
10	0.06*** [0.000]	-0.08 [0.563]	0.10* [0.061]	0.28*** [0.000]	-0.02 [0.825]	-0.37*** [-1.593]	1.19*** [0.000]	0.38 [0.510]
11	-0.01 [0.213]	0.09 [0.496]	0.18*** [0.001]	0.60*** [0.000]	-0.18** [0.024]	-0.36*** [-1.533]	0.96*** [0.000]	-0.19 [0.739]
12	0.04*** [0.000]	0.17 [0.207]	0.13** [0.013]	0.14** [0.018]	-0.07 [0.405]	-0.32*** [-1.364]	1.02*** [0.000]	-0.51 [0.374]

Notes: This table represents average abnormal volatility (AAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.11 presents Average Abnormal Volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using GARCH (1,1) as volatility proxy. The AAV trends across indices reveals distinct market responses, highlighting considerable differences in investor sentiment and market sensitivity throughout the event window (-12 to 12 days).

The *IND* index displayed the most pronounced volatility among all indices. Initially, from Day -12 to Day -4, it gradually rose, reflecting investor anticipation or increasing uncertainty prior to the event. Remarkably, from Day -4 onward, the *IND* index volatility spiked dramatically, peaking near 3.5 around Day 2. This sharp increase highlights intense market speculation or significant information shocks occurring during the event period. Following this sharp peak, volatility sharply declined yet remained elevated relative to other indices.

The *CONSTR* and *PR* indices exhibited significant volatility around the event period as well. *CONSTR* demonstrated a sharp, prominent peak near Day 0, exceeding a volatility level of 1.5, signalling market sensitivity tied directly to event announcements. Subsequently, volatility sharply reverted to moderate levels, suggesting quick normalization once uncertainties subsided. Similarly, *PR* showed a substantial volatility spike around day 0, indicating that investor sentiment in the property sector was closely tied to event outcomes. *PR* subsequently experienced fluctuations, emphasizing ongoing uncertainty or investor recalibrations post-event.

The *TE* index illustrated a volatile trajectory with noticeable fluctuations, exhibiting alternating peaks and troughs throughout the window. Notably, *TE* sharply dropped into negative volatility territory around Day -2, marking a distinctive trough, suggesting possible investor caution or withdrawal from technology stocks due to uncertainty prior to the event.

Subsequently, volatility rebounded sharply, reflecting renewed speculative behaviour or optimism around day 4, followed by further fluctuations, highlighting persistent investor uncertainty.

In contrast, the broader FBMKLCI, *FIN*, *PL*, and *CONS* indices exhibited relatively subdued volatility. FBMKLCI maintained stable and consistently moderate volatility levels across the event period, illustrating broad market stability despite individual sector volatilities. The *FIN* and *PL* indices similarly demonstrated stable volatility with minimal fluctuations, suggesting limited investor sensitivity or well-managed market expectations within these sectors. *CONS* showed moderate fluctuations, remaining relatively stable, indicating measured responses and investor confidence.

Overall, the AAV trends reveal sector-specific volatility behaviours. The *IND* index displayed the highest peak around day 2, signifying the strongest market reaction and speculative activity, reflecting heightened investor concerns or market uncertainty. *CONSTR* and *PR* sectors also experienced clear volatility peaks around day 0, signifying their pronounced sensitivity and reactive investor behaviour during immediate event windows.

The *TE* index exhibited a distinctive volatility pattern with pronounced negative volatility around day -2, marking the most notable trough and signalling heightened market apprehension. The subsequent rapid rebound in volatility underscores significant investor recalibration post-event.

Indices such as FBMKLCI, *FIN*, *PL*, and *CONS* maintained consistently moderate volatility, reflecting sectors less impacted by political uncertainty or investor speculation. These indices serve as indicators of relative market stability and balanced investor sentiment across the broader market.

In conclusion, the graphical evidence underlines stark contrasts in market volatility reactions across indices. *IND*, *CONSTR*, *PR*, and *TE* indices illustrate heightened investor reactions characterized by sharp peaks, troughs, and significant fluctuations. Meanwhile, *FBMKLCI*, *FIN*, *PL*, and *CONS* indices indicate overall investor composure and market stability throughout the event period. Such findings emphasize the sector-specific nature of investor sentiment and market sensitivity towards political or informational events.

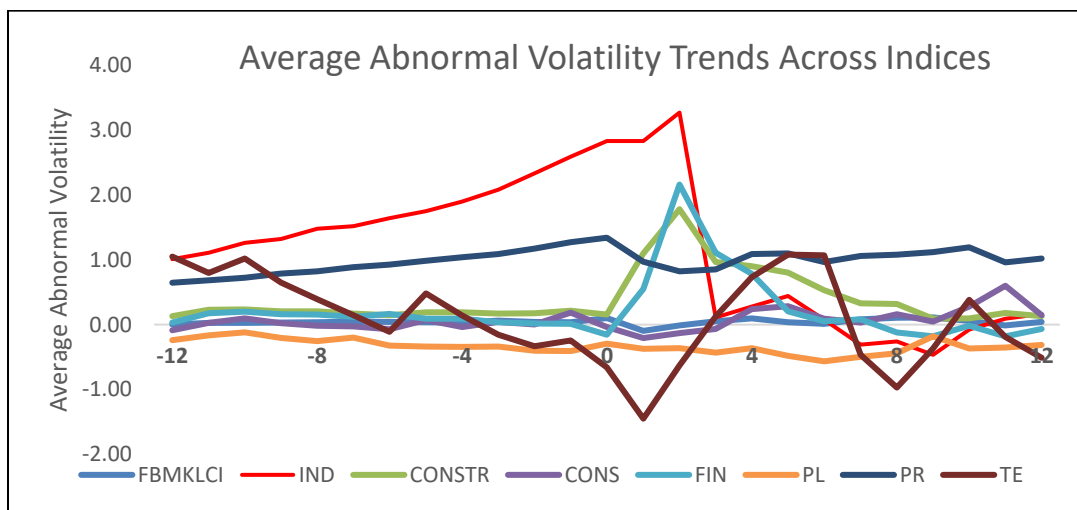


Figure 4.11: Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using GARCH (1,1) as Volatility Proxy

4.2.4.3 Interpretation of Cumulative Abnormal Volatility (CAV) for All Indices during GE13 – GE15.

Table 4.36 – 4.39 presents Cumulative Abnormal Volatility for all indices across elections using window [-12,12] with GARCH (1,1) as the volatility proxy. It can be observed volatility varied substantially across GE13, GE14, and GE15. Notably, GE14 consistently presented the highest volatility across multiple indices, most remarkably within the *IND*, *CONSTR*, and *TE* sectors. *IND* reached an extreme CAV of 70.07 in the [-12,0] window, significantly higher compared to GE13 and GE15, demonstrating heightened market uncertainty or speculative behaviour surrounding this election. In contrast, GE13 exhibited mostly negative or relatively low positive volatility, suggesting a less turbulent market environment. GE15, although marked by negative volatility in sectors such as *PL* and *TE*, demonstrated more subdued responses compared to GE14.

Sector-specific volatility was pronounced, with *IND* clearly experiencing the greatest overall volatility, particularly during GE14 across almost all windows. *PR* was also significantly reactive, especially notable during GE13 (35.52 in [-12,0]), showing that this sector was highly sensitive to political uncertainty or investor speculation. The *PL* index consistently exhibited negative volatility, especially evident during GE15 (-10.72 in [-12,0]), indicating decreased market activity or investor pessimism. The broader FBMKLCI index showed relatively stable volatility, reflecting moderate investor sentiment. *CONSTR* and *FIN* sectors also displayed significant volatility during GE14, signaling these sectors' sensitivity to policy-related uncertainties.

Analysis of asymmetric windows highlighted investor anticipatory behaviours pre-election $([-12,0], [-10,0])$, with volatility substantially elevated in sectors like *IND*, *CONSTR*, and *PR*. In narrower windows closer to the event $([-3,0], [-1,0], [0,1])$, volatility diminished notably across most indices, indicating rapid market stabilization or investor reassessment post-event. Symmetrical windows $([-12,12], [-10,10])$ presented robust evidence of sustained market volatility spanning pre- and post-election periods, particularly for *IND* (86.49 in $[-12,12]$ GE14), *PR*, and *TE* indices, emphasizing persistent investor uncertainty or speculative behaviours.

Overall, cumulative abnormal volatility analysis underscores clear differences across election periods and sectors. GE14 emerges as the most volatile election, characterized by substantial volatility spikes across sectors, notably *IND*, *CONSTR*, and *TE*, reflecting significant market disruption or investor apprehension driven by political uncertainty. *IND*, being consistently volatile, highlights its acute sensitivity to political and economic uncertainties, further supported by large positive CAV during symmetrical windows. The *PR* index demonstrates substantial speculative volatility, whereas *PL* and occasionally *TE* sectors showed predominantly negative volatility, implying investor caution or pessimism. Meanwhile, FBMKLCI consistently exhibited moderate volatility, indicative of broad-market stability despite sector-specific disturbances. The variation between asymmetric and symmetric windows confirms heightened anticipatory volatility, which subsides rapidly following the resolution of uncertainty. Collectively, these findings underscore that market reactions and investor behaviour are markedly influenced by political events, sector-specific sensitivities, and the timing of informational clarity around elections.

Table 4.36: Event Study on Cumulative Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Asymmetric Window	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	0.08 [0.494]	1.43*** [0.000]	0.06*** [0.001]	-0.26 [0.489]	70.07*** [0.000]	-1.37*** [0.007]
[-10,0]	0.16 [0.141]	1.28*** [0.000]	0.05*** [0.004]	-0.34 [0.333]	63.62*** [0.000]	-1.20*** [0.010]
[-5,0]	0.18** [0.026]	0.73*** [0.000]	0.01 [0.262]	-0.22 [0.393]	41.31*** [0.000]	-0.67** [0.050]
[-3,0]	0.20*** [0.003]	0.50*** [0.000]	0.01 [0.348]	-0.13 [0.537]	30.01*** [0.000]	-0.41 [0.144]
[-1,0]	0.15*** [0.002]	0.26*** [0.000]	0.00 [0.600]	-0.04 [0.775]	16.48*** [0.000]	-0.19 [0.338]
[0,1]	-0.28*** [0.000]	0.28*** [0.000]	0.00 [0.551]	-0.71*** [0.000]	17.88*** [0.000]	-0.21 [0.284]
[0,3]	-0.49*** [0.000]	0.62*** [0.000]	0.01 [0.433]	-0.85*** [0.000]	28.37*** [0.000]	-0.41 [0.136]
[0,5]	-0.49*** [0.000]	1.01*** [0.000]	0.02 [0.192]	-0.54** [0.037]	29.27*** [0.000]	0.54 [0.116]
[0,10]	-0.62*** [0.000]	2.21*** [0.000]	0.03 [0.118]	-0.29 [0.405]	24.47*** [0.000]	1.99*** [0.000]
[0,12]	-0.80*** [0.000]	2.49*** [0.000]	0.03 [0.120]	-0.31 [0.410]	24.99*** [0.000]	2.26*** [0.000]
Symmetric Window						
[-12,12]	-0.88*** [0.000]	3.78*** [0.000]	0.09*** [0.001]	-0.58 [0.268]	86.49*** [0.000]	0.99 [0.155]
[-10,10]	-0.62*** [0.000]	3.35*** [0.000]	0.07*** [0.002]	-0.64 [0.187]	79.51*** [0.000]	0.89 [0.162]
[-5,5]	-0.48*** [0.000]	1.60*** [0.000]	0.03* [0.098]	-0.76** [0.029]	62.00*** [0.000]	-0.03 [0.940]
[-3,3]	-0.46*** [0.000]	0.99*** [0.000]	0.02 [0.256]	-0.99*** [0.000]	49.81*** [0.000]	-0.72* [0.050]
[-1,1]	-0.29*** [0.000]	0.41*** [0.000]	0.01 [0.509]	-0.76*** [0.000]	25.79*** [0.000]	-0.30 [0.214]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.37: Event Study on Cumulative Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Asymmetric Window	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	0.46 [0.420]	6.21*** [0.000]	0.57 [0.358]	-0.19 [0.405]	0.12 [0.888]	0.57 [0.358]
[-10,0]	0.01 [0.986]	5.65*** [0.000]	0.49 [0.390]	-0.10 [0.618]	0.29 [0.719]	0.49 [0.390]
[-5,0]	-0.34 [0.378]	3.74*** [0.000]	-0.12 [0.772]	-0.03 [0.856]	0.83 [0.163]	-0.12 [0.772]
[-3,0]	-0.30 [0.334]	2.73*** [0.000]	-0.30 [0.386]	0.02 [0.849]	0.84* [0.081]	-0.30 [0.386]
[-1,0]	-0.22 [0.332]	1.54*** [0.000]	-0.22 [0.365]	0.06 [0.475]	0.59* [0.084]	-0.22 [0.365]
[0,1]	2.17*** [0.000]	1.66*** [0.000]	-0.08 [0.728]	-0.41*** [0.000]	-0.24 [0.484]	-0.08 [0.728]
[0,3]	9.68*** [0.000]	2.35*** [0.000]	-0.06 [0.866]	-0.64*** [0.000]	-0.63 [0.191]	-0.06 [0.866]
[0,5]	13.60*** [0.000]	1.76*** [0.001]	1.73*** [0.000]	-0.59*** [0.000]	-0.90 [0.129]	1.73*** [0.000]
[0,10]	17.44*** [0.000]	-0.54 [0.450]	4.28*** [0.000]	-0.73*** [0.001]	-1.47* [0.067]	4.28*** [0.000]
[0,12]	18.40*** [0.000]	-1.01 [0.190]	4.73*** [0.000]	-0.79*** [0.001]	0.36 [0.675]	4.73*** [0.000]
Symmetric Window						
[-12,12]	19.08*** [0.000]	4.39*** [0.000]	5.42*** [0.000]	-1.04*** [0.001]	0.54 [0.657]	5.42*** [0.000]
[-10,10]	17.67*** [0.000]	4.31*** [0.000]	4.90*** [0.000]	-0.89*** [0.002]	-1.14 [0.304]	4.90*** [0.000]
[-5,5]	13.48*** [0.000]	4.70*** [0.000]	1.73*** [0.003]	-0.67*** [0.002]	-0.03 [0.974]	1.73*** [0.003]
[-3,3]	9.59*** [0.000]	4.28*** [0.000]	-0.23 [0.610]	-0.67*** [0.000]	0.26 [0.683]	-0.23 [0.610]
[-1,1]	2.17*** [0.000]	2.40*** [0.000]	-0.18 [0.544]	-0.41*** [0.000]	0.40 [0.337]	-0.18 [0.544]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.38: Event Study on Cumulative Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Asymmetric Window	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	-0.92 [0.413]	4.33*** [0.000]	-0.09 [0.644]	0.44 [0.527]	-0.61*** [0.000]	-10.72** [0.014]
[-10,0]	-0.38 [0.711]	3.21*** [0.001]	-0.13 [0.486]	0.50 [0.430]	-0.48*** [0.001]	-9.71** [0.015]
[-5,0]	-0.27 [0.722]	0.71 [0.321]	-0.15 [0.285]	0.27 [0.558]	-0.26** [0.011]	-6.38** [0.030]
[-3,0]	-0.41 [0.507]	0.24 [0.685]	-0.09 [0.414]	0.33 [0.383]	-0.18** [0.031]	-4.48* [0.063]
[-1,0]	-0.44 [0.315]	0.07 [0.867]	-0.05 [0.529]	0.30 [0.267]	-0.08 [0.179]	-2.32 [0.172]
[0,1]	1.40*** [0.002]	-0.15 [0.719]	-0.06 [0.431]	0.42 [0.118]	-0.08 [0.192]	-2.34 [0.167]
[0,3]	11.69*** [0.000]	-0.54 [0.353]	-0.14 [0.207]	0.54 [0.156]	-0.18** [0.031]	-4.75** [0.048]
[0,5]	14.75*** [0.000]	-1.14 [0.109]	0.35** [0.011]	0.93** [0.048]	-0.45*** [0.000]	-7.41** [0.012]
[0,10]	16.70*** [0.000]	-4.12*** [0.000]	0.83*** [0.000]	1.60** [0.012]	-1.55*** [0.000]	-13.14*** [0.001]
[0,12]	16.58*** [0.000]	-4.78*** [0.000]	0.87*** [0.000]	1.98*** [0.004]	-1.88*** [0.000]	-15.20*** [0.001]
Symmetric Window						
[-12,12]	16.07*** [0.000]	-0.43 [0.766]	0.80*** [0.005]	2.08** [0.031]	-2.45*** [0.000]	-24.74*** [0.000]
[-10,10]	16.73*** [0.000]	-0.89 [0.502]	0.73*** [0.005]	1.76** [0.046]	-1.99*** [0.000]	-21.67*** [0.000]
[-5,5]	14.90*** [0.000]	-0.42 [0.665]	0.23 [0.213]	0.86 [0.174]	-0.67*** [0.000]	-12.61*** [0.002]
[-3,3]	11.69*** [0.000]	-0.29 [0.710]	-0.21 [0.169]	0.54 [0.287]	-0.32*** [0.004]	-8.05** [0.012]
[-1,1]	1.37** [0.011]	-0.06 [0.905]	-0.08 [0.390]	0.38 [0.246]	-0.12 [0.106]	-3.48* [0.094]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.39: Event Study on Cumulative Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Asymmetric Window	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	35.52*** [0.000]	1.85*** [0.000]	-0.23 [0.641]	-5.87 [0.127]	25.83*** [0.001]	-10.48* [0.063]
[-10,0]	31.93*** [0.000]	1.43*** [0.001]	-0.21 [0.644]	-5.23 [0.139]	16.78** [0.018]	-7.61 [0.141]
[-5,0]	20.42*** [0.000]	0.57* [0.062]	-0.26 [0.429]	-3.01 [0.248]	0.83 [0.873]	-0.14 [0.971]
[-3,0]	14.52*** [0.000]	0.34 [0.167]	-0.23 [0.395]	-2.14 [0.314]	-0.85 [0.843]	-1.20 [0.701]
[-1,0]	7.78*** [0.000]	0.21 [0.227]	-0.14 [0.461]	-1.30 [0.386]	-0.62 [0.838]	-0.79 [0.718]
[0,1]	7.00*** [0.000]	0.11 [0.536]	-0.16 [0.402]	-3.23** [0.033]	-1.89 [0.531]	-1.20 [0.587]
[0,3]	12.28*** [0.000]	0.00 [0.991]	-0.33 [0.227]	-1.76 [0.408]	-3.09 [0.469]	-2.98 [0.338]
[0,5]	18.20*** [0.000]	-0.28 [0.361]	0.59* [0.079]	1.61 [0.538]	-4.07 [0.436]	0.05 [0.989]
[0,10]	34.09*** [0.000]	-1.51*** [0.000]	2.14*** [0.000]	8.23** [0.020]	-16.91** [0.018]	5.22 [0.312]
[0,12]	40.05*** [0.000]	-1.79*** [0.000]	2.39*** [0.000]	9.16** [0.018]	-21.90*** [0.005]	7.16 [0.202]
Symmetric Window						
[-12,12]	71.55*** [0.000]	-0.02 [0.978]	2.24*** [0.001]	4.11 [0.440]	4.56 [0.669]	-2.79 [0.720]
[-10,10]	62.00*** [0.000]	-0.16 [0.777]	2.01*** [0.002]	3.81 [0.434]	0.50 [0.959]	-1.87 [0.793]
[-5,5]	34.59*** [0.000]	0.21 [0.607]	0.40 [0.375]	-0.59 [0.866]	-2.60 [0.713]	0.44 [0.931]
[-3,3]	22.78*** [0.000]	0.27 [0.419]	-0.49 [0.180]	-3.09 [0.272]	-3.30 [0.558]	-3.65 [0.375]
[-1,1]	10.75*** [0.000]	0.24 [0.264]	-0.23 [0.337]	-3.72** [0.044]	-1.87 [0.613]	-1.46 [0.587]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

4.2.4.4 Interpretation of Cumulative Average Abnormal Volatility (CAAV) for All Indices during GE13 – GE15

Table 4.40 presents Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices using window [-12,12] with GARCH (1,1) as the volatility proxy. The results illustrate distinct volatility reactions across indices and event windows. The results illustrate distinct volatility reactions across indices and event windows. The *IND* index showed the highest levels of CAAV consistently across both symmetric and asymmetric windows. In the asymmetric windows, CAAV ranged notably high, peaking at 22.82 during [-12, 0], and similarly recording substantial values across other windows, suggesting that industrial stocks strongly and persistently react to market shocks around the event. The *PR* sector also exhibited pronounced volatility, notably high at 12.37 within [-12, 0] and remaining elevated across several windows, which indicates heightened investor sensitivity possibly driven by speculative interest or uncertainty regarding property-related policy impacts.

