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The Impact of Middle East Conflict on Crypto-Market Study Case Palestine-Israel War and Bitcoin

Orta Doğu Çatışmasının Kripto Piyasasına Etkisi: Filistin-İsrail Savaşı ve Bitcoin Üzerine Bir Çalışma

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ABSTRACT

Keywords:

Geopolitical Events,
Crypto Markets,
Hamas's Attack,
Bitcoin

Jel Codes:

G12, G14, G15

The objective of this research is to determine the impact of geopolitical developments on Bitcoin's value. It focuses on the events that occurred from October 7, 2023 including the attack on Israel by the militant group Hamas, the tension between Iran and Israel, and the conflict between Palestine and the US. Through a comprehensive event study, we can analyze the returns generated by these events. The results of the study revealed that Bitcoin performed well during the adjustment and anticipation periods, which showed that it could be a safe-haven asset. On the other hand, the negative AAR during the event day reflected the market's first reaction. The study also highlighted Bitcoin's dual nature as a speculative asset and a safe-haven asset providing investors with a deeper understanding of the risks that affect the cryptocurrency market.

ÖZET

Anahtar Kelimeler:

Jeopolitik Olaylar,
Kripto Piyasaları,
Hamas'ın Saldırısı,
Bitcoin

Jel Kodları:

G12, G14, G15

Bu çalışmanın amacı, jeopolitik olayların Bitcoin'in performansı üzerindeki etkilerini analiz etmektir. Çalışma, militan grup Hamas'ın İsrail'e saldırısı, İran ile İsrail arasındaki gerilim ve Filistin ile ABD arasındaki çatışma da dahil olmak üzere 7 Ekim 2023'ten itibaren yaşanan dönemi incelemektedir. Olay çalışması yönteminin kullanıldığı çalışmanın sonuçları, Bitcoin'in ayarlama ve tahmin dönemlerinde iyi performans gösterdiğine dair kanıtlar sunmakta ve bu da onun güvenli bir liman varlığı olabileceğini göstermektedir. Ayrıca, olay günündeki negatif Aritmetik Ortalama Getiri (AAR), piyasanın ilk tepkisini yansıtmaktadır. Çalışma yatırımcılara kripto para piyasasını etkileyen riskler hakkında daha derin bir anlayış sağlarken aynı zamanda Bitcoin'in spekülasyon bir varlık ve güvenli bir liman varlığı olarak ikili yapısını da vurgulamaktadır.

1. INTRODUCTION

Over the past decade, Bitcoin, a virtual currency, has evolved into a significant asset within the financial sector, exhibiting distinct behavioral characteristics that differentiate it from traditional assets. This study aims to systematically examine the impact of geopolitical developments in the Middle East on the cryptocurrency market, with a specific focus on Bitcoin. The Middle East has long been a region plagued by conflicts such as the Iran-Iraq War, the Arab-Israeli War, and various uprisings and terrorist activities, which have influenced global economic stability. The ongoing conflict between Palestine and Israel, characterized by frequent ceasefires and escalations, continues to impact markets. The recent attack by Hamas on Israel on October 7, 2023, further exacerbated concerns about political and military instability in the region.

In times of heightened geopolitical uncertainty, investors typically seek out safe-haven assets such as gold and government bonds to hedge their risks. However, the emergence of digital currencies like Bitcoin has introduced a new alternative. Bitcoin's decentralized and independent nature makes it an increasingly popular asset among investors looking to mitigate geopolitical risk. This study evaluates the performance of Bitcoin, focusing on its cumulative average and abnormal returns following the Gaza attack and other political developments in 2024. By analyzing Bitcoin's price movements during this period, the research explores broader implications for both policymakers and investors.

The motivation for this research is rooted in the growing need to understand whether Bitcoin can reliably function as a safe-haven asset during geopolitical crises. While traditional assets have long been studied in this context, Bitcoin's unique characteristics—such as high volatility, decentralization, and speculative nature—present both opportunities and risks that require deeper exploration. Understanding the interplay between political developments and cryptocurrencies is crucial for investors seeking to navigate these uncertain times, as well as for policymakers who need to consider the financial stability risks posed by the growing role of cryptocurrencies. The potential contributions of this research are twofold. First, it adds to the limited body of literature by specifically examining the impact of the Palestine-Israel conflict on Bitcoin, a subject that has seen only minimal academic inquiry. Second, it provides a comprehensive analysis of Bitcoin's role as both a speculative asset and a safe-haven alternative during times of geopolitical instability, offering practical insights for investors and valuable implications for policymakers. The findings of this study could guide future decisions on risk management, portfolio diversification, and regulatory frameworks, enhancing both theoretical understanding and practical application within the financial sector.