In contrast, the *PL* sector displayed predominantly negative CAAV values, such as -3.63 at [-12,0], consistently indicating reduced volatility or muted investor reactions. Similarly, the *FIN*, *CONS*, and *CONSTR* indices revealed moderate and positive volatility responses, implying balanced and moderate investor sentiment. *TE* despite its moderate volatility levels, exhibited significant negative volatility values in narrower windows like [-1,0] and [0,1], highlighting investor caution or pessimism around critical event dates. FBMKLCI demonstrated moderate but positive volatility across most windows, reflecting an overall stable market reaction.

When comparing symmetrical and asymmetrical windows, distinct patterns emerge. The asymmetric windows from [-12,0] consistently exhibited greater volatility values

compared to shorter windows like $[-5,0]$ or $[-3,0]$, suggesting investor anticipation and uncertainty leading into the event. In contrast, symmetrical windows provided insights into volatility dynamics surrounding the event, capturing both anticipatory and reactive phases. Here, windows $[-12,12]$ and $[-10,10]$ revealed higher volatility levels, particularly for *IND* and *PR* indices, suggesting persistent market uncertainty and investor recalibrations both before and after the event. Conversely, narrower symmetrical windows $[-3,3]$ and $[-1,1]$ showed notably lower CAAV values across sectors, indicating more limited volatility confined to immediate event dates, with quick normalization thereafter.

Across indices, volatility peaks prominently in wider windows, particularly for *IND* (28.97 in $[-12,12]$) and *PR* (24.60 in $[-12,12]$), emphasizing strong market reactions, extensive speculative behaviours, or substantial uncertainty associated with these sectors. Notably, troughs and negative values appeared more frequently in *PL* and occasionally in *TE*, reflecting either subdued reactions or investor pessimism around policy or informational clarity provided by the event. Fluctuations were prominent, particularly in *IND*, *PR*, and *TE*, emphasizing sector-specific market recalibrations due to perceived event implications.

Overall, the CAAV analysis emphasizes that market volatility responses are highly sector-specific and event-window sensitive. Industrial and Property sectors emerge as most reactive and volatile, reflecting significant investor repositioning and speculative behaviour. Conversely, Plantation sectors reflect consistently lower volatility and a more reserved investor sentiment. Symmetrical windows confirm volatility persistence and investor uncertainty across both pre- and post-event periods, whereas asymmetric windows underline anticipatory market reactions. These insights highlight the heterogeneous nature of volatility

across sectors, emphasizing investor differentiation based on industry sensitivity, policy implications, and market expectations.

Table 4.40: Event Study on Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with GARCH (1,1) as the Volatility Proxy

Asymmetric Window	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
[-12,0]	0.52*** [0.000]	22.82*** [0.000]	2.41*** [0.000]	0.17*** [0.006]	1.11*** [0.000]	-3.63*** [0.000]	12.37*** [0.000]	3.16*** [0.000]
[-10,0]	0.49*** [0.000]	20.70*** [0.000]	2.05*** [0.000]	0.22*** [0.000]	0.90*** [0.000]	-3.23*** [0.000]	11.04*** [0.000]	1.32** [0.023]
[-5,0]	0.31*** [0.000]	13.48*** [0.000]	1.09*** [0.000]	0.23*** [0.000]	0.10 [0.229]	-2.12*** [0.000]	6.90*** [0.000]	-0.77 [0.181]
[-3,0]	0.24*** [0.000]	9.83*** [0.000]	0.71*** [0.000]	0.19*** [0.002]	-0.09 [0.263]	-1.44*** [0.000]	4.87*** [0.000]	-1.39** [0.016]
[-1,0]	0.14*** [0.000]	5.42*** [0.000]	0.37*** [0.000]	0.15** [0.016]	-0.14* [0.078]	-0.70*** [0.003]	2.61*** [0.000]	-0.91 [0.118]
[0,1]	0.00 [0.766]	5.66*** [0.000]	1.25*** [0.000]	-0.25*** [0.000]	0.40*** [0.000]	-0.67*** [0.004]	2.31*** [0.000]	-2.11*** [0.000]
[0,3]	0.04*** [0.000]	9.04*** [0.000]	4.00*** [0.000]	-0.44*** [0.000]	3.67*** [0.000]	-1.46*** [0.000]	3.98*** [0.000]	-2.62*** [0.000]
[0,5]	0.18*** [0.000]	9.76*** [0.000]	5.70*** [0.000]	0.08 [0.180]	4.65*** [0.000]	-2.31*** [0.000]	6.17*** [0.000]	-0.80 [0.166]
[0,10]	0.54*** [0.000]	8.73*** [0.000]	7.07*** [0.000]	0.69*** [0.000]	4.47*** [0.000]	-4.37*** [0.000]	11.59*** [0.000]	-1.16** [0.046]
[0,12]	0.57*** [0.000]	8.98*** [0.000]	7.38*** [0.000]	1.43*** [0.000]	4.22*** [0.000]	-5.04*** [0.000]	13.57*** [0.000]	-1.86*** [0.001]
Symmetric Window								
[-12,12]	0.99*** [0.000]	28.97*** [0.000]	9.64*** [0.000]	1.64*** [0.000]	5.48*** [0.000]	-8.38*** [0.000]	24.60*** [0.000]	1.96*** [0.001]
[-10,10]	0.93*** [0.000]	26.60*** [0.000]	8.96*** [0.000]	0.95*** [0.000]	5.52*** [0.000]	-7.30*** [0.000]	21.29*** [0.000]	0.82 [0.157]
[-5,5]	0.39*** [0.000]	20.41*** [0.000]	6.64*** [0.000]	0.34*** [0.000]	4.90*** [0.000]	-4.14*** [0.000]	11.73*** [0.000]	-0.92 [0.113]
[-3,3]	0.18*** [0.000]	16.04*** [0.000]	4.56*** [0.000]	-0.21*** [0.000]	3.73*** [0.000]	-2.61*** [0.000]	7.51*** [0.000]	-3.35*** [0.000]
[-1,1]	0.04*** [0.000]	8.25*** [0.000]	1.47*** [0.000]	-0.06 [0.305]	0.41*** [0.000]	-1.07*** [0.000]	3.58*** [0.000]	-2.36*** [0.000]

Notes: This table represents cumulative average abnormal volatility (CAAV) results from volatility event study using GARCH (1,1) as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^4$ and p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.12 presents Cumulative Average Abnormal Volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using GARCH (1,1) as volatility proxy. The fluctuations reflect diverse market responses to events, likely indicating heterogeneous investor expectations and varying degrees of market sensitivity to political uncertainties.

Focusing first on sectoral indices, the *PR* and *TE* indices exhibited the most pronounced volatility movements. *PR* showed a dramatic spike from Day 0 onwards, climbing to the highest peak close to a volatility level of 0.70 by Day 10, indicating significant investor sensitivity and possibly speculative reactions post-event. Similarly, the Technology sector, after experiencing an initial stable period from day -12 to -4, surged remarkably between day -4 and day 4, peaking prominently before declining and subsequently rising again sharply after day 8. This behaviour underscores heightened market attention towards technology stocks, possibly reflecting the market's speculative repositioning or risk-taking sentiment triggered by uncertainty or policy anticipation around event dates.

The FBMKLCI, representing the broader market index, along with *FIN* and *PL* sectors, depicted more moderate volatility fluctuations. The FBMKLCI maintained relatively steady CAAV levels, peaking modestly around day -2 to day 0, then slightly declining before stabilizing. This pattern suggests a cautious yet confident market stance among investors in the broader index, responding more moderately to informational shocks or events. Meanwhile, the *FIN* and *PL* indices tracked similar trends, illustrating moderate peaks around day 0, suggesting a measured response possibly linked to investor perceptions about sector stability and resilience amid political events.

Conversely, the *CONSTR*, *CONS*, and *IND* indices exhibited lower overall volatility levels throughout most of the event window. However, noticeable volatility emerged around days -2 to 4. Particularly, *CONSTR* showed a distinctive trough at around day 2, reflecting reduced market uncertainty or diminished speculative interest, possibly due to clearer policy expectations emerging post-event. The *CONS* and *IND* indices displayed closely similar patterns, marked by gradual, steady increases towards the end of the window, indicating slowly building market anticipation or reactions following the initial event-driven uncertainty.

In summary, the CAAV trends across indices reveal significant heterogeneity in volatility responses. *PR* and *TE* indices represent sectors highly sensitive to market shocks, demonstrated by substantial volatility peaks and sharp fluctuations. In contrast, *FBMKLCI*, *FIN*, and *PL* sectors depict moderate and cautious market reactions, implying balanced investor sentiment toward market uncertainty. Finally, the *CONSTR*, *CONS*, and *IND* indices represent sectors with restrained volatility, marked by relatively lower peaks and more contained fluctuations. These varied patterns across sectors highlight investor differentiation based on industry characteristics, sector-specific expectations, and perceived impacts of political and informational events. Overall, the CAAV analysis demonstrates clear sectoral disparities in investor sentiment and market dynamics in response to political event windows.

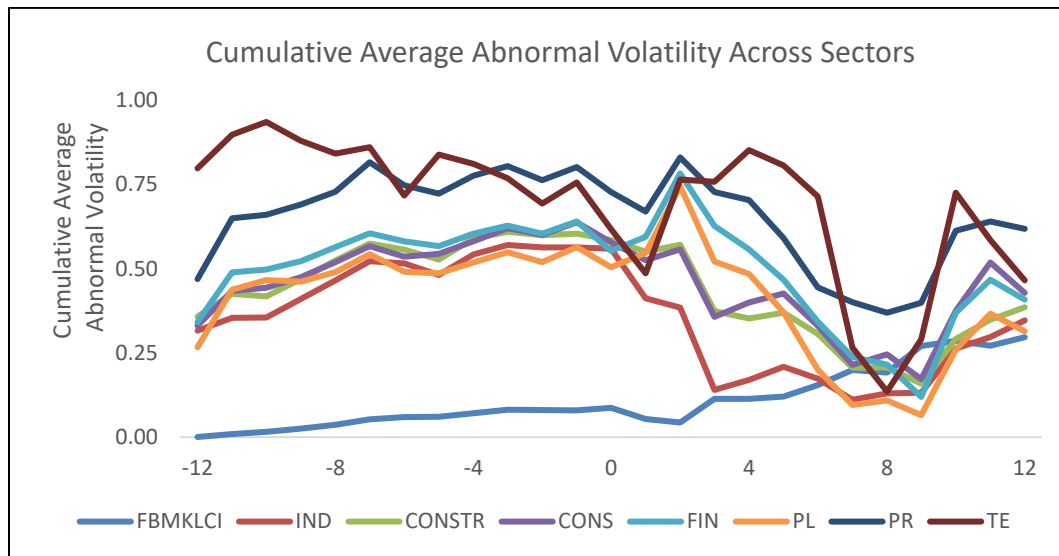


Figure 4.12: Cumulative Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using GARCH (1,1) as Volatility proxy

4.2.5 Squared Return Based Volatility Event Study

4.2.5.1 Interpretation of Abnormal Volatility (AV) for All Indices during GE13 – GE15.

Table 4.41 – 4.44 presents abnormal volatility for all indices across elections using window [-12,12] with squared return as the volatility proxy. Of all the elections, GE15 has the most pronounced abnormal volatility with the most significance values across indices. It is reported that TE index demonstrated persistent and highly significant negative AV from Day -12 (-18.96) through Day 10 (-11.94). This suggests uncertainty leading up to and following the election. Meanwhile, the significant AV is more sector-specific and less widespread during GE14 and this can be evident from *CONSTR* and *FIN* indices with significant surge AV values of 21.89 and 25.82 points on Day 0, respectively. All statistically significant at 10% level. GE13 exhibited more moderate abnormal volatility, despite significance was found in *FIN* index with AV of 4.85 points on Day 0, suggesting that they were not as intense as in GE14 or GE15 although market reactions were present.

For cross sector analysis, TE index registered the most significant figure in terms of abnormal volatility with nearly every day in the event window. The AV values are mostly negative, suggesting sell-off pressure. GE15 was particularly turbulent than it normally did for this sector, with AV dropping to -18.96 (Day -12) and -23.04 (Day 9). A sharp AV spikes is reported in *CONSTR* index on Day 0 with 21.89 points (GE13) and Day 2 with 167 points (GE14). This pattern indicating investor expectations for government spending on infrastructure post-election. The *PR* index had a strong reaction in GE13, especially on Day 0 (25.82) and Day 5 (12.27), reflecting confidence in anticipated monetary policy or financial reform following the elections. However, GE13 had only modest or statistically insignificant results. The *PL* index exhibited mostly negative AV across all elections, with only significant on certain days: Day 0 (-13.11) in GE13, Day 9 (-5.35) in GE14 and Day 3

(-19.80) in GE15. All are statistically significant at least at 5% level. The *CONS* index appeared muted in response to the elections and few significant AVs seem scattered around post-election with 4.53 points on Day 7 in GE15 and -1.52 points on Day 9 in GE14, which likely reflects a delayed consumer confidence response to the election outcome. Similarly, FBMKLCI is also experienced calm market with significant AVs in certain days of the window. For instance, GE14 was notable for its significant AV on Day -6 (0.39) and Day 10 (0.69), signaling a lagging but visible market reaction.

In summary, GE15 was marked by suppressed market reactions despite political intense during that period, when using squared return as volatility proxy. This followed by GE14 and lastly is GE13, which exhibited relatively few significant AVs in overall. The *TE* index had the most persistent and severe negative AV, while *CONSTR* and *FIN* indices experienced sharp positive AV spikes, suggesting speculative surges driven by policy expectations. Across the windows [-12,12] period, it is noticeable that the active period is hovering around Days 0 to 5, with significant AV in certain indices. For instance, *CONSTR* and *PR* indices has peaked at 21.89 and 25.82 points, respectively, suggesting strong investor reactions. In contrast, there are several negative and significant AVs were spotted including *TE* (-57.82 on Day 0), *IND* (-12.07 on Day 3) and *CONS* (-2.59 on Day 0) in each election. Based on the AV trend, the indices mostly registered negative AV figures and appeared more pronounced particularly in GE15 when using squared return as volatility proxy in overall.

Table 4.41: Event Study on Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Day	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.03 [0.894]	0.05 [0.816]	1.65*** [0.000]	-0.25 [0.807]	0.57 [0.570]	-2.73*** [0.007]
-11	-0.05 [0.815]	-0.20 [0.400]	0.49** [0.036]	-0.24 [0.810]	0.37 [0.714]	-1.13 [0.264]
-10	-0.06 [0.803]	-0.13 [0.570]	-0.04 [0.875]	-0.21 [0.839]	0.23 [0.818]	-0.25 [0.805]
-9	-0.02 [0.929]	-0.08 [0.725]	-0.07 [0.758]	-0.29 [0.773]	-0.80 [0.427]	-0.13 [0.895]
-8	0.03 [0.901]	-0.01 [0.965]	-0.02 [0.929]	-0.14 [0.887]	-0.29 [0.771]	-0.22 [0.827]
-7	-0.05 [0.846]	-0.05 [0.835]	0.00 [0.995]	-0.25 [0.805]	-0.25 [0.806]	-0.20 [0.844]
-6	-0.02 [0.929]	0.39* [0.096]	-0.09 [0.684]	-0.33 [0.741]	-1.08 [0.287]	4.14*** [0.000]
-5	-0.06 [0.789]	-0.07 [0.753]	0.00 [0.993]	-0.31 [0.755]	-0.24 [0.809]	-0.28 [0.778]
-4	0.14 [0.540]	0.13 [0.583]	0.31 [0.178]	-0.45 [0.657]	-0.40 [0.691]	-0.94 [0.353]
-3	-0.05 [0.835]	-0.07 [0.777]	-0.06 [0.798]	-0.25 [0.806]	-0.76 [0.451]	-0.30 [0.768]
-2	-0.05 [0.836]	0.06 [0.800]	-0.06 [0.785]	-0.34 [0.735]	-1.29 [0.201]	-0.27 [0.789]
-1	0.44* [0.061]	-0.05 [0.835]	-0.05 [0.835]	-0.62 [0.537]	-0.25 [0.806]	-0.25 [0.806]
0	0.26 [0.258]	-0.05 [0.835]	-0.04 [0.860]	-12.62*** [0.000]	-0.25 [0.806]	-0.22 [0.828]
1	-0.24 [0.308]	-0.05 [0.835]	0.10 [0.654]	-2.94*** [0.004]	-0.25 [0.806]	-0.34 [0.735]
2	-0.06 [0.784]	0.00 [0.985]	-0.05 [0.818]	-0.05 [0.958]	5.03*** [0.000]	0.03 [0.980]
3	0.15 [0.530]	-0.04 [0.864]	3.60*** [0.000]	-0.24 [0.816]	0.32 [0.751]	-12.07*** [0.000]
4	-0.23 [0.318]	0.00 [0.988]	0.38* [0.100]	1.38 [0.173]	-0.64 [0.523]	-1.18 [0.244]
5	-0.42* [0.068]	-0.16 [0.484]	-0.05 [0.835]	-0.38 [0.710]	-0.41 [0.688]	-0.25 [0.806]
6	-0.05 [0.829]	-0.10 [0.681]	0.29 [0.212]	-0.10 [0.921]	0.40 [0.693]	3.79*** [0.000]
7	0.04 [0.855]	-0.06 [0.795]	0.00 [0.992]	1.15 [0.255]	-0.27 [0.788]	-1.17 [0.246]
8	0.19 [0.416]	0.10 [0.664]	-0.29 [0.220]	-1.19 [0.240]	1.38 [0.172]	-0.01 [0.991]
9	-0.08 [0.727]	1.33*** [0.000]	0.25 [0.277]	-0.05 [0.963]	-4.76*** [0.000]	0.16 [0.876]
10	-0.44* [0.057]	0.69*** [0.003]	0.11 [0.646]	-0.45 [0.657]	-2.90*** [0.004]	-0.74 [0.466]
11	-0.03 [0.881]	0.31 [0.187]	-0.05 [0.832]	-0.64 [0.526]	-1.98* [0.050]	0.19 [0.848]
12	-0.07 [0.762]	0.59** [0.011]	-0.06 [0.790]	-0.11 [0.917]	-1.36 [0.178]	0.16 [0.876]

Notes: This table represents abnormal volatility (AV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.42: Event Study on Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Day	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.04 [0.983]	-0.85 [0.673]	-5.74*** [0.005]	-0.21 [0.755]	-0.38 [0.569]	0.39 [0.564]
-11	-0.16 [0.937]	-0.64 [0.750]	-2.08 [0.303]	-0.05 [0.937]	0.91 [0.175]	1.08 [0.108]
-10	0.41 [0.839]	2.52 [0.212]	-0.07 [0.974]	0.02 [0.981]	-0.17 [0.800]	-0.09 [0.891]
-9	0.24 [0.906]	-0.90 [0.657]	0.62 [0.758]	-0.24 [0.718]	-0.23 [0.737]	0.28 [0.676]
-8	-0.30 [0.880]	5.43*** [0.007]	-0.33 [0.870]	-0.10 [0.883]	-0.24 [0.725]	-0.22 [0.748]
-7	-0.16 [0.936]	-0.18 [0.928]	-0.20 [0.920]	-0.12 [0.861]	-0.18 [0.793]	-0.18 [0.790]
-6	-0.23 [0.908]	3.44* [0.088]	-3.41* [0.091]	-0.20 [0.769]	0.53 [0.432]	0.66 [0.328]
-5	0.28 [0.891]	-0.21 [0.917]	-0.20 [0.919]	-0.18 [0.785]	-0.11 [0.873]	-0.19 [0.772]
-4	-0.42 [0.835]	-0.44 [0.828]	-1.20 [0.553]	-0.08 [0.908]	-0.01 [0.986]	-0.42 [0.530]
-3	-0.18 [0.928]	-0.17 [0.934]	2.35 [0.245]	-0.18 [0.793]	-0.15 [0.819]	-0.14 [0.830]
-2	0.33 [0.871]	-0.58 [0.774]	-0.22 [0.913]	-0.03 [0.968]	-0.42 [0.532]	-0.17 [0.806]
-1	-1.75 [0.386]	-0.18 [0.928]	-0.18 [0.928]	0.30 [0.657]	-0.18 [0.793]	-0.18 [0.793]
0	21.89*** [0.000]	-0.18 [0.928]	-0.19 [0.926]	-2.59*** [0.000]	-0.18 [0.793]	1.21* [0.072]
1	10.42*** [0.000]	-0.18 [0.928]	-0.31 [0.878]	-0.99 [0.143]	-0.18 [0.793]	0.28 [0.680]
2	1.66 [0.412]	167.00*** [0.000]	1.50 [0.458]	-0.19 [0.780]	23.68*** [0.000]	-0.19 [0.778]
3	0.60 [0.768]	1.06 [0.601]	-1.89 [0.349]	-0.07 [0.916]	-0.16 [0.815]	1.67** [0.013]
4	6.52*** [0.001]	-0.75 [0.710]	0.04 [0.983]	0.48 [0.471]	1.17* [0.082]	0.58 [0.392]
5	1.55 [0.441]	15.85*** [0.000]	-0.18 [0.928]	-0.21 [0.757]	0.18 [0.786]	-0.18 [0.793]
6	0.38 [0.852]	17.02*** [0.000]	-0.29 [0.885]	0.28 [0.682]	0.98 [0.146]	-0.10 [0.882]
7	0.68 [0.736]	-0.21 [0.918]	0.19 [0.925]	0.09 [0.890]	0.98 [0.144]	4.53*** [0.000]
8	-0.90 [0.654]	2.07 [0.305]	-0.01 [0.995]	-0.54 [0.421]	-0.14 [0.834]	-0.27 [0.691]
9	0.22 [0.912]	-6.36*** [0.002]	-0.35 [0.863]	-0.21 [0.757]	-1.52** [0.024]	-0.23 [0.737]
10	3.14 [0.120]	-2.86 [0.157]	-0.83 [0.680]	-0.09 [0.892]	-0.62 [0.359]	0.28 [0.672]
11	0.26 [0.896]	-1.63 [0.418]	-0.18 [0.928]	-0.22 [0.743]	-0.83 [0.220]	-0.13 [0.845]
12	0.86 [0.670]	-0.60 [0.765]	0.60 [0.766]	0.09 [0.893]	-0.65 [0.337]	-0.12 [0.857]

Notes: This table represents abnormal volatility (AV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.43: Event Study on Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Day	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.10 [0.862]	-0.26 [0.646]	-0.20 [0.716]	-0.57 [0.829]	-1.34 [0.612]	-1.96 [0.461]
-11	0.02 [0.967]	-0.21 [0.711]	-1.04* [0.063]	-0.39 [0.883]	-1.34 [0.613]	0.24 [0.927]
-10	-0.02 [0.977]	-0.07 [0.899]	-0.11 [0.847]	-0.42 [0.874]	-0.66 [0.804]	-0.64 [0.810]
-9	-0.03 [0.961]	-0.36 [0.522]	0.06 [0.918]	-0.36 [0.893]	-1.13 [0.669]	-0.57 [0.830]
-8	-0.07 [0.896]	0.07 [0.894]	0.24 [0.663]	0.55 [0.836]	-0.70 [0.792]	-0.63 [0.811]
-7	0.16 [0.780]	-0.05 [0.925]	0.10 [0.855]	-0.32 [0.904]	-0.55 [0.836]	-0.50 [0.852]
-6	0.00 [0.997]	0.39 [0.484]	-1.67*** [0.003]	-0.63 [0.812]	-1.06 [0.688]	-2.00 [0.451]
-5	0.09 [0.871]	-0.03 [0.952]	0.07 [0.904]	-0.23 [0.931]	-0.56 [0.832]	-0.60 [0.820]
-4	0.03 [0.953]	0.99* [0.076]	-0.01 [0.983]	-0.24 [0.927]	-0.69 [0.795]	-1.11 [0.676]
-3	-0.05 [0.925]	0.14 [0.797]	0.17 [0.754]	-0.55 [0.836]	-0.76 [0.775]	-0.42 [0.873]
-2	-0.03 [0.954]	1.85*** [0.001]	0.22 [0.696]	-0.43 [0.872]	-1.90 [0.473]	-0.48 [0.857]
-1	-0.44 [0.432]	-0.05 [0.925]	-0.05 [0.925]	0.32 [0.903]	-0.55 [0.836]	-0.55 [0.836]
0	4.85*** [0.000]	-0.05 [0.925]	-0.01 [0.979]	-13.11*** [0.000]	-0.55 [0.836]	-0.20 [0.941]
1	3.01*** [0.000]	-0.05 [0.925]	-0.06 [0.911]	-3.14 [0.237]	-0.55 [0.836]	-0.64 [0.810]
2	-0.02 [0.965]	0.25 [0.648]	-0.08 [0.886]	-0.60 [0.821]	-0.04 [0.989]	-0.46 [0.864]
3	0.87 [0.118]	-0.05 [0.923]	1.12** [0.045]	0.93 [0.727]	0.52 [0.845]	-19.80*** [0.000]
4	-0.26 [0.644]	0.60 [0.286]	-0.49 [0.376]	-0.85 [0.748]	-0.84 [0.752]	-1.32 [0.620]
5	0.43 [0.443]	-0.12 [0.834]	-0.05 [0.925]	-2.28 [0.391]	0.14 [0.959]	-0.55 [0.836]
6	0.06 [0.919]	-0.10 [0.862]	-0.04 [0.945]	-0.15 [0.954]	-0.59 [0.823]	-0.65 [0.807]
7	-0.03 [0.954]	-0.01 [0.985]	-0.61 [0.272]	-0.07 [0.978]	-0.36 [0.892]	-0.09 [0.973]
8	0.13 [0.815]	0.04 [0.936]	-0.20 [0.715]	1.43 [0.590]	-0.59 [0.823]	0.97 [0.714]
9	0.02 [0.966]	-0.87 [0.119]	0.35 [0.524]	-0.39 [0.884]	-5.35** [0.044]	-0.70 [0.792]
10	-0.35 [0.530]	3.62*** [0.000]	-0.37 [0.506]	-0.73 [0.782]	-2.94 [0.268]	-0.39 [0.882]
11	0.17 [0.759]	-0.40 [0.474]	-0.05 [0.926]	0.09 [0.974]	-2.28 [0.389]	-0.38 [0.886]
12	-0.01 [0.979]	-0.20 [0.721]	-0.09 [0.868]	-0.39 [0.883]	-1.77 [0.505]	-0.72 [0.785]

Notes: This table represents abnormal volatility (AV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.44: Event Study on Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Day	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
-12	-0.02 [0.978]	-0.75 [0.384]	-3.52*** [0.000]	-0.96*** [0.851]	-0.93*** [0.856]	-18.96*** [0.000]
-11	0.04 [0.967]	-0.84 [0.327]	-1.50* [0.081]	-0.86*** [0.866]	7.48*** [0.145]	-6.80*** [0.185]
-10	1.01 [0.242]	0.72 [0.401]	1.89** [0.028]	-0.89*** [0.862]	-1.47*** [0.774]	-1.25*** [0.807]
-9	0.19 [0.826]	-0.59 [0.496]	0.20 [0.815]	-1.16*** [0.821]	-2.67*** [0.603]	-0.69*** [0.894]
-8	-0.18 [0.830]	1.39 [0.106]	0.15 [0.857]	-1.50*** [0.769]	-0.48*** [0.925]	-1.47*** [0.774]
-7	-0.10 [0.907]	-0.10 [0.903]	-0.07 [0.938]	-0.88*** [0.864]	-0.94*** [0.854]	0.36*** [0.945]
-6	0.01 [0.988]	-0.32 [0.709]	-1.87** [0.031]	-1.11*** [0.828]	-2.77*** [0.588]	17.00*** [0.001]
-5	-0.03 [0.969]	0.61 [0.475]	-0.01 [0.989]	-0.79*** [0.877]	0.68*** [0.895]	-1.11*** [0.829]
-4	0.77 [0.371]	-0.26 [0.767]	-0.62 [0.470]	-1.28*** [0.802]	-0.96*** [0.851]	-2.83*** [0.580]
-3	-0.10 [0.903]	0.37 [0.670]	-0.04 [0.967]	-0.94*** [0.854]	-2.65*** [0.605]	-1.14*** [0.823]
-2	-0.17 [0.845]	0.52 [0.544]	-0.11 [0.900]	-1.31*** [0.799]	-1.31*** [0.798]	3.38*** [0.510]
-1	-0.86 [0.318]	-0.10 [0.903]	-0.10 [0.903]	-5.01*** [0.329]	-0.94*** [0.854]	-0.94*** [0.854]
0	25.82*** [0.000]	-0.10 [0.903]	-0.07 [0.933]	-57.82*** [0.000]	-0.94*** [0.854]	-0.25*** [0.961]
1	13.39*** [0.000]	-0.10 [0.903]	-0.04 [0.967]	-10.14*** [0.048]	-0.94*** [0.854]	-1.32*** [0.797]
2	1.43* [0.098]	-0.03 [0.974]	0.10 [0.906]	1.87*** [0.716]	30.17*** [0.000]	-0.57*** [0.912]
3	0.82 [0.340]	0.09 [0.919]	-3.94*** [0.000]	1.35*** [0.793]	0.81*** [0.875]	-37.03*** [0.000]
4	1.63* [0.058]	0.19 [0.828]	-0.32 [0.712]	9.96*** [0.052]	-2.45*** [0.632]	-2.50*** [0.625]
5	12.27*** [0.000]	0.15 [0.863]	-0.10 [0.903]	9.39*** [0.068]	-1.53*** [0.765]	-0.94*** [0.854]
6	0.28 [0.743]	0.83 [0.334]	3.58*** [0.000]	-0.74*** [0.885]	-1.23*** [0.810]	-1.41*** [0.784]
7	0.48 [0.576]	-0.02 [0.979]	-0.63 [0.461]	0.60*** [0.907]	0.77*** [0.880]	-4.32*** [0.400]
8	-0.54 [0.530]	-0.16 [0.853]	0.43 [0.617]	-4.57*** [0.373]	2.80*** [0.585]	39.89*** [0.000]
9	2.91*** [0.001]	-4.11*** [0.000]	-0.25 [0.770]	7.29*** [0.155]	-23.04*** [0.000]	-1.53*** [0.765]
10	26.53*** [0.000]	-1.56* [0.070]	-0.49 [0.573]	-2.00*** [0.696]	-11.94*** [0.020]	-1.22*** [0.812]
11	-0.34 [0.693]	-1.23 [0.153]	-0.06 [0.945]	-0.99*** [0.847]	-7.54*** [0.142]	-0.92*** [0.858]
12	2.92*** [0.001]	-1.01 [0.243]	0.66 [0.443]	-0.80*** [0.877]	-5.59*** [0.275]	0.13*** [0.980]

Notes: This table represents abnormal volatility (AV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.13 presents Abnormal Volatility trend path of FBMKLCI and sectoral indices across elections (GE13-GE15) using squared return as volatility proxy. The abnormal volatility (AV) trend varies significantly across the three elections. It can be observed that GE14 has the most intense and widespread reactions across several indices, particularly with dramatic spikes around Days 0 to 4. For instance, a sharp increase in AV trend is recorded in *CONSTR*, *CONS* and *FIN* indices, reflecting heightened investor uncertainty which involved a regime change. As for GE15, it has more mixed results. Indices such as *TE* and *PR* indices have the market participant sentiment lingering around pre- and post-election as both indices portrayed sharp fluctuations. Additionally, this election effect is more concentrated on certain indices as compared to GE14. On the contrary, GE13 reported as the most and stable volatility pattern. Most indices remain close to the baseline with minor deviations, indicating that markets anticipated the outcome and responded with limited surprise as ruling party secure another term in the office. The absence of significant movements suggests the perception of continuity in governance and policy direction.

From the perspective of cross sector analysis, *CONSTR* index demonstrated significant upward trend at nearly 170 points on Day 3 during GE14. Similarly, *TE* index also possessed extreme fluctuation during GE13 and GE15 as the index dipped below -60 points around Days -1 to 0, followed by strong rebounds post-election. Another index known as *PL* index also show negative AV, where the index dipped below -20 points which occurred around Days 0 to 3 during GE13 and GE15. Both *FIN* and *CONS* indices demonstrated an upward AV trend post-election with significant positive AV surge nearly 5 (Day 0) and 20 points (Days 2 to 3) during GE14, respectively. The election effect has extended to *PR* index where a significant surge was recorded at more than 25 points around Days 0 to 10 during GE13 and GE15. Likewise, *IND* index was no exception when the AV trend fell below -12

points on event day (Day 0) during GE15. For main market, FBMKLCI display a stable market, with minor surges during GE14 and GE15. The most notable peak hit 3.5 points which occurred during GE15, around Day 4, reflecting general market adjustment without extreme reaction.

In summary, AV trend path demonstrated that indices with the most pronounced peaks includes *CONSTR* (GE14, Day 3: 170 points), *CONS* (GE14, Day 3: 25 points), and *PR* (GE13, Days 1 & 10: 25 points), whereas *TE* (GE13 & GE15, Day 0: -60 to -70 points), *PL* (GE15, Days 2 & 3: -25 points), and *IND* (GE15, Day 0: -12 points) have the deepest troughs across elections. Notably, most indices reacted more strongly following the election particularly around Days -2 to 5 as this period considered the densest fluctuation period as compared to other days in the window. These patterns confirm that election events significantly influence market behaviour, with the extent and direction of AV depending on sectoral sensitivity, political uncertainty, and investor expectations.