2. LITERATURE

The Middle East has long been a central issue of geopolitical conflicts and tensions, which have affected global markets. This literature review looks into key events and developments, including the conflict between Israel and Palestine, Iran's political situation, and recent attacks, like the one carried out by Hamas on October 7, 2023. Smith, (2013) published a book detailing the history of the conflict between Israel, Palestine, and Arabs. It explores how these conflicts have affected global financial markets. The first Arab- Israeli war was fought in 1948. This book presents a historical overview of the conflict, which has affected global economies. Berti & Guzansky, (2014) discussed Israel and the Arab Spring, which looked into how these developments have affected economic stability and investor confidence. Grinin & Korotayev (2022) published a book that looked into the Arab Spring and the subsequent conflicts. It revealed how these developments have affected the financial markets. The research provided a framework for evaluating how the cryptocurrency market might be affected by similar events currently taking place.

The study conducted by Smith & Jones (2023) analyzed how the attack by Hamas on Israel on October 7, 2023, affected the financial markets. It noted that the incident caused panic and increased volatility in the cryptocurrency market. Bitcoin, which is often considered a safe haven asset, also experienced a spike in trading volume. Bitcoin's price immediately rose after the incident, as investors sought to take advantage of its perceived safety. The sudden increase in volatility was triggered by the market's reaction to the geopolitical situation. The sudden death of key political figures in Iran has raised concerns about the country's political stability. This issue is analyzed in a study conducted by Yan et al. (2022) who noted that Bitcoin could be a safe haven asset. During times like these, investors tend to increase their exposure to Bitcoin. Although Baur & Lucey, (2010) mainly focused on gold, it also looked into the various asset classes that can be considered as safe havens, such as stocks, bonds, and gold. It found that when faced with crises, assets perceived as autonomous from the conventional financial systems become more appealing.

Analyzing the volatility of the cryptocurrency market, Corbet, Lucey & Yarovaya, (2019) looked into how investors react to global crises. They also analyzed Bitcoin's price movements and trading volume during the incident. The findings of this study provide a basis for understanding how the market reacts to geopolitical events. In 2016, a study conducted by Dyhrberg compared Bitcoin's hedging capabilities with those of gold. It found that Bitcoin enjoys the same characteristics as gold when it comes to geopolitical uncertainty. It is therefore a preferred asset for investors during such situations. In 2018, Klein et al. (2018) compared Bitcoin's performance to that of traditional safe-haven assets. It noted that Bitcoin's volatility and correlation with the market are different from those of gold.

Bitcoin's behavior is different from that of traditional markets, as it tends to react more quickly to geopolitical events. Kumar (2023) discussed the impact of cryptocurrencies on scholarly interest and discussions. People are always looking to protect their assets whenever there is conflict, and global political events such as elections can have an effect on the market. Due to the current situation in the Middle East, people are also searching for ways to safeguard their financial assets. The objective of Khalfaoui (2023) was to analyze how the war affected the stock returns of the industrialized nations. They looked into the link between the war and the crypto market. They found that although the conflict had a negative effect on cryptocurrencies, it was only during normal market conditions.

The geopolitical events in 2023 were able to positively impact the crypto markets as they occurred during a period of rising market sentiment. For their study, the researchers focused on Bitcoin, Ethereum, Bitcoin, Litecoin, and Ripple. They noted that during the Ukraine-Russian crisis, the stock market had been bullish, but cryptocurrencies, as well as G7 stocks, were regarded as safe haven assets. The effects of the conflict on the stock and crypto markets depend on the time horizon of investors. For instance, the war's negative impact on the stock returns of G7 nations can be attributed to the lack of attention. However, the long-term consequences of the conflict in Ukraine can also have a negative impact on the crypto market.

According to Houben (2020) cryptocurrencies should be regarded as different types of assets. They also think that cryptography is the main factor that drives the development of these assets. They claim that the term cryptocurrencies do not only refer to physical assets. It doesn't just contain digital assets. They believe that these are all based on cryptography. In response to Russia's invasion of Ukraine, the Western Nations imposed sanctions on the country. This was the kind of reaction they took after they seized Crimea in 2014.

All individuals who are citizens of one of the European Union's member states or reside there are affected by the sanctions. Companies operating within the EU are also subject to these regulations. These include foreign and local firms. These regulations also cover the activities of companies in the cryptocurrency industry. All of these entities are subject to the sanctions, and those operating in Russia are not affected.

These regulations are aimed at punishing the country's vital business and economic activities. Since the cryptocurrency market is fairly unregulated, it's not yet clear how they would affect the activities of individuals and companies operating in this sector. In response, Russia has issued regulations that prevent people who aren't Russian citizens from providing services to others. It is also not feasible to fully implement these regulations since there is a lack of a definition for cryptocurrencies. For instance, during the war in Ukraine, the exchange rate between the Russian ruble and Bitcoin became volatile. Another factor that contributed to the volatility of the exchange rate was the depreciation of the Russian currency.

Qin (2021) Explores how the interaction between the global economy and Bitcoin affects its price. They used a rolling-window method to analyse the link between the uncertainty of the global economy and the price of bitcoin. They discovered that the market's information can help predict the likely future state of the global economy. According to the researchers, this information can help improve the Bitcoin price's prediction capabilities. In addition, various studies have shown that political events can interact with Bitcoin. The research on cryptocurrency's potential role in the financial sector is being conducted by a number of academic institutions.