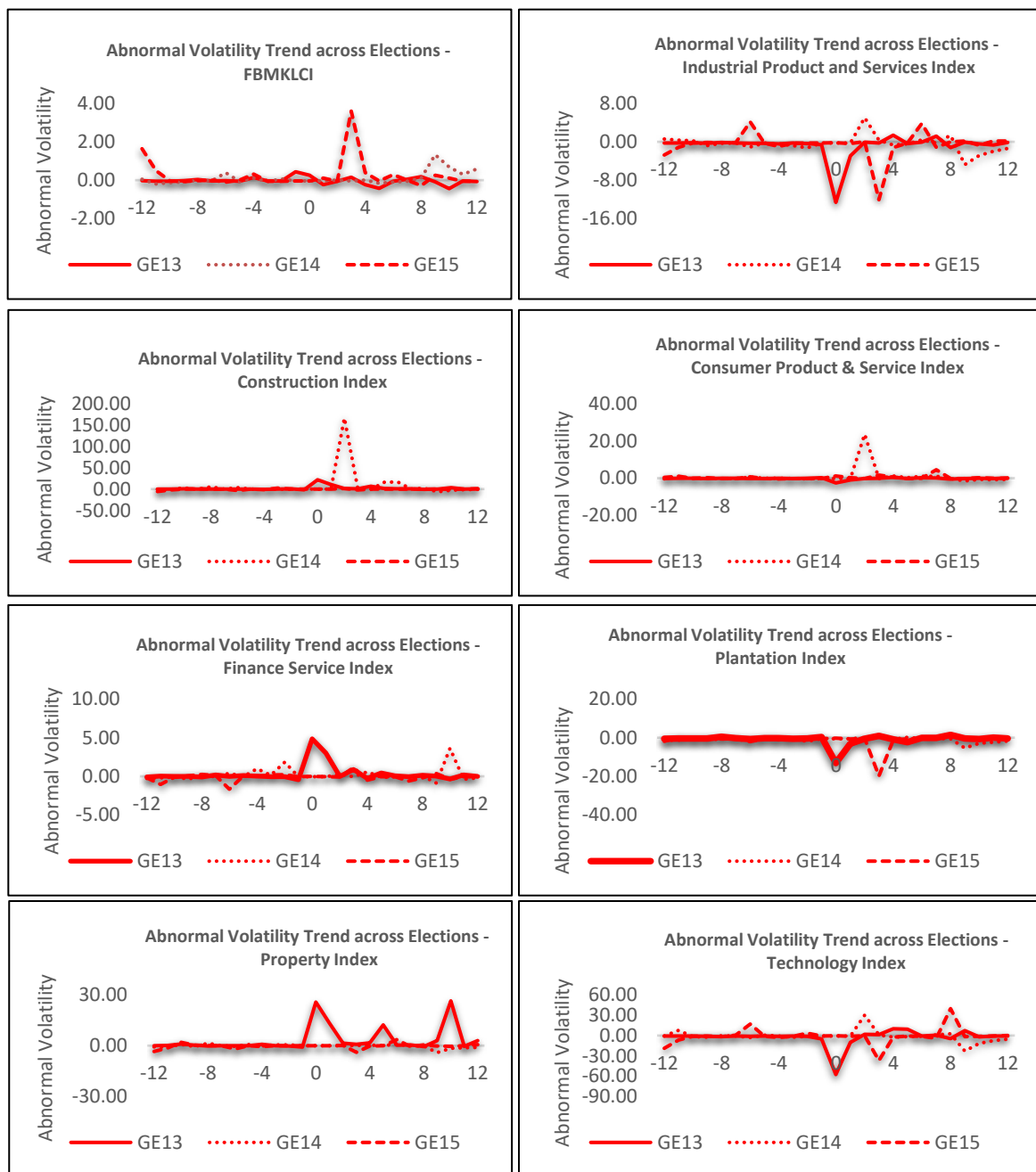


Figure 4.13: Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices across elections (GE13-GE15) using Squared Return as Volatility Proxy

4.2.5.2 Interpretation of Average Abnormal Volatility (AAV) for All Indices during GE13 – GE15.

Table 4.45 presents on average abnormal volatility for FBMKLCI and sectoral indices using window [-12,12] with squared return as the volatility proxy. Based on the AAV, TE index has the most dramatic and persistent volatility behaviour as the index registered a major contraction with AV value of -19.37 points on Day 0, followed by a rebound on Day 8 which is 12.70 points, suggesting delayed investor response post-election. Additionally, the index recorded multiple significant movements across the window including Day -1 (-2.30), Day 2 (10.07) and Day 3 (6.44), marking it as one of the most sensitive sectors to electoral uncertainty and revaluation. Similarly, PR index also shows multiple days of significant abnormal volatility. The index seems to increase in an upward trend nearly at 8.55 points on Day 0 and spiked again to 8.16 points in Day 10. Smaller and consistent movements were also recorded across the windows, despite being less reactive.

The *PL* index showed strong and mostly positive abnormal volatility. For instance, the index has recorded 1.59 points on Day 0 and continue to surge on Day 6 nearly at 1.56 points. In a similar pattern, *FIN* index reported significant spikes on Day 0 and Day 10 with AAV value of 1.59 and 0.97 points, respectively. The election effect has extended to *CONSTR* index extreme AAV surge as much as 7.77 points on Day 1 and continue to be significant until Day 5 with 5.74 points. On the contrary, *IND* index showed some of the most pronounced negative AAV, particularly on Day 0 (-4.36) and Day 1 (-4.00). The index later rebounded, showing significance on Day 3 (1.24), indicating post-election recovery. The *CONS* index, however, recorded significance only on Day 1 (7.77) and Day 7 (1.87). Lastly, the FBMKLCI presented a minor but statistically significant AV only on Day 0

(0.06). This suggests that while sector-specific volatility was prominent, the overall market reaction was comparatively moderate and less pronounced.

In summary, the AAV results reveal significant election-induced volatility, particularly in *TE*, *PR*, and *CONSTR* indices. The peak AAV was observed in *CONSTR* on Day 1 (7.77) and *TE* on Day 0 (-19.67), while *PR* and *PL* experienced surges at later points, indicating staggered reactions. Notably, Days 0 to 3 considered as the most significant responses across indices, suggesting immediate post-election pricing adjustments. Meanwhile, sustained reactions through Day 5 to Day 10 to sector-specific realignments based on perceived policy directions. Overall, AAV using squared return highlights how different sectors absorb and react to political uncertainty asymmetrically in both timing and magnitude.

Table 4.45: Event Study on Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Squared Return as the Volatility Proxy

Day	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
-12	0.56 [0.303]	-0.80 [0.303]	-2.21 [0.198]	-0.07 [0.876]	-0.19 [0.623]	-1.29 [0.487]	-1.43 [0.102]	-6.95 [0.143]
-11	0.08 [0.624]	-0.33 [0.624]	-0.96 [0.496]	0.65 [0.237]	-0.41 [0.333]	-0.50 [0.776]	-0.77 [0.261]	-0.06 [0.985]
-10	-0.08 [0.910]	-0.07 [0.910]	0.95 [0.498]	-0.08 [0.852]	-0.06 [0.859]	-0.57 [0.744]	1.21 [0.135]	-1.20 [0.723]
-9	-0.06 [0.555]	-0.41 [0.555]	-0.01 [0.993]	-0.06 [0.886]	-0.11 [0.767]	-0.69 [0.697]	-0.07 [0.908]	-1.50 [0.661]
-8	0.00 [0.742]	-0.22 [0.742]	1.60 [0.303]	-0.18 [0.682]	0.08 [0.824]	-0.26 [0.880]	0.46 [0.456]	-1.15 [0.734]
-7	-0.03 [0.728]	-0.23 [0.728]	-0.18 [0.890]	-0.16 [0.723]	0.07 [0.851]	-0.46 [0.794]	-0.09 [0.872]	-0.49 [0.884]
-6	0.09 [0.259]	0.91 [0.259]	-0.07 [0.960]	0.33 [0.485]	-0.43 [0.315]	-1.23 [0.505]	-0.73 [0.282]	4.37 [0.277]
-5	-0.05 [0.677]	-0.28 [0.677]	-0.05 [0.972]	-0.16 [0.716]	0.04 [0.909]	-0.47 [0.790]	0.19 [0.739]	-0.41 [0.903]
-4	0.19 [0.414]	-0.60 [0.414]	-0.69 [0.616]	-0.17 [0.702]	0.34 [0.405]	-0.68 [0.700]	-0.04 [0.949]	-1.69 [0.624]
-3	-0.06 [0.532]	-0.44 [0.532]	0.67 [0.625]	-0.16 [0.722]	0.09 [0.808]	-0.58 [0.742]	0.08 [0.893]	-1.58 [0.646]
-2	-0.02 [0.389]	-0.64 [0.389]	-0.16 [0.905]	-0.20 [0.651]	0.68 [0.169]	-0.94 [0.602]	0.08 [0.884]	0.25 [0.939]
-1	0.11 [0.587]	-0.37 [0.587]	-0.71 [0.606]	-0.02 [0.966]	-0.18 [0.630]	-0.26 [0.881]	-0.36 [0.547]	-2.30 [0.519]
0	0.06** [0.017]	-4.36** [0.017]	7.17** [0.025]	-0.52 [0.313]	1.59** [0.038]	-4.62* [0.094]	8.55*** [0.003]	-19.67** [0.022]
1	-0.06 [0.181]	-1.18 [0.181]	3.31 [0.105]	-0.30 [0.526]	0.97* [0.095]	-1.44 [0.445]	4.42** [0.012]	-4.13 [0.297]
2	-0.04 [0.103]	1.67 [0.103]	56.72*** [0.000]	7.77*** [0.002]	0.05 [0.891]	-0.36 [0.834]	0.50 [0.420]	10.49* [0.071]
3	1.24** [0.021]	-4.00** [0.021]	-0.08 [0.952]	0.48 [0.340]	0.65 [0.182]	-6.12* [0.057]	-1.01 [0.179]	-11.63* [0.059]
4	0.05 [0.822]	-0.15 [0.822]	1.94 [0.238]	0.74 [0.195]	-0.05 [0.886]	-1.00 [0.580]	0.50 [0.419]	1.67 [0.629]
5	-0.21 [0.615]	-0.34 [0.615]	5.74** [0.039]	-0.07 [0.878]	0.09 [0.813]	-0.90 [0.617]	4.10** [0.014]	2.31 [0.517]
6	0.05 [0.144]	1.36 [0.144]	5.70** [0.039]	0.39 [0.425]	-0.03 [0.943]	-0.46 [0.790]	1.56* [0.088]	-1.13 [0.739]
7	-0.01 [0.882]	-0.10 [0.882]	0.22 [0.867]	1.87** [0.040]	-0.22 [0.567]	-0.18 [0.919]	-0.06 [0.917]	-0.98 [0.771]
8	0.00 [0.927]	0.06 [0.927]	0.39 [0.772]	-0.32 [0.500]	-0.01 [0.980]	0.60 [0.731]	-0.09 [0.872]	12.70* [0.050]
9	0.50 [0.117]	-1.55 [0.117]	-2.16 [0.204]	-0.65 [0.235]	-0.16 [0.661]	-2.15 [0.296]	-0.49 [0.430]	-5.76 [0.191]
10	0.12 [0.145]	-1.36 [0.145]	-0.19 [0.889]	-0.14 [0.751]	0.97* [0.095]	-1.36 [0.469]	8.16*** [0.004]	-5.05 [0.229]
11	0.07 [0.299]	-0.81 [0.299]	-0.52 [0.700]	-0.39 [0.417]	-0.09 [0.799]	-0.86 [0.631]	-0.54 [0.387]	-3.15 [0.398]
12	0.15 [0.532]	-0.44 [0.532]	0.29 [0.829]	-0.23 [0.619]	-0.10 [0.781]	-0.96 [0.594]	0.86 [0.226]	-2.09 [0.553]

Notes: This table represents average abnormal volatility (AAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.14 presents Average Abnormal Volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using squared return as volatility proxy. The AAV trend analysis illustrated that *CONSTR* index displays the sharpest and most prominent spike among all indices. The index is reportedly peak nearly to 60 points around Day 1, making it the most reactive sector to the election event. However, it is acknowledged that the inverted V-shaped AAV trend is surrounded by a steady movement before and after the election, suggesting a concentrated market reaction to the confirmation of election results.

The *TE* index demonstrates significant negative volatility right around Day 0, reaching a trough of approximately -20 points. Following that, the index shows subsequent recovery in the post-event window, including a spike around Day 8, indicating speculative positioning. While the *PR* index experiences notable fluctuations, peaking around Day 2 and Day 8, with smaller surges throughout the event window, the *FIN* index remains relatively stable for most of the event window, with moderate upward volatility around Days 4 and 9. The election effect also extends to *PL* index where it displays mild declining trend despite lower amplitude. The index is recorded small fluctuation below the baseline following the election, implying the reaction as less extreme. Similarly, *CONS* and *IND* indices show relatively muted reactions as minimal movement is reported throughout the event window. These sectors may be less vulnerable to political shocks, especially if their earnings and operations are primarily driven by domestic consumption. Lastly, the FBMKLCI, being the market composite, reflects moderate and smoothed volatility in terms of AAV trend. Its curve remains tightly around the baseline, suggesting that sector-specific volatility is balanced out when aggregated into the broader market.

In summary, *CONSTR* index has the most pronounced AAV surge which sharply peaks at nearly 60 points immediately after the election and this is a standout reaction compared to other indices. In contrast, the *TE* index records the deepest trough, dropping to around -20 points on Day 0, reflecting significant pessimism or uncertainty. Other notable fluctuations include the *PR* index, with visible double surges post-event, and the *FIN* index, which experiences modest positive AAV increases. The *CONS*, *PL* and *IND* indices show relatively flat trends, indicating limited volatility around the event window. Overall, the average abnormal volatility trend reveals that market reactions are highly sector-dependent, suggesting these patterns reinforce that elections trigger asymmetric volatility responses, influenced by investor expectations, sector exposure, and perceived risk levels.

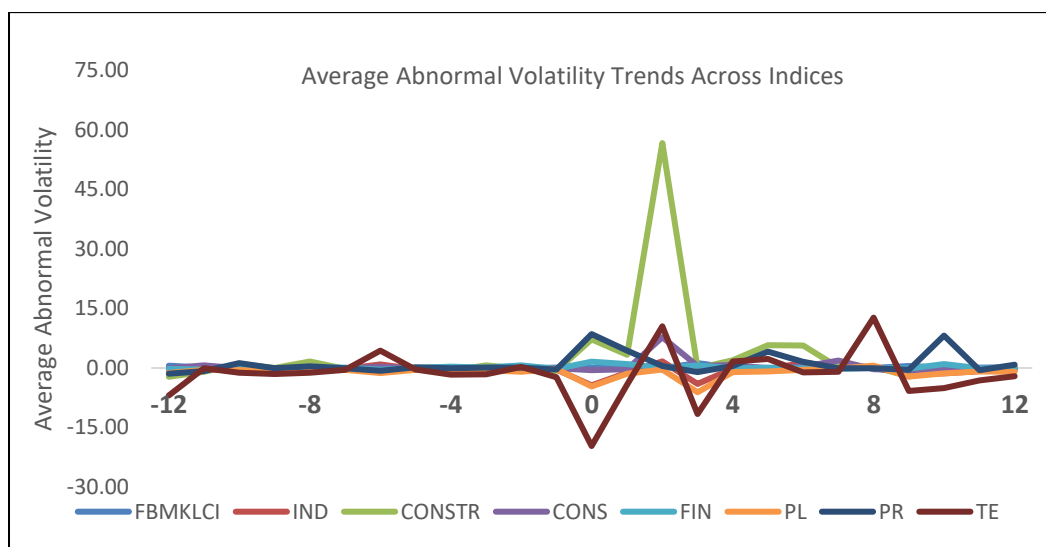


Figure 4.14: Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Squared Return as Volatility Proxy

4.2.5.3 Interpretation of Cumulative Abnormal Volatility (CAV) for All Indices during GE13 – GE15.

Table 4.36 – 4.39 presents Cumulative Abnormal Volatility for all indices across elections using window $[-12,12]$ with squared return as the volatility proxy. The volatility responses across different elections reveal a notable disparity in how investors perceived and reacted to political events. GE14 stands out with the most extreme market reactions. For instance, the *PR* and *TE* indices recorded exceptionally high negative cumulative abnormal volatility during GE14, such as -74.50 and -22.57 respectively in the asymmetric $[-12,0]$ window. This implies that GE14 introduced significant uncertainty, likely due to a regime change or unexpected electoral outcome. GE13, although not as volatile, showed positive CAV in sectors like *FIN* and *CONSTR*. In contrast, GE15 exhibited milder and mostly insignificant volatility responses across indices, suggesting lower investor sensitivity, likely due to stable pre-election signals.

Sector-specific analysis indicates that the *CONSTR* and *PR* indices displayed the highest sensitivity to electoral events, especially in GE14. The *CONSTR* index registered explosive volatility in GE13 (e.g., 45.26 in symmetric window $[-12,12]$). In the same symmetric window, the *PR* index similarly experienced drastic negative CAV (e.g., -63.24 in GE14), likely due to investor concerns over regulatory changes or housing policies. In contrast, the *PL* and *TE* indices showed consistent negative CAV during GE14, indicating persistent sectoral pessimism. Meanwhile, the FBMKLCI (market index) showed relatively small but statistically significant negative CAV during GE14, indicating broader market caution but with less intensity than specific sectors. Notably, the *FIN* index responded positively in GE13 (e.g., 8.43 in $[-12,12]$), possibly reflecting favourable expectations about economic policy continuity.

When comparing symmetric and asymmetric windows, asymmetric windows often yielded more granular insights about market reactions leading up to and following the election day. For example, during GE14, the asymmetric window $[-5,0]$ reveals a sharp decline in CAV across most indices, such as FBMKLCI (-1.04) and TE (-11.43), capturing investor anxiety right before polling day. The symmetric windows, particularly $[-10,10]$ and $[-12,12]$, consolidate pre- and post-election movements and confirm that CAV was substantially negative in GE14 across sectors like *PR*, *TE*, and *PL*. This symmetrical capture reinforces the notion that the effects of elections are not isolated to one side of the event window but persist throughout the period. GE13 results, by contrast, were more stable and positive in both symmetric and asymmetric windows, suggesting a more favourable and predictable political climate.

In summary, the cumulative abnormal volatility trends clearly indicate that GE14 triggered the highest levels of market turbulence, particularly for *PR*, *TE*, *PL* and *CONSTR* indices. Peaks in negative volatility reached up to -74.50 (*PR*), -46.54 (*TE*), and -63.24 (*PR*), especially around symmetric windows. Conversely, GE13 saw positive reactions across Construction and Finance indices, with peak CAV values of 45.26 and 8.43 respectively, suggesting market confidence. GE15 was characterized by subdued and mostly insignificant volatility, pointing to market maturity or desensitization to political cycles.

Table 4.46: Event Study on Cumulative Abnormal Volatility for FBMKLCI and Industrial Product and Service Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Asymmetric Window	FBMKLCI			IND		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	0.48 [0.198]	-0.49 [0.104]	0.80 [0.510]	-16.29*** [0.000]	0.63 [0.416]	16.20*** [0.001]
[-10,0]	0.57 [0.101]	-0.92*** [0.001]	0.64 [0.564]	-15.80*** [0.000]	0.56 [0.432]	16.88*** [0.000]
[-5,0]	0.68*** [0.008]	-0.86*** [0.000]	0.28 [0.738]	-14.58*** [0.000]	0.17 [0.749]	7.07** [0.031]
[-3,0]	0.60*** [0.004]	-0.66*** [0.000]	0.41 [0.547]	-13.81*** [0.000]	1.60*** [0.000]	5.32** [0.046]
[-1,0]	0.70*** [0.000]	-0.52*** [0.000]	-0.14 [0.769]	-13.22*** [0.000]	2.24*** [0.000]	2.25 [0.232]
[0,1]	0.03 [0.859]	-0.46*** [0.000]	-0.14 [0.776]	-15.54*** [0.000]	2.01*** [0.000]	2.18 [0.247]
[0,3]	0.11 [0.601]	-1.04*** [0.000]	-0.24 [0.724]	-15.83*** [0.000]	1.17*** [0.008]	5.97** [0.026]
[0,5]	-0.55** [0.033]	-1.31*** [0.000]	0.17 [0.839]	-14.82*** [0.000]	1.16** [0.030]	4.39 [0.178]
[0,10]	-0.89** [0.011]	-1.62*** [0.000]	0.36 [0.744]	-15.46*** [0.000]	3.60*** [0.000]	9.11** [0.040]
[0,12]	-1.00*** [0.009]	-1.75*** [0.000]	0.03 [0.978]	-16.21*** [0.000]	3.94*** [0.000]	8.65* [0.072]
Symmetric Window						
[-12,12]	-0.78 [0.137]	-1.98*** [0.000]	0.92 [0.584]	-19.90*** [0.000]	1.64 [0.130]	22.94*** [0.001]
[-10,10]	-0.59 [0.220]	-2.29*** [0.000]	1.09 [0.478]	-18.66*** [0.000]	1.24 [0.213]	24.06*** [0.000]
[-5,5]	-0.13 [0.710]	-1.92*** [0.000]	0.53 [0.634]	-16.80*** [0.000]	-1.60** [0.027]	9.54** [0.032]
[-3,3]	0.45 [0.104]	-1.44*** [0.000]	0.26 [0.773]	-17.04*** [0.000]	-0.16 [0.777]	9.37*** [0.009]
[-1,1]	0.46** [0.011]	-0.73*** [0.000]	-0.19 [0.748]	-16.16*** [0.000]	1.32*** [0.001]	2.50 [0.277]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.47: Event Study on Cumulative Abnormal Volatility for Construction Index and Consumer Product and Service Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Asymmetric Window	CONSTR			CONS		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	19.90*** [0.000]	-2.56 [0.376]	-2.63 [0.782]	-3.66** [0.021]	-0.26 [0.602]	-1.64 [0.524]
[-10,0]	20.10*** [0.000]	-4.20 [0.116]	-4.54 [0.604]	-3.40** [0.020]	0.33 [0.475]	-1.39 [0.557]
[-5,0]	20.15*** [0.000]	-3.42* [0.084]	-2.34 [0.718]	-2.76** [0.011]	1.16*** [0.001]	-1.48 [0.399]
[-3,0]	20.30*** [0.000]	-0.54 [0.738]	-2.10 [0.691]	-2.50*** [0.005]	0.21 [0.456]	-1.14 [0.427]
[-1,0]	20.15*** [0.000]	0.45 [0.691]	-0.45 [0.903]	-2.29*** [0.000]	-0.44** [0.027]	-0.29 [0.772]
[0,1]	32.30*** [0.000]	-1.07 [0.344]	-0.50 [0.894]	-3.58*** [0.000]	-0.30 [0.122]	-0.43 [0.670]
[0,3]	34.56*** [0.000]	-1.80 [0.262]	-3.10 [0.557]	-3.83*** [0.000]	-0.53* [0.056]	-1.09 [0.445]
[0,5]	42.63*** [0.000]	-2.69 [0.172]	-3.19 [0.622]	-3.56*** [0.001]	-1.03*** [0.003]	-1.68 [0.336]
[0,10]	46.14*** [0.000]	-1.10 [0.679]	-5.19 [0.554]	-4.03*** [0.006]	-2.03*** [0.000]	-2.90 [0.221]
[0,12]	47.26*** [0.000]	-1.37 [0.635]	-5.49 [0.564]	-4.16*** [0.009]	-2.36*** [0.000]	-3.54 [0.171]
Symmetric Window						
[-12,12]	45.26*** [0.000]	-2.48 [0.536]	-7.65 [0.562]	-5.23** [0.017]	-2.23*** [0.002]	-4.93 [0.169]
[-10,10]	44.34*** [0.000]	-3.85 [0.296]	-9.25 [0.445]	-4.84** [0.016]	-1.32** [0.039]	-4.04 [0.218]
[-5,5]	40.88*** [0.000]	-4.66* [0.082]	-5.05 [0.564]	-3.72** [0.011]	0.52 [0.261]	-2.90 [0.221]
[-3,3]	32.95*** [0.000]	-0.89 [0.675]	-4.72 [0.499]	-3.74*** [0.001]	0.06 [0.870]	-1.97 [0.298]
[-1,1]	30.55*** [0.000]	0.83 [0.552]	-0.48 [0.917]	-3.28*** [0.000]	-0.35 [0.142]	-0.47 [0.706]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.48: Event Study on Cumulative Abnormal Volatility for Finance Service Index and Plantation Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Asymmetric Window	FIN			PL		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	4.42*** [0.000]	-2.16 [0.278]	-3.30 [0.258]	-16.37*** [0.000]	-11.21*** [0.000]	23.68 [0.150]
[-10,0]	4.49*** [0.000]	-2.41 [0.189]	-3.50 [0.193]	-15.40*** [0.000]	-9.53*** [0.000]	23.88 [0.115]
[-5,0]	4.45*** [0.000]	-1.80 [0.184]	-1.45 [0.462]	-14.23*** [0.000]	-6.93*** [0.000]	-0.35 [0.975]
[-3,0]	4.33*** [0.000]	-1.34 [0.227]	-1.32 [0.414]	-13.76*** [0.000]	-4.32*** [0.000]	-0.84 [0.926]
[-1,0]	4.41*** [0.000]	-0.67 [0.393]	-0.66 [0.566]	-12.78*** [0.000]	-2.23*** [0.000]	1.19 [0.853]
[0,1]	7.86*** [0.000]	-0.90 [0.248]	-0.75 [0.513]	-16.24*** [0.000]	-2.76*** [0.000]	1.21 [0.850]
[0,3]	8.71*** [0.000]	-1.06 [0.336]	-1.02 [0.528]	-15.91*** [0.000]	-4.39*** [0.000]	1.05 [0.908]
[0,5]	8.88*** [0.000]	-1.46 [0.280]	0.39 [0.843]	-19.05*** [0.000]	-5.98*** [0.000]	-0.87 [0.938]
[0,10]	8.71*** [0.000]	-1.70 [0.353]	-1.51 [0.573]	-18.97*** [0.000]	-8.69*** [0.000]	-1.45 [0.923]
[0,12]	8.86*** [0.000]	-1.51 [0.450]	-1.90 [0.513]	-19.27*** [0.000]	-10.00*** [0.000]	-1.74 [0.916]
Symmetric Window						
[-12,12]	8.43*** [0.000]	-3.13 [0.258]	-4.51 [0.265]	-22.53*** [0.000]	-20.21*** [0.000]	20.22 [0.374]
[-10,10]	8.35*** [0.000]	-3.58 [0.159]	-4.31 [0.245]	-21.27*** [0.000]	-17.22*** [0.000]	20.71 [0.320]
[-5,5]	8.48*** [0.000]	-2.73 [0.138]	-0.37 [0.890]	-20.17*** [0.000]	-11.91*** [0.000]	-2.94 [0.845]
[-3,3]	8.19*** [0.000]	-1.86 [0.204]	-1.64 [0.441]	-16.57*** [0.000]	-7.71*** [0.000]	-1.51 [0.900]
[-1,1]	7.42*** [0.000]	-1.04 [0.280]	-0.71 [0.613]	-15.92*** [0.000]	-3.99*** [0.000]	0.68 [0.931]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Table 4.49: Event Study on Cumulative Abnormal Volatility for Property Index and Technology Index Using Window [-12,12] with Squared Return as the Volatility Proxy

Asymmetric Window	PR			TE		
	GE13	GE14	GE15	GE13	GE14	GE15
[-12,0]	26.34*** [0.000]	-74.50*** [0.000]	-2.83 [0.485]	-74.50*** [0.000]	-22.57*** [0.000]	-7.04 [0.787]
[-10,0]	26.33*** [0.000]	-72.67*** [0.000]	-2.62 [0.483]	-72.67*** [0.000]	-20.82*** [0.000]	-5.30 [0.825]
[-5,0]	25.40*** [0.000]	-67.13*** [0.000]	-2.02 [0.464]	-67.13*** [0.000]	-14.45*** [0.000]	7.00 [0.692]
[-3,0]	24.67*** [0.000]	-65.06*** [0.000]	-1.84 [0.414]	-65.06*** [0.000]	-4.76 [0.105]	-1.16 [0.936]
[-1,0]	24.94*** [0.000]	-62.81*** [0.000]	-1.11 [0.487]	-62.81*** [0.000]	0.98 [0.635]	4.22 [0.679]
[0,1]	39.20*** [0.000]	-67.90*** [0.000]	-1.05 [0.507]	-67.90*** [0.000]	-1.90 [0.358]	0.27 [0.979]
[0,3]	41.45*** [0.000]	-64.68*** [0.000]	-1.10 [0.625]	-64.68*** [0.000]	-5.67* [0.054]	-1.71 [0.906]
[0,5]	55.38*** [0.000]	-45.33*** [0.000]	-2.08 [0.450]	-45.33*** [0.000]	5.48 [0.128]	-3.76 [0.832]
[0,10]	85.02*** [0.000]	-44.75*** [0.001]	-3.76 [0.314]	-44.75*** [0.001]	5.75 [0.237]	-4.60 [0.848]
[0,12]	87.60*** [0.000]	-46.54*** [0.001]	-4.44 [0.275]	-46.54*** [0.001]	2.92 [0.580]	-0.54 [0.984]
Symmetric Window						
[-12,12]	88.14*** [0.000]	-63.24*** [0.001]	-6.28 [0.265]	-63.24*** [0.001]	-23.66*** [0.002]	-8.70 [0.809]
[-10,10]	85.55*** [0.000]	-59.62*** [0.001]	-5.40 [0.296]	-59.62*** [0.001]	-19.08*** [0.005]	-11.03 [0.739]
[-5,5]	54.98*** [0.000]	-54.66*** [0.000]	-3.12 [0.404]	-54.66*** [0.000]	-12.98*** [0.008]	2.11 [0.930]
[-3,3]	40.32*** [0.000]	-71.94*** [0.000]	-1.95 [0.512]	-71.94*** [0.000]	-14.44*** [0.000]	-4.00 [0.834]
[-1,1]	38.34*** [0.000]	-72.91*** [0.000]	-1.18 [0.546]	-72.91*** [0.000]	-4.93* [0.053]	3.36 [0.788]

Notes: This table represents cumulative abnormal volatility (CAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

4.2.5.4 Interpretation of Cumulative Average Abnormal Volatility (CAAV) for All Indices during GE13 – GE15

Table 4.50 presents Cumulative Average Abnormal Volatility for FBMKLCI and sectoral indices using window $[-12,12]$ with squared return as the volatility proxy. The *TE* index exhibited the most pronounced volatility reactions throughout the event window. In almost all symmetric and asymmetric windows, *TE* recorded large and statistically significant negative CAAV values, particularly in narrower windows like $[-1,1]$ (-8.30), indicating calm market response. In contrast, the *PR* index showed consistently elevated volatility, with significantly positive CAAV values such as 4.27 in $[-1,1]$ and 1.93 in $[-3,3]$, suggesting heightened speculation to electoral outcomes.

As for, the FBMKLCI, representing the broad market, displayed relatively stable reactions. The index experienced limited market-wide disruption as most of its CAAV estimates are close to zero and statistically insignificant across windows. However, a notable exception is the asymmetric window $[-1,0]$, which records a small yet statistically significant negative value of -0.10, reflecting a short-term dip in market stability right before and on election day.

Indices like *CONS* and *IND* also showed consistently negative and significant CAAV, particularly around narrower windows. For example, in the $[-1,1]$ window, *CONS* showed -0.46 and *IND* showed -1.37, highlighting investor caution or rebalancing activities around the election. Meanwhile, the *CONSTR* index exhibited mild to moderate positive volatility (e.g., 3.43 in $[-1,1]$), possibly reflecting optimistic expectations tied to infrastructure policy shifts post-election.

A comparison between symmetrical and asymmetrical windows reveals notable patterns. Across most indices, the volatility magnitude is generally larger and statistically more significant in shorter symmetric windows such as $[-1,1]$ and $[-3,3]$, pointing to concentrated reactions around the immediate election period. For instance, in the symmetric window $[-1,1]$, all indices recorded statistically significant CAAV values except FBMKLCI, most of which were large and directionally aligned with investor sentiment (positive for *CONSTR* and *PR*; negative for *TE*, *CONS*, and *IND*). In asymmetric windows, especially pre-election focused ones like $[-3,0]$ and $[-1,0]$, a mix of anticipatory reactions is observed. For instance, the *TE* index again showed sharp declines in $[-1,0]$ (-9.63) and $[-3,0]$ (-5.93), implying that tech investors adjusted positions before results were confirmed. Conversely, the *PR* index saw sharp increases in the same windows (e.g., 4.33 in $[-1,0]$), reflecting possible speculative positioning. The asymmetric $[0,3]$ window mostly captured post-election reactions, with *PR* (3.12) and *CONSTR* (2.47) remaining significant. All are statistically significant at 1% level.

In summary, the results highlight sectoral heterogeneity in how volatility was transmitted around election periods. The most volatile and statistically significant movements were found in the *TE*, *PR* and *CONSTR* indices. *TE* index stood out for persistent and large negative volatility, while Property and Construction recorded more positive, investor-optimistic responses. In contrast, the market index (FBMKLCI) showed relatively muted volatility, indicating aggregate resilience despite political transitions. Notably, the most intense volatility fluctuations occurred in narrow symmetric windows ($[-1,1]$ and $[-3,3]$), suggesting investor sentiment crystallizes tightly around the announcement and confirmation of election results. Large and significant values includes both positive and negative, suggesting the presence of market inefficiencies or overreactions in certain sectors,

aligning with literature on political event-induced volatility. This validates the hypothesis that election events trigger asymmetric responses across indices, possibly due to perceived policy implications or sectoral exposure to regulatory change.

Table 4.50: Event Study on Cumulative Average Abnormal Volatility for FBMKLCI and Sectoral Indices Using Window [-12,12] with Squared Return as the Volatility Proxy

Asymmetric Window	FBMKLCI	IND	CONSTR	CONS	FIN	PL	PR	TE
[-12,0]	0.02 [0.256]	0.01 [0.950]	0.38 [0.446]	-0.14** [0.037]	-0.03 [0.810]	-0.10 [0.740]	0.88 [0.107]	-2.67** [0.040]
[-10,0]	0.01 [0.611]	0.05 [0.818]	0.34 [0.486]	-0.14** [0.045]	-0.04 [0.698]	-0.03 [0.919]	1.00* [0.073]	-3.00** [0.025]
[-5,0]	0.01 [0.761]	-0.41* [0.077]	0.80 [0.126]	-0.17** [0.017]	0.07 [0.544]	-1.19*** [0.002]	1.84*** [0.005]	-4.15*** [0.005]
[-3,0]	0.03 [0.119]	-0.58** [0.020]	1.47** [0.013]	-0.29*** [0.001]	0.14 [0.220]	-1.58*** [0.000]	2.25*** [0.001]	-5.93*** [0.000]
[-1,0]	0.01 [0.704]	-1.46*** [0.000]	3.35*** [0.000]	-0.50*** [0.000]	0.52*** [0.001]	-2.30*** [0.000]	4.33*** [0.000]	-9.63*** [0.000]
[0,1]	-0.09*** [0.000]	-1.90*** [0.000]	5.12*** [0.000]	-0.72*** [0.000]	1.04*** [0.000]	-2.97*** [0.000]	6.06*** [0.000]	-11.62*** [0.000]
[0,3]	-0.10*** [0.000]	-0.73*** [0.006]	2.47*** [0.001]	-0.46*** [0.000]	0.55*** [0.001]	-1.60*** [0.000]	3.12*** [0.000]	-6.02*** [0.000]
[0,5]	-0.09*** [0.000]	-0.52** [0.033]	2.04*** [0.002]	-0.35*** [0.000]	0.43*** [0.003]	-1.44*** [0.001]	2.79*** [0.000]	-2.43* [0.057]
[0,10]	-0.07*** [0.004]	-0.08 [0.693]	1.21** [0.031]	-0.27*** [0.001]	0.17 [0.151]	-0.88** [0.014]	2.38*** [0.001]	-1.33 [0.265]
[0,12]	-0.07*** [0.003]	-0.09 [0.662]	1.04* [0.056]	-0.26*** [0.002]	0.14 [0.220]	-0.80** [0.022]	2.06*** [0.002]	-1.14 [0.335]
Symmetric Window								
[-12,12]	-0.02 [0.302]	0.06 [0.539]	0.47** [0.013]	-0.17*** [0.005]	0.01 [0.877]	-0.30 [0.337]	1.21*** [0.000]	-1.28** [0.018]
[-10,10]	-0.03 [0.275]	0.10 [0.342]	0.50** [0.015]	-0.16** [0.011]	0.01 [0.921]	-0.28 [0.409]	1.39*** [0.000]	-1.43** [0.016]
[-5,5]	-0.05 [0.198]	-0.27* [0.080]	0.94*** [0.001]	-0.19** [0.034]	0.16 [0.124]	-1.06** [0.025]	1.80*** [0.000]	-1.99** [0.015]
[-3,3]	-0.04 [0.431]	-0.37* [0.052]	1.30*** [0.000]	-0.27** [0.014]	0.22* [0.094]	-1.23** [0.039]	1.93*** [0.000]	-4.31*** [0.000]
[-1,1]	-0.05 [0.465]	-1.37*** [0.000]	3.43*** [0.000]	-0.46*** [0.007]	0.63*** [0.002]	-2.14** [0.019]	4.27*** [0.000]	-8.30*** [0.000]

Notes: This table represents cumulative average abnormal volatility (CAAV) results from volatility event study using squared return as volatility proxy for event window [-12, 12]. The eight indices employed are FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE). The reported coefficients have been scaled by $\times 10^{-4}$. The p-value is reported below the respective estimated coefficients in parentheses. Note: *, ** & *** denote 10%, 5% and 1% significant level.

Figure 4.15 presents Cumulative Average Abnormal Volatility trend path of FBMKLCI and sectoral indices for windows [-12,12] using squared return as volatility proxy. The CAAV trend across indices reveals stark sectoral differences in how markets responded to the election event. The *TE* index stands out with the most pronounced and persistent negative cumulative abnormal volatility. Starting from just below zero at Day -12, the index experiences a continuous and steep decline, hitting approximately -45 by Day 0 and remaining deeply negative throughout the post-election window.

In contrast, the *PR* index exhibits a strong and consistent upward trend in CAAV. The index starts to rise sharply from Day 0 and eventually accumulates nearly 35 points by Day 12. This indicates substantial market optimism, possibly reflecting investor expectations of increased infrastructure development, property-friendly policies, or political clarity benefiting the sector. The *CONSTR* index also shows a steady and positive accumulation of abnormal volatility, peaking around 20 points post-election. The FBMKLCI index, representing the broad market, shows a flat trend in CAAV, indicating slight but consistent investor confidence post-election. Its cumulative volatility stabilizes around 10 points by Day 12, reflecting an overall positive, yet cautious, market response.

Other indices like *FIN*, *CONS*, *IND*, and *PL* show relatively muted CAAV trends. These indices hover around the zero line with only marginal positive or negative changes. The *PL* index briefly spikes upward around Day -8 but quickly reverts to the baseline, indicating temporary market reaction. The most dramatic shift occurs in the *TE* index, which drops from near -20 points of CAAV at Day -4 to approximately -45 points at Day 0, marking the steepest trough among all indices. Notably, CAAV of the index does not recover post-election, indicating persistent positive sentiment.

On the flip side, *PR* peaks around Day 12 with a CAAV of roughly 35 points, demonstrating panic selling from the investors. A surge begins around Day 0, reflecting post-election pessimism. Similarly, *CONSTR* index follows an upward trend, accumulating over 20 points by the end of the window, albeit more gradually compared to *PR*. In contrast, *FBMKLCI*, while showing a positive slope, increases slowly and remains stable, indicating balanced sentiment at the market level. Other indices include *IND*, *FIN*, *CONS*, and *PL*, exhibit marginal fluctuations (within the range of ± 5 points), with no large spikes or troughs, suggesting neutrality or resilience to political shocks.

Overall, the CAAV trend analysis demonstrates heterogeneous nature of volatility reactions across indices. Indices tied closely to policy such as *TE* index witnessed post-election boosts, while *PR* and *CONSTR* suffered substantial drawdowns. These findings highlight sector-specific expectations and the importance of political events in shaping volatility differently across economic segments.

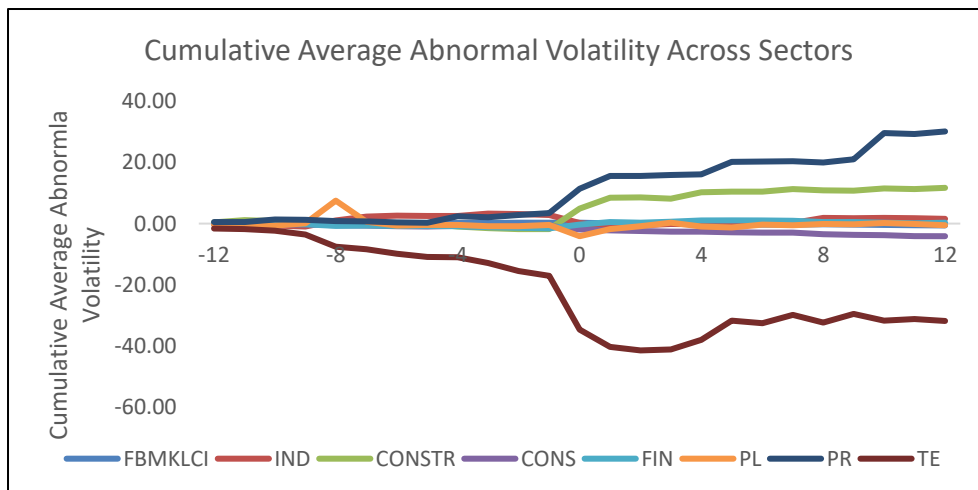


Figure 4.15: Cumulative Average Abnormal Volatility Trend path of FBMKLCI and Sectoral Indices for windows [-12,12] using Squared Return as Volatility proxy

4.3 Panel Regression Analysis

Table 4.51 presents the results from the regression when using absolute return as volatility proxy. The regression results reported that the most significant predictors of cumulative abnormal volatility are number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC). According to the Table 4.51, NP is statistically significant in all indices, indicating a widespread and strong influence of political fragmentation on market volatility. *MGOV_dummy* is also significant in seven indices, excluding only *CONS*. This suggests that the nature of government formation regardless whether majority or minority, the predictor still plays a key role in shaping market expectations, with minority governments generally viewed as a source of political uncertainty. The margin of victory (MVIC) also demonstrates a strong effect, being statistically significant in five indices: *IND*, *CONSTR*, *FIN*, *PL*, *PR* and *TE*. The investors perspective towards wider or narrower margin of victory as significant factor in triggering the market chaos as it relates to policy uncertainty. All are statistically significant at least at 10% level.

From monetary standpoints which derived from PBC theory, money supply (LogM2) is significant in *IND*, *CONS*, *CONSTR*, *FIN* and *PL* indices, highlighting its selective but strong impact. Meanwhile, government budget variable which represents fiscal policy is significant in only three indices namely *CONS*, *PL*, and *TE*, implying a more limited influence on volatility during election cycles. As FDI (% of GDP) representing independent variable from dependency theory, it is significant in six indices: *IND*, *CONSTR*, *FIN*, *PL*, *PR*, and *TE*, suggesting that foreign capital flows are a major driver of volatility across both traditional and emerging sectors. Lastly, both exchange rate (EXRATE) and SP500 does not

show significant influence in any indices, indicating its limited role in explaining short-term volatility during election periods.

Other than that, some indices have shown more responsive to electoral events. This can be observed when *FIN* index reported as the most reactive, with six independent variables reaching statistical significance. For instance, number of parties has significant and negative coefficient in *FIN* index with -46.76, implying an increase in political competition as proxied for number of parties contesting in election is associated with a reduction in cumulative abnormal volatility within *FIN* index. In this case, a one-unit increase in the number of parties corresponds to a decrease in 46.76 points in CAV of *FIN* index. Similarly, money supply (logM2) which proxied for monetary policy from PBC theory also reported significant and negative coefficient with -17557.95. This means that a 1% increase in M2 is associated with a reduction in cumulative abnormal volatility at 174.61 point. Thus, this inverse relationship suggests monetary expansion reduce financial market uncertainty, due to increase liquidity and market confidence. All these are significant at 1% level. The *CONSTR* index also shows a high degree of responsiveness, with significant results for NP, MGOV_dummy, MVIC, LogM2, and FDI, reflecting its dependence on political decisions and infrastructure-related policies. Similarly, the *TE* index is impacted by five significant variables, including political and economic factors, indicating investor sensitivity to policy shifts in innovation-driven sectors. The *IND* and *PL* indices each exhibit five significant relationships, implying moderately high responsiveness, particularly to political variables and foreign capital. *PR* index also shows significant responses to four variables, particularly MGOV_dummy and FDI, highlighting its exposure to policy-related investor behaviour. Both FBMKLCI and CONS indices have the least significance variables, indicating a relatively more stable or insulated response to election dynamics.

In conclusion, political factors such as number of political parties and minority government are the most influential and significant across indices when absolute return is used as the volatility proxy. It is also noticed that FDI has the most widespread and robust impact, followed by money supply (LogM2), while government budget and exchange rate have relatively weaker explanatory power. Sector wise, *FIN*, *CONSTR* and *TE* indices exhibit the strongest reactions to the variables, whereas *CONS* index appears more resilient to political and policy disturbances. These findings affirm that cumulative abnormal volatility is predominantly driven by political uncertainty and capital flows.

Table 4.51: Regression: Influence of election-induced factors on index volatility using Absolute Return of Cumulative Abnormal Volatility [-12,12] for FBMKLCI and Sectoral Indices

Variables	KLCI	IND	CONS	CONSTR	FIN	PL	PR	TE
NP	-1.134*** [0.000]	0.698*** [0.000]	-2.329*** [0.000]	-3.681*** [0.000]	-46.760*** [0.000]	15.655* [0.050]	-11.037*** [0.000]	0.494*** [0.000]
MGOV_dummy	-22.691*** [0.000]	19.625*** [0.000]	0.233 [0.983]	-31.673* [0.072]	-864.726*** [0.000]	572.196*** [0.000]	-289.335*** [0.000]	10.118*** [0.000]
MVIC	-34.804 [0.149]	100.443*** [0.000]	-22.945 [0.673]	-337.592*** [0.000]	-4985.277*** [0.000]	2575.341*** [0.001]	-1639.162*** [0.000]	70.741*** [0.000]
LogM2	331.680 [0.180]	234.886** [0.022]	-1028.811* [0.069]	-1976.368** [0.030]	-17557.953** [0.016]	29128.907*** [0.000]	-647.393 [0.681]	71.239 [0.355]
Gov_Budget	1.224 [0.821]	-0.752 [0.734]	-32.720*** [0.010]	-28.717 [0.150]	-90.637 [0.566]	504.271*** [0.003]	3.926 [0.910]	-4.711*** [0.007]
FDI % GDP	-451.189 [0.146]	857.406*** [0.000]	-1142.358 [0.106]	-3503.754*** [0.003]	-46829.489*** [0.000]	15768.098* [0.096]	-14000.138*** [0.000]	475.517*** [0.000]
EXRATE	-4.901 [0.211]	0.396 [0.803]	-3.582 [0.685]	-0.862 [0.952]	-46.474 [0.682]	120.454 [0.312]	2.980 [0.905]	-0.028 [0.981]
SP500	52.347 [0.356]	9.943 [0.666]	-82.568 [0.521]	-204.458 [0.323]	-953.065 [0.562]	44.820 [0.979]	-256.483 [0.480]	23.324 [0.190]
constant	33.350*** [0.000]	-31.712*** [0.000]	26.116* [0.057]	84.656*** [0.000]	1551.181*** [0.000]	-888.473*** [0.000]	431.157*** [0.000]	-19.712*** [0.000]
R-sq	0.678	0.802	0.554	0.433	0.621	0.609	0.861	0.866
Adj. R-sq	0.639	0.777	0.500	0.365	0.575	0.561	0.844	0.850
No. Obs	75	75	75	75	75	75	75	75

Notes: This table shows results from the regression in Eq. (3.20). The Cumulative Abnormal Volatility for event window [-12,12] of eight indices namely FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE) are estimated using Absolute Return. These variables are regressed on three elements: (a) number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC) which proxied for election-induced variables; (b) change in money supply (logM2), and change in government budget which proxied for political business cycle variables; and (c) foreign direct investment (FDI as % GDP) proxied for dependency theory. Change in exchange rate (EXRATE) and SP500 are the control variables. A pooled ordinary least squared is utilized to analyze the overall election effect on each index. The p-value is reported below to the respective estimated coefficients in parantheses. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 4.52 presents the results from the regression when using log absolute return as volatility proxy. The regression results reported several significant independent variables, despite mixed reaction. For instance, NP remains a key political variable and significant in most indices except for *FIN* index. Similarly, MGOV_dummy is significant in most indices except *IND*, *CONS* and *FIN* indices, implying the market responsiveness towards minority rule. For instance, minority of government has positive and significant coefficient in FBMKLCI (0.03) and *PL* (0.086), indicating that the presence of minority government increases cumulative abnormal volatility in these indices by 0.03 and 0.086 units, respectively, while the remaining variables are constant. Hence, reject the null hypothesis stating that minority government is not significantly impact the cumulative abnormal volatility. The finding supports the study of Biłkowski et al. (2008) where this raise concerns about policy reversals over the presence of minority government as it will contribute to increase stock market volatility.

The MVIC also reported significance in six out of eight indices: *KLCI*, *IND*, *CONSTR*, *PL*, *PR*, and *TE*. It is also reported that CONSTR, PR and TE has significant and negative relationship between margin of victory and cumulative abnormal volatility with coefficient of -0.628, -1.061 and -0.701, respectively. Such finding suggests the presence of narrow margin victory leads to increase in cumulative abnormal volatility in these indices by -0.628, -1.061 and -0.701 points, respectively. Hence, reject null hypothesis for stating that the presence of narrow margin of victory does not affect the cumulative abnormal volatility. This finding is consistent with Carnahan and Saiegh (2021), suggesting narrow margin of victory implies weak political control and thus, induces market volatility due to uncertainty.

From monetary and fiscal standpoints which derived from PBC theory, LogM2 is significant in three indices such as FBMKLCI, *PR*, and *TE* indices whereas Gov_Budget is significant in all indices except *CONSTR* index. This implies all these indices are vulnerable to expansionary and contractionary government policies in terms of monetary and fiscal. For instance, Gov_Budget has positive and significant coefficient in FBMKLCI (0.018), *IND* (0.023), and *FIN* (0.015). A positive relationship between government budget and cumulative abnormal volatility suggested that introducing expansionary fiscal policy during election periods may lead to increase in market volatility as market participant viewed this as politically driven agenda for the ruling party to be re-elected for another term in office. So, one unit increase in government budget will increase the cumulative abnormal volatility by 0.018 points in the case of FBMKLCI. Next, foreign direct investment which proxied for dependency theory is significant across five indices namely FBMKLCI, *CONS*, *PL*, *PR*, and *TE*. This means that the variable also constituted to a strong volatility driver in growth-oriented and globalized sectors. For example, foreign direct investment has negative and significant coefficient in *CONS* (-3.477), *PR* (-7.713) and *TE* (-9.665) indices. All are statistically significant at 1% level. A one unit increase in foreign direct investment is associated with a reduction in cumulative abnormal volatility by -3.477 points in the case of *CONS* index. Such result suggested that investors' confidence and anticipation for policy continuity as new form of government ruling the country has increased capital inflows which eventually reduced volatility for the case of *CONS* index. Hence, null hypothesis is rejected for stating that foreign direct investment has no significant impact on cumulative abnormal volatility. This finding is in line with Musah et al. (2023).

For cross indices analysis, the FBMKLCI, *PR* and *TE* are the most reactive indices of all since they are all significant in NP, MGOV, MVIC, LogM2, Gov_Budget and FDI (%)

GDP). This means that there are sensitive to domestic political condition, government policies as well as foreign investment sentiment. Following that, *PL* index has five significant variables except money supply. While the remaining indices only reported one to three variables that is significant and hence, registered as the least responsive indices. In terms of model fit, *PL* index has the highest adjusted R-squared with 0.728, indicating that 72.8% of the variation in the cumulative abnormal volatility is explained by the model. Following that, *PR* and FBMKLCI indices possessed moderate model fit with adjusted R-squared of 0.680 and 0.570, respectively, indicating that only selected political and economic variables explain a substantial portion of volatility in these indices. In contrast, *CONS* (0.314) and *TE* (0.362) show relatively lower model fit despite several significant variables.

In conclusion, number of parties and margin of victory consistently emerge as significant across most indices, while minority of government continues to be a strong determinant in terms of political variables. Form the view of government policies which proxied for PBC theory, government budget continued to be significant factor under this specification, followed by foreign direct investment, which continues to play a major role in volatility, especially in sectors tied to external capital. Besides, it is noted that FBMKLCI, *PL*, *TE* and *PR* are the most affected indices whereas *CONS* and *FIN* remain relatively stable. The overall results confirm that volatility reactions differ by sector and are sensitive to how volatility is measured.

Table 4.52: Regression: Influence of election-induced factors on index volatility using Log Absolute Return of Cumulative Abnormal Volatility [-12,12] for FBMKLCI and Sectoral Indices

Variables	KLCI	IND	CONS	CONSTR	FIN	PL	PR	TE
NP	0.001*** [0.000]	-0.001** [0.030]	-0.005*** [0.000]	0.005* [0.070]	0.000 [0.310]	0.002*** [0.004]	-0.008*** [0.000]	-0.012*** [0.000]
MGOV_dummy	0.030*** [0.000]	0.004 [0.614]	0.013 [0.497]	-0.190*** [0.000]	0.002 [0.689]	0.086*** [0.000]	-0.212*** [0.000]	-0.098* [0.057]
MVIC	0.144*** [0.000]	0.079* [0.055]	-0.080 [0.406]	-0.628** [0.010]	-0.020 [0.489]	0.279*** [0.000]	-1.061*** [0.000]	-0.701*** [0.008]
LogM2	0.485*** [0.004]	0.069 [0.869]	-0.809 [0.413]	1.873 [0.444]	0.464 [0.124]	0.174 [0.725]	-1.961** [0.048]	-6.764** [0.012]
Gov_Budget	0.018*** [0.000]	0.023** [0.015]	-0.046** [0.039]	0.025 [0.640]	0.015** [0.030]	0.022* [0.050]	-0.068*** [0.003]	-0.193*** [0.001]
FDI % GDP	1.269*** [0.000]	0.660 [0.210]	-3.477*** [0.006]	-0.439 [0.886]	-0.297 [0.428]	3.411*** [0.000]	-7.713*** [0.000]	-9.665*** [0.004]
EXRATE	0.001 [0.627]	0.004 [0.499]	-0.004 [0.785]	0.000 [0.997]	-0.003 [0.485]	0.014* [0.073]	-0.008 [0.616]	-0.007 [0.861]
SP500	0.010 [0.788]	0.078 [0.416]	-0.209 [0.358]	0.350 [0.534]	-0.020 [0.769]	-0.026 [0.819]	-0.077 [0.733]	-0.378 [0.531]
constant	-0.040*** [0.000]	0.014 [0.172]	0.044* [0.071]	0.114* [0.057]	0.001 [0.872]	-0.100*** [0.000]	0.299*** [0.000]	0.242*** [0.000]
R-sq	0.617	0.553	0.388	0.481	0.605	0.757	0.714	0.431
Adj. R-sq	0.570	0.499	0.314	0.418	0.558	0.728	0.680	0.362
No. Obs	75	75	75	75	75	75	75	75

Notes: This table shows results from the regression in Eq. (3.20). The Cumulative Abnormal Volatility for event window [-12,12] of eight indices namely FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE) are estimated using Log Absolute Return. These variables are regressed on three elements: (a) number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC) which proxied for election-induced variables; (b) change in money supply (logM2), and change in government budget which proxied for political business cycle variables; and (c) foreign direct investment (FDI as % GDP) proxied for dependency theory. Change in exchange rate (EXRATE) and SP500 are the control variables. A pooled ordinary least squared is utilized to analyze the overall election effect on each index. The p-value is reported below to the respective estimated coefficients in parantheses. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 4.53 presents the results from the regression when using range-based as volatility proxy. Of all three political variables, the results demonstrate number of parties is the most significant variable in most indices except *CONS* index. The variable has negatively affect indices such as *FBMKLCI*, *CONSTR*, *FIN*, *PR*, and positively affect *IND*, *PL*, and *TE*, reflecting sector-specific sensitivities to political fragmentation. Similarly, the margin of victory is significant in six indices with varied impact: *FBMKLCI* (-0.167), *CONS* (0.105), *CONSTR* (-0.814), *FIN* (-0.299), *PL* (0.755), and *PR* (-0.659). Minority of government reported to have significant in five indices such as *FBMKLCI*, *CONSTR*, *FIN*, *PL*, and *PR*, with majority are negative coefficient as the market view it as destabilizing forces. All are statistically significant at least at 5% level.

On the contrary, money supply is significant in five indices with varied impact: *FBMKLCI* (-0.624), *IND* (2.114), *CONSTR* (-4.447), *FIN* (-2.247), and *PL* (6.462). While certain indices are negative in most cases, it is suggesting monetary tightening reduces volatility. Meanwhile, indices that have positive coefficient such as *IND* and *PL*, possibly due to investors' concern over uncertainty about the expansionary monetary policy which in turn amplify the volatility. The government budget is significant in six indices, including *FBMKLCI* (-0.038), *CONS* (-0.028), *CONSTR* (-0.128), *FIN* (-0.055), *PL* (0.089), and *TE* (-0.061). Its negative coefficients in most indices imply that higher government expenditure is associated with increased volatility, possibly reflecting concerns over fiscal sustainability. Meanwhile, foreign direct investment shows significant influence in five indices including *FBMKLCI*, *CONSTR*, *FIN*, *PL*, and *PR*. The sign of coefficients varies with positive in *PL* and *IND*, whereas negative in *FBMKLCI*, *FIN*, and *PR*, implying that foreign capital inflows are viewed differently across indices, either as stabilizing or risk-enhancing tool. All are statistically significant at least at 10% level.

In terms of cross sector analysis, FBMKLCI, *CONSTR*, *FIN* and *PL* reported to be the most responsive indices, with six significant variables including number of parties, minority of government, margin of victory, money supply, government budget and foreign direct investment. This finding revealed that the indices react strongly to political structure, government policies, and capital flows. The PR index shows four significant predictors, suggesting moderate sensitivity, especially to number of parties, minority in government, margin of victory and foreign direct investment. Whereas, the remaining indices including *IND*, *CONS* and *TE* show lower responsiveness with only two significant variables, implying reduced short-term volatility to political and macroeconomic shocks under the range-based volatility proxy.

Regarding the goodness-of-fit, the adjusted R-squared is higher for these three indices including FBMKLCI (0.735), *CONS* (0.734) and *PR* (0.612) with explanatory power more than 60% of the variation in cumulative abnormal volatility. Conversely, *CONSTR* (0.221) has weaker model fits, suggesting volatility in this index may be affected by other variables not captured in this model.

Overall, number of parties, minority of government and margin of victory continue to dominate as key driver of CAV, with significant effect across indices when employing range-based as volatility proxy. Among indicators for PBC and dependency theories, money supply, government budget and FDI illustrated stronger relevance under this volatility measure as compared to other volatility proxy, suggesting that markets respond more acutely to macroeconomic signals when intraday price movements are captured. Sector wise, FBMKLCI, *CONSTR*, *FIN* and *PL* stand out as the most responsive, while *IND*, *CONS* and *TE* remain more insulated.

Table 4.53: Regression: Influence of election-induced factors on index volatility using Range-based Volatility of Cumulative Abnormal Volatility [-12,12] for FBMKLCI and Sectoral Indices

Variables	KLCI	IND	CONS	CONSTR	FIN	PL	PR	TE
NP	-0.002*** [0.000]	0.003*** [0.004]	0.000 [0.000]	-0.009*** [0.000]	-0.004*** [0.000]	0.008*** [0.001]	-0.002** [0.041]	0.004*** [0.000]
MGOV_dummy	-0.054*** [0.000]	-0.030 [0.148]	0.004 [0.000]	-0.125*** [0.003]	-0.054*** [0.000]	0.097** [0.025]	-0.141*** [0.000]	-0.003 [0.861]
MVIC	-0.167*** [0.000]	-0.042 [0.680]	0.105*** [0.436]	-0.814*** [0.000]	-0.299*** [0.000]	0.755*** [0.001]	-0.659*** [0.000]	-0.021 [0.817]
LogM2	-0.624* [0.064]	2.114** [0.047]	0.421 [0.004]	-4.447** [0.035]	-2.247*** [0.001]	6.462*** [0.004]	-0.198 [0.845]	-0.693 [0.448]
Gov_Budget	-0.038*** [0.000]	-0.006 [0.794]	-0.028*** [0.598]	-0.128*** [0.007]	-0.055*** [0.000]	0.089* [0.069]	-0.010 [0.669]	-0.061*** [0.003]
FDI % GDP	-2.185*** [0.000]	1.190 [0.365]	0.186 [0.105]	-8.479*** [0.002]	-3.621*** [0.000]	6.674** [0.018]	-4.354*** [0.001]	-0.512 [0.654]
EXRATE	-0.008 [0.124]	-0.002 [0.902]	-0.006 [0.003]	-0.024 [0.476]	-0.010 [0.291]	0.011 [0.749]	-0.005 [0.740]	-0.010 [0.486]
SP500	0.072 [0.347]	0.091 [0.705]	0.036 [0.421]	-0.550 [0.252]	-0.068 [0.638]	0.314 [0.535]	-0.105 [0.651]	-0.017 [0.936]
constant	0.073*** [0.000]	-0.038 [0.136]	-0.011 [0.234]	0.230*** [0.000]	0.101*** [0.000]	-0.223*** [0.000]	0.171*** [0.000]	-0.083*** [0.000]
R-sq	0.764	0.462	0.763	0.305	0.488	0.384	0.654	0.519
Adj. R-sq	0.735	0.397	0.734	0.221	0.426	0.309	0.612	0.460
No. Obs	75	75	75	75	75	75	75	75

Notes: This table shows results from the regression in Eq. (3.20). The Cumulative Abnormal Volatility for event window [-12,12] of eight indices namely FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE) are estimated using range-based volatility. These variables are regressed on three elements: (a) number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC) which proxied for election-induced variables; (b) change in money supply (logM2), and change in government budget which proxied for political business cycle variables; and (c) foreign direct investment (FDI as % GDP) proxied for dependency theory. Change in exchange rate (EXRATE) and SP500 are the control variables. A pooled ordinary least squared is utilized to analyze the overall election effect on each index. The p-value is reported below to the respective estimated coefficients in parantheses. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 4.54 presents the results from the regression when using GARCH (1,1) as volatility proxy. The regression results revealed a shift in the pattern of significance across independent variables. Number of political parties remains a significant predictor in four indices including FBMKLCI, *IND*, *CONSTR*, and *TE*, highlighting that political fragmentation still contributes meaningfully to volatility. Minority government shows strong and significant effects in four indices as well and they are *CONSTR*, *FIN*, *PR*, and *TE*. The significant negative coefficients suggest that minority governments are generally perceived as destabilizing force. Similarly, the margin of victory is statistically significant in four indices such as *CONSTR*, *FIN*, *PL*, and FBMKLCI, confirming that electoral mandate strength continues to shape investor sentiment. As for indicators proxied for PBC theory, money supply and government budget shows moderate significant results. The former variable is significant in *IND*, *PL*, *PR*, and *TE* indices, whereas the latter variable only significant for *PL* and *PR* indices. Foreign direct investment which proxied for dependency theory has emerged as the most powerful determinants under the GARCH volatility proxy, being significant in almost all indices except *FIN* index.

From the sectoral perspective, FBMKLCI, *CONSTR*, *PL*, *PR* and *TE* reported as the most reactive indices with four variables achieving significant. This confirms that investor sentiment is highly sensitive to both political factors, policies shifts and capital flow shocks. Conversely, *CONS* index remains largely unresponsive, with no statistically significant variables, confirming its resilience or detachment from election-driven volatility under both specifications. In terms of model goodness-of-fit, the adjusted R-squared values indicate strong explanatory power in *PR* (0.950), *PL* (0.789), and FBMKLCI (0.788), suggesting these models explain the majority of volatility variation in their respective indices. In

contrast, indices like *CONS* (0.125) and *FIN* (0.208) show weaker model fit, highlighting at unobserved variables in the formation of CAV in these markets.

In summary, the effect of political factors, policy shift and capital flow shocks remain significant but demonstrated slightly in pattern and depth when employing GARCH (1,1) as volatility proxy for CAV. Again, number of parties, minority government and margin of victory have consistently become the key driver of volatility, particularly for FBMKLCI and *CONSTR* indices. Interestingly, foreign direct investment gained greater prominence under this specification, suggesting that volatility persistence amplifies the effect of investment flows. Furthermore, the FBMKLCI, *CONSTR*, *PL*, *PR* and *TE* indices emerge as the most sensitive to the set of explanatory variables, whereas *CONS* shows negligible responsiveness. The GARCH-based models provide better fit for indices including *PR* and *PL*, reinforcing their suitability for capturing volatility clustering in politically driven environments. Overall, the findings confirm that volatility under electoral contexts is not only sector-specific but also influenced by the choice of volatility proxy.

Table 4.54: Regression: Influence of election-induced factors on index volatility using GARCH (1,1) of Cumulative Abnormal Volatility [-12,12] for FBMKLCI and Sectoral Indices

Variables	KLCI	IND	CONS	CONSTR	FIN	PL	PR	TE
NP	0.034*** [0.000]	0.457*** [0.000]	0.000 [0.995]	-0.093*** [0.002]	-0.030 [0.510]	0.019 [0.128]	-0.001 [0.942]	0.195*** [0.001]
MGOV_dummy	0.951*** [0.000]	-1.590 [0.400]	-0.346 [0.212]	-2.469*** [0.000]	-2.287*** [0.007]	0.093 [0.677]	-0.539* [0.070]	-2.488** [0.017]
MVIC	4.340*** [0.000]	-15.250 [0.112]	-0.180 [0.897]	-12.807*** [0.000]	-10.855** [0.011]	-3.770*** [0.001]	-0.609 [0.680]	-7.758 [0.134]
LogM2	-7.030 [0.276]	-216.370** [0.029]	-11.319 [0.428]	-2.033 [0.941]	38.202 [0.370]	-22.815* [0.052]	57.653*** [0.000]	229.076*** [0.000]
Gov_Budget	-0.107 [0.451]	-1.640 [0.446]	-0.121 [0.702]	-0.051 [0.933]	0.364 [0.698]	-0.740*** [0.005]	1.127*** [0.001]	-1.301 [0.265]
FDI % GDP	44.450*** [0.000]	207.940* [0.092]	-3.978 [0.824]	-106.514*** [0.003]	-34.382 [0.519]	-53.904*** [0.000]	-147.400*** [0.000]	175.551*** [0.010]
EXRATE	-0.011 [0.915]	-0.128 [0.934]	0.055 [0.807]	0.017 [0.969]	-0.033 [0.960]	-0.080 [0.661]	-0.026 [0.914]	-1.394* [0.098]
SP500	-0.240 [0.871]	-4.470 [0.842]	-0.005 [0.999]	1.177 [0.853]	1.934 [0.843]	-5.633** [0.037]	2.205 [0.527]	15.406 [0.206]
constant	-1.340*** [0.000]	-1.450 [0.539]	0.376 [0.278]	3.581*** [0.000]	2.563** [0.015]	-0.479* [0.090]	1.947*** [0.000]	-1.310 [0.307]
R-sq	0.811	0.490	0.219	0.505	0.293	0.812	0.956	0.674
Adj. R-sq	0.788	0.428	0.125	0.445	0.208	0.789	0.950	0.634
No. Obs	75	75	75	75	75	75	75	75

Notes: This table shows results from the regression in Eq. (3.20). The Cumulative Abnormal Volatility for event window [-12,12] of eight indices namely FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE) are estimated using GARCH (1,1). These variables are regressed on three elements: (a) number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC) which proxied for election-induced variables; (b) change in money supply (logM2), and change in government budget which proxied for political business cycle variables; and (c) foreign direct investment (FDI as % GDP) proxied for dependency theory. Change in exchange rate (EXRATE) and SP500 are the control variables. A pooled ordinary least squared is utilized to analyze the overall election effect on each index. The p-value is reported below to the respective estimated coefficients in parantheses. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 4.55 presents the results from the regression when using squared return as volatility proxy. The results from the regression revealed that the proposed indicators remain significance. For instance, number of political parties is highly significant across all eight indices, reflecting a consistently strong influence of political fragmentation on stock market volatility. Its coefficients vary in direction with positive effects in all indices except *CONSTR* index, indicating that market perception of political competition may differ by indices. The minority government dummy is also significant in six indices including *FBMKLCI*, *IND*, *FIN*, *PL*, *PR*, and *TE*. This explained heightened market volatility arise from minority in coalition due to the potential discontinuity in government policies. Similarly, margin of victory affects volatility significantly in six indices as well, except for *FBMKLCI* and *CONS* indices. Its positive coefficients in most indices suggest that a stronger electoral mandate increases perceived policy risk or encourages speculative activity in certain sectors.

Among indicators proxied for PBCS theory, money supply is significant in four indices: *CONS*, *CONSTR*, *FIN*, and *PL*. Most coefficients are negative, particularly in *CONS*, *CONSTR* and *FIN*, indicating that monetary expansion is associated with lower volatility in capital-intensive and liquidity-sensitive index. Government budget is significant in three indices including *CONS*, *PL*, and *TE*. It is reported that mostly negative coefficients, suggesting that higher government spending is associated with increased volatility, especially in sectors sensitive to fiscal policy. Foreign direct investment also plays a critical role, showing significance in six indices: *IND*, *CONSTR*, *FIN*, *PL*, *PR*, and *TE*. Notably, FDI increases volatility in *IND* and *PL*, while reducing it in *PR* and *FIN*, reflecting different investor sentiment toward foreign capital across indices. Sectoral responsiveness under the squared return proxy reveals that *IND*, *PL*, *PR* and *TE* indices are the most affected. Each of

these indices has five or more significant predictors, showing sensitivity to both political structure and economic fundamentals. *IND* and *PL* in particular reflect heightened responsiveness to FDI, margin of victory, and government budget, perhaps due to their direct exposure to investment and policy decisions. The *FIN* and *CONSTR* indices show four or five significant predictors each, reinforcing their responsiveness to political factors and government policies and capital outflow. The *CONS* index is less reactive overall, with only three significant variables. In terms of model goodness-of-fit, the adjusted R-squared values are higher in *PR* (0.879), *FIN* (0.811), *IND* (0.844), and *FBMKLCI* (0.795), indicating that the regression model explains a substantial portion of volatility variation in these indices. The weakest model fit is observed in *CONS* (0.279), suggesting that volatility in this index may be influenced by other, unobserved factors beyond the suggested indicators.

In summary, three variables from the political indicators remain dominant in driving cumulative abnormal volatility across indices. The uniform significance of NP in all indices strongly validates the hypothesis that political fragmentation is a key source of market uncertainty. Indicators which proxied for PBC and dependency theories such as money supply, government budget and foreign direct investment also emerge as relevant under this specification, with varied impacts across indices. While monetary expansion generally dampens volatility in policy-sensitive indices, fiscal spending and FDI present mixed effects, acting either as stabilizers or sources of speculative noise depending on the index. From a sectoral perspective, *CONSTR*, *FIN* and *PL* stand out as highly responsive to both political and economic variables, while *CONS* appear more insulated. The high explanatory power in *PR*, *FIN*, and *IND* further affirms that using squared return as volatility proxy effectively captures volatility patterns during politically turbulent periods.

Table 4.55: Regression: Influence of election-induced factors on index volatility using Squared Return of Cumulative Abnormal Volatility [-12,12] for FBMKLCI and Sectoral Indices

Variables	KLCI	IND	CONS	CONSTR	FIN	PL	PR	TE
NP	0.000*** [0.001]	0.000*** [0.000]	0.000*** [0.001]	-0.001*** [0.000]	0.000*** [0.000]	0.000*** [0.000]	0.000*** [0.000]	0.000*** [0.000]
MGOV_dummy	0.000*** [0.000]	0.004*** [0.000]	0.001 [0.440]	-0.003 [0.552]	-0.001*** [0.000]	0.006*** [0.000]	-0.010*** [0.000]	0.013*** [0.000]
MVIC	0.000 [0.998]	0.017*** [0.000]	0.000 [0.891]	-0.064** [0.026]	-0.008*** [0.000]	0.023*** [0.000]	-0.052*** [0.000]	0.046*** [0.000]
LogM2	0.001 [0.822]	0.015 [0.285]	-0.060* [0.077]	-0.518* [0.078]	-0.020** [0.015]	0.069** [0.011]	-0.007 [0.861]	-0.091 [0.184]
Gov_Budget	0.000 [0.112]	0.000 [0.199]	-0.002** [0.016]	-0.010 [0.126]	0.000 [0.291]	0.002*** [0.001]	0.000 [0.965]	-0.005*** [0.003]
FDI % GDP	-0.005 [0.453]	0.151*** [0.000]	-0.066 [0.119]	-0.909** [0.015]	-0.075*** [0.000]	0.214*** [0.000]	-0.423*** [0.000]	0.283*** [0.001]
EXRATE	0.000* [0.052]	0.000* [0.063]	0.000 [0.759]	-0.001 [0.911]	0.000 [0.760]	0.001* [0.056]	0.000 [0.845]	0.002 [0.136]
SP500	0.001 [0.466]	0.000 [0.904]	-0.005 [0.477]	-0.056 [0.400]	-0.002 [0.327]	-0.002 [0.737]	-0.005 [0.577]	-0.003 [0.865]
constant	0.001*** [0.000]	-0.006*** [0.000]	0.001 [0.227]	0.020*** [0.007]	0.002*** [0.000]	-0.009*** [0.000]	0.014*** [0.000]	-0.018*** [0.000]
R-sq	0.817	0.861	0.493	0.357	0.832	0.763	0.892	0.782
Adj. R-sq	0.795	0.844	0.432	0.279	0.811	0.734	0.879	0.756
No. Obs	75	75	75	75	75	75	75	75

Notes: This table shows results from the regression in Eq. (3.20). The Cumulative Abnormal Volatility for event window [-12,12] of eight indices namely FBMKLCI, Industrial Product and Services Index (IND), Consumer Product and Service index (CONS), Construction index (CONSTR), Finance Service index (FIN), Plantation index (PL), Property index (PR) and TE index (TE) are estimated using Squared Return. These variables are regressed on three elements: (a) number of political parties (NP), minority of government (MGOV_dummy) and margin of victory (MVIC) which proxied for election-induced variables; (b) change in money supply (logM2), and change in government budget which proxied for political business cycle variables; and (c) foreign direct investment (FDI as % GDP) proxied for dependency theory. Change in exchange rate (EXRATE) and SP500 are the control variables. A pooled ordinary least squared is utilized to analyze the overall election effect on each index. The p-value is reported below to the respective estimated coefficients in parantheses. ***, ** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter Five consists of four sections. Section 5.1 is summary of findings. Section 5.2 is reporting policy implication based on the empirical findings. Section 5.3 is empirical implications from the findings. Section 5.4 is documenting the limitation of study and proposing the direction of future research in order to overcome the limitation. Section 5.5 concludes this study.

5.2 Summary of Findings

This study explores the impact of elections on stock market volatility in Malaysia, focusing on abnormal volatility (AV), average abnormal volatility (AAV), cumulative abnormal volatility (CAV), and cumulative average abnormal volatility (CAAV) across different indices and volatility measures. The research examines how political uncertainty influences investor sentiment and market behaviour during election periods, covering General Elections 13 (GE13), 14 (GE14), and 15 (GE15). The findings are derived from five different volatility measures, namely log absolute return, squared return, GARCH-based volatility, range-based volatility, and absolute return. These methods offer comprehensive insights into the varying reactions of financial markets to election-induced uncertainties.

The analysis of log absolute return-based volatility demonstrates that market volatility remains relatively stable in the pre-election period, with a few exceptions where statistically significant movements occur. However, post-election periods tend to exhibit fluctuations in AV, suggesting that investor sentiment is influenced by electoral outcomes.

In GE13, for instance, negative abnormal volatility spikes were observed both before and after the election, signalling adjustments in market expectations. Similarly, GE14 showed pronounced volatility around election day, indicating heightened uncertainty and market rebalancing. GE15, on the other hand, presented a quicker market adjustment, where AV spiked immediately post-election but stabilized in the following days. This suggests that investors had already factored in political risks ahead of the election, resulting in a more tempered market response. The trends in AAV across indices showed a significant decrease in volatility post-election, reinforcing that markets tend to normalize after the uncertainty of elections dissipates. CAV findings indicate cumulative market reactions to elections, with variations across indices and time frames.

The range-based volatility measure provides further evidence of significant market reactions to elections. In GE13 and GE14, AV spiked notably on election day, reflecting strong market sentiment driven by political developments. GE15 displayed a delayed volatility reaction, where significant fluctuations were recorded a few days post-election rather than on election day itself. AAV patterns revealed more stabilized trends over time, though CAV showed that cumulative volatility effects persisted longer for some indices. The prolonged reaction in GE15 might be attributed to post-election negotiations and uncertainties regarding government formation, which prolonged market instability.

The GARCH-based volatility model captures the persistence of market volatility surrounding election events. In GE14, prolonged AV was observed in the post-election period, indicating sustained market uncertainty. This is in contrast to GE13, where volatility quickly stabilized after the election. GE15 exhibited the lowest overall election-induced volatility, suggesting that investors had greater confidence in the electoral process and its

implications for economic policies. CAV results suggest that prolonged market reactions were more evident in GE14 than in the other elections, highlighting the influence of political uncertainty on sustained volatility.

The squared return volatility model highlights delayed market reactions to elections, with significant AV increases occurring several days post-election. In GE13, volatility remained largely insignificant before the election but exhibited a notable increase after election day. GE14, in contrast, recorded sharp and sustained post-election AV, reinforcing the argument that investor sentiment is deeply influenced by political developments. GE15 followed a similar pattern, with AV peaking post-election before gradually declining. AAV results suggest that election-induced volatility tends to normalize in the long run, though CAV analysis shows that the cumulative effects can be substantial for certain sectors.

The absolute return volatility model presents a strong correlation between political uncertainty and stock market fluctuations. During GE13, AV movements were relatively modest, with significant spikes occurring immediately post-election, particularly in the financial and industrial sectors. GE14, however, exhibited stronger reactions, where AV significantly increased on election day and continued into the post-election period. The finance and construction indices displayed heightened volatility, reflecting investor concerns over potential policy changes. GE15 demonstrated a mixed pattern, with short-term AV spikes around election day but relatively lower sustained volatility in the post-election period. The cumulative effects of AV, as captured by CAV, highlight that while initial market reactions may vary, long-term volatility adjustments occur across all elections.

Regression analyses of CAV across different volatility measures further reveal the influence of political and economic variables on stock market fluctuations. Political factors

such as the number of political parties, minority government status, margin of victory, and changes in political orientation significantly impact market volatility. The number of political parties was found to reduce volatility in construction and financial sectors, likely due to coalition-driven stability, while increasing volatility in industrial and plantation indices due to heightened policy uncertainty. The presence of a minority government was associated with reduced volatility in market-wide indices, suggesting that coalition-led governments provide greater stability. However, it increased volatility in the plantation and technology sectors, where policy uncertainty tends to have a greater impact. CAV results confirmed that broader market trends respond significantly to these political shifts, often displaying prolonged volatility in unstable political conditions.

The margin of victory also plays a crucial role in shaping market volatility. A wider margin generally reduces AV in construction, finance, and property indices, reflecting increased investor confidence. However, in industrial and plantation sectors, a larger margin of victory is associated with higher volatility, possibly due to concerns over regulatory changes and policy shifts. These findings suggest that market reactions are sector-specific and depend on the perceived stability and predictability of governance structures following elections. The cumulative effects observed in CAV reinforce the notion that markets price in election uncertainty over time, with sustained effects varying by index.

Political business cycle variables, particularly money supply and government budget changes, further influence market volatility. Higher money supply contributes to increased AV in industrial and plantation indices, as inflationary pressures and speculative investments heighten uncertainty. Conversely, in the construction and property sectors, an expansionary monetary policy reduces volatility by providing liquidity and financial stability. Fiscal

policy, particularly changes in government spending, also affects market volatility. Increased government expenditure tends to stabilize property and technology sectors, ensuring consistent demand and investment confidence. In contrast, reduced fiscal spending correlates with heightened market uncertainty in industrial indices, highlighting the importance of economic policy consistency in maintaining investor confidence. CAV measures further reveal that fiscal policy impacts have longer-lasting effects on volatility trends, particularly in capital-intensive industries.

Sector-specific findings reinforce these broader trends. The financial sector exhibited significant volatility across different elections, particularly in GE14, where prolonged fluctuations were observed. This is likely due to regulatory uncertainties and policy shifts following election results. The industrial and plantation sectors showed heightened election-induced AV, particularly in response to policy uncertainty. Industrial volatility spiked post-election in GE14, indicating investor concerns about regulatory changes. The plantation index, in particular, was sensitive to election outcomes, with increased volatility in cases where elections resulted in weaker government mandates. This suggests that political uncertainty has direct implications for sectors heavily influenced by government policies, such as agriculture and manufacturing. AAV, CAV patterns for these sectors further reveal the lasting effects of election-related instability.

The construction and property sectors displayed reduced AV in elections with clear mandates, reinforcing the importance of political stability in driving investment confidence. However, in elections where margins of victory were narrow or coalition governments were formed, AV increased, reflecting investor concerns over potential policy uncertainties. The findings suggest that markets respond not only to election outcomes but also to the perceived

stability of governance structures, with sectors tied to long-term investments being particularly sensitive to political stability. CAV results in these sectors indicate that election-related uncertainty may take longer to subside in politically volatile conditions.

In conclusion, this study provides strong empirical evidence that elections have a significant impact on stock market volatility in Malaysia, with varying effects across indices and volatility measures. The findings highlight the importance of political stability in ensuring market confidence, particularly in emerging markets where policy uncertainty can have pronounced effects on investor sentiment. Different volatility proxies reveal distinct short-term and long-term reactions to election events, emphasizing the need for comprehensive market analysis to understand these fluctuations.

5.3 Policy Implication

There are several policy implications can be drawn from the findings. Political and economic factors have significant effects on stock market volatility, particularly in Malaysia, where election-induced uncertainty impacts investor confidence and market stability. The findings from the regression analysis suggest that political fragmentation, margin of victory, minority government formations, and fiscal and monetary policies influence cumulative abnormal volatility (CAV) differently across various indices. These insights are critical for policymakers seeking to mitigate market uncertainties and promote financial stability.

Political stability plays a crucial role in market confidence. The results indicate that while political fragmentation generally stabilizes broad market indices, finance, construction, and property sectors, it increases volatility in industrial, plantation, and technology indices. This suggests that while coalition-based governance reduces extreme policy swings, it can also introduce regulatory uncertainty in industries that rely on clear and

consistent policy direction. To mitigate this, the government should ensure that policies remain transparent and predictable to foster investor confidence and reduce sector-specific uncertainties.

The formation of minority governments has been found to reduce volatility in finance, construction, and property sectors while increasing it in industrial, plantation, and technology indices. This implies that coalition-led governance fosters stability in financial and infrastructure-related industries but creates uncertainty for industries that depend on global trade and technological advancements. To address this, policymakers should implement measures that enhance stability, such as clear regulatory frameworks and long-term strategic planning for technology and plantation industries, which are more sensitive to political changes.

Margin of victory also plays a critical role in investor confidence. A strong electoral win tends to reduce volatility in construction, finance, and property sectors due to expectations of policy continuity. However, it increases volatility in the plantation sector, likely due to uncertainty surrounding policy shifts in agricultural subsidies and trade agreements. Policymakers should ensure that election outcomes do not lead to abrupt regulatory changes by reinforcing investor-friendly declarations and maintaining economic policies that support long-term stability in affected sectors.

Monetary policy has different effects across sectors. Expansionary monetary policy increases volatility in industrial and plantation sectors but stabilizes volatility in construction, consumer, and financial sectors. This suggests that while liquidity injections provide stability in consumer-driven markets, they can also contribute to inflationary pressures and speculation in other industries. The central bank should consider sector-

specific monetary interventions to ensure inflationary concerns and excess liquidity do not lead to speculative market fluctuations. Targeted financial stability measures should be adopted to curb excessive volatility in capital-intensive sectors such as industrial and plantation markets.

Fiscal policy also plays an essential role in determining market stability. Higher government spending has been found to reduce volatility in consumer, property, and technology sectors, while increasing volatility in plantation stocks. Fiscal expansion supports demand-driven industries but may raise concerns in agriculture and export-dependent markets due to potential policy shifts. As such, fiscal stimulus measures should be carefully designed to balance support for economic growth with measures that mitigate market speculation. Stable fiscal policies should target volatile sectors such as plantation and industrial markets to ensure long-term stability.

Foreign direct investment (FDI) introduces additional volatility to industrial and plantation sectors but stabilizes construction, property, and technology markets. This suggests that foreign investments, while essential for economic growth, create short-term uncertainty in some industries. Policymakers should encourage long-term FDI commitments in industrial and plantation sectors while ensuring that regulatory frameworks prevent speculative capital inflows that may exacerbate market instability. Incentives should be provided for stable, long-term investments that enhance economic sustainability rather than short-term capital movements that can lead to increased volatility.

To enhance investor protection and market resilience, regulatory authorities should implement tailored risk mitigation strategies. Robust circuit breakers, enhanced market surveillance, and greater transparency in government policies can help stabilize markets

during election periods. Market regulators should also strengthen pre-election financial stability measures, including increased disclosure requirements for politically exposed stocks. Additionally, expanding investor protection policies can help reduce speculative trading and protect long-term investors from abrupt election-induced market fluctuations.

The study's findings emphasize that different industries react uniquely to election outcomes based on their exposure to government policies, trade agreements, and capital inflows. Political fragmentation and minority governments tend to increase volatility in industrial and plantation sectors while reducing it in construction and consumer markets. Furthermore, election results and fiscal policies play critical roles in shaping market behavior. By implementing the recommended policy measures, policymakers can enhance market stability, reduce investor uncertainty, and ensure that the financial market remains resilient despite political changes. A well-structured regulatory framework, combined with clear and transparent policymaking, will foster an environment that supports sustained economic growth and market stability in Malaysia

5.4 Empirical Implication

The empirical findings in this study contribute to the growing literature on the intersection of political events and financial market volatility. By utilizing multiple volatility measures such as Absolute Return, Squared Return, Range-Based Volatility, Log Absolute Return, and GARCH-based Volatility, this study provides robust evidence that election-induced uncertainty affects financial markets differently across sectors. These results support the Efficient Market Hypothesis (EMH) by demonstrating that political information is incorporated into asset prices, influencing volatility patterns.

A key empirical implication is the differential sectoral response to election-related variables. While market-wide indices react strongly to political stability indicators, sector-specific responses vary depending on industry exposure to government policies, trade agreements, and macroeconomic shifts. This highlights the need for sector-based approaches when analyzing election-driven financial risks rather than applying broad, market-wide assumptions.

Furthermore, the study's findings validate aspects of the Political Business Cycle theory, suggesting that government interventions such as fiscal and monetary expansions can moderate or exacerbate market reactions depending on sectoral dependencies. This aligns with existing research indicating that expansionary policies during politically uncertain times can have mixed effects on investor sentiment, stabilizing some markets while intensifying volatility in others.

The use of GARCH-based volatility measures further strengthens the empirical contribution by confirming that volatility persistence is a significant feature of election-induced market reactions. Compared to other measures, GARCH captures the prolonged effect of uncertainty beyond the event window, whereas Absolute Return and Squared Return reflect more immediate fluctuations in volatility. The findings show that Absolute Return exhibits the highest short-term volatility spikes immediately surrounding election events, while Squared Return provides a risk-adjusted measure that remains elevated for a more extended period. Range-Based Volatility demonstrates higher intra-day fluctuations, suggesting that short-term traders react strongly to election uncertainty. Log Absolute Return offers a smoother adjustment, capturing medium-term volatility persistence that aligns with policy uncertainty over time. These comparisons highlight that different measures provide distinct insights into

volatility dynamics, emphasizing the importance of employing a combination of methodologies in empirical research

5.5 Limitations and Recommendations

While this study has contributed to the evidence of the ways in which general election does influence stock market and sectoral indices, and made an effort to investigate how this feeds through to the level, several limitations of study have been identified from methodology perspective. The first limitation encountered by this study was employed student t-test to test for the significant impact of election on the stock return (volatility) in terms of magnitude but it is unable to justify the occurrence of negative (non-negative abnormal return) provided that the stock return (volatility) is inconsistent in trend around election period. Secondly, this study only focuses on single event window (e.g -90, 90) to determine the cumulative abnormal return (CAR) around election. Judging the CAR value estimation by single event window can be biased since investors may start investing in any day around election period instead of starting from t-90.

For future direction of the research, it is recommended that the study employs binomial test along with student t-test. This is because the occurrence of negative (non-negative) abnormal returns in the event period can only be justified by binomial test and it helps to determine the quantity aspect on the extensiveness of the impact. Next, this study can further estimate the significance of the election effect on abnormal return (volatility) using different event window and estimate new CAR for symmetric and asymmetric window for robustness check purpose. Lastly, the election effect can be further investigated on politically-connected firms in order to identify the value of political connection of firms to government in power. From there, this study will be able to tell whether the value of

politically-connected firm arises from rent-seeking possibility or access to cheaper credits or simply having privileged access to industry entry

5.6 Concluding Remarks

To summarize, the three objectives of this study has been accomplished and several policy implications can be drawn from the findings of the study. This includes make use of election- related news to adjust for investors' portfolio, considering shorter timeframe trading strategy for optimum gain or choosing sector that is outperform during the election. Other than that, this study also discusses the limitations encountered and future direction of the research. Among them is to improve the methodology of the study by introducing binomial test and suggesting more trading timeframe or event window to capture the election effect robustly and lastly, the interplay between election effect and politically-connected firm due to its value for political connection

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