In Bouoiyour & Selmi (2017), the authors explain how the sharp increase in Bitcoin's value following Donald Trump's election led them to question whether the cryptocurrency could serve as a safe haven investment for the U.S. stock market. However, their research concluded that Bitcoin is a weak haven asset. Umar (2021) reached similar conclusions and looked into the link between political and economic uncertainties in the US and bitcoin when the situation was at its peak. They discovered that its relationship could change as uncertainty grows. Bitcoin also has various important events that are linked to it.

In 2021, Qin noted that when various uncertainties, such as the UK's exit from the European Union and the debt crises in Cyprus and Turkey, occur, the price of bitcoin will increase. In another study, Wustenfeld & Geldner

(2022) explained that economic shocks can have an effect on the activities and trading volumes of bitcoin. Almaqableh's group in 2022 noted that attacks by terrorists affected how people used bitcoin. Although other studies have shown that economic and political factors can affect the price of bitcoin, this finding is not supported by the available data.

A study conducted in 2022 identified Bitcoin and other assets as not considered safe havens during the Ukraine war. The research, which utilized a statistical method known as the Distributed Consensus Gathering Algorithm (DCC-GARCH), analyzed the daily data of various cryptocurrencies from November 1, 2021 to March 15, 2022. Halousková, (2022) The researchers used a statistical model, the researchers were able to determine how attention indicators affect stock price changes. They found that the predictability of the performance of the market was influenced by the amount of media attention that 36 nations paid to the conflict in Syria before, during, and after it happened. They also discovered that the economic openness of these countries was linked to media attention to Russia.

The study conducted by Aslanidis in (2022) used the Google Trends Indicator to analyze the daily changes in the sentiment toward various cryptocurrencies from 2015 to 2021. They discovered that the sentiment toward these digital currencies is more closely related to the market-specific indicator than the general uncertainty index. Moreover, the returns from these currencies have a longer time frame compared to those from other assets.

Based on the research of Jankovič (2024) It is believed that the conflict involving Ukraine occurred before March 23, 2022. Doing this would allow us to determine if the market was affected by the war. The null hypothesis states that the market did not experience any impact. The analysis was performed using a time frame that spans from June 19, 2021 to January 23, 2022. For the event window, it was used from February 17, 2022 to March 24, 2022. Although it's hard to tell exactly how the war affected the market, it can be observed how various cryptocurrencies changed their prices, volumes, and liquidity. A quick review of the data allows us to compare its findings with a larger time frame, offering a deeper comprehension of the factors that impacted the market. Furthermore, we should take into account other global events happening at present.

3.DATA AND METHODOLOGY

Here in this research to understand the complex relationship between crypto and war attacks we will use Top crypto BTC to represent the entire crypto market. According to Usatoday.com top cryptocurrency of 2024 is Bitcoin as shown in the list below of the Table1 with full name, codes, and market capitalization. Data of BTC are retrieved from The investing.com. All the data covers period from, 07.07.2023 to 17.10.2023 Israel-Palestine conflict.

Table 1. Bitcoin

Full name	Codes	Market Capitalization
Bitcoin	BTC	756,020,936,523

This section explores the concept of Event study, which is a statistical analysis of the effects of certain types of events on financial markets. It aims to determine if the market reaction is statistically significant. Through the event study, we can analyze the movements of Bitcoin exchange rate. It determines the presence or absence of significant market reactions to past events that are relevant to a company's stock price.

The event study's foundation is based on the Efficient Market Hypothesis (EMH), which was developed by Fisher, Fama, Brown, and Warner in 1985. The main goal of the research is to find out if the market's reaction differs from what it would be in the event of no event. The standard event study method can also be used to analyze the effects of stock splits.

According to MacKinlay & Lo, in 2004, the event study has been regarded as the most successful method for analyzing corporate finance. Fama & Brown were also acknowledged for their seminal work on the subject in 1969. Their study examined how news or economic events affected share prices.

The event study can analyze how certain types of news or events affected share prices. It can also identify abnormal performance. There are a variety of methods that can be utilized to determine abnormal returns. One of the most popular methods used by the event study to analyze abnormal returns is the Market model, which is a risk adjusted returns model. It can be used to measure the multiple measures that affect share prices during the event window. For the expected returns of Bitcoin, a benchmark index is needed to be established. The Crypto

Currency Index 30 (CCI30) is a 30-day market cap-weighted index created on January 1, 2017. It is used to measure the overall increase and daily changes in the market. Daily values of the CCI30 index are retrieved from The cci30.com. All the data covers the period the war and conflicts going on at the moment between Palestine and Israel. After all the required data has been collected, the logarithmic returns of each cryptocurrency and CCI30 index are calculated with the following equation:

Step a: Daily returns for BTC

The daily return for each sample company is computed for the estimation window and for the event window using:

$$R_{it} = \log(P_{it} - P_{i(t-1)}) \quad (1)$$

Where, P_{it} and $P_{i(t-1)}$ are respective daily closing share prices for the company (i) at day t and t-1, R_{it} is the actual return for company i at day t.

In equation (1), R_{it} represents the logarithmic return of BTC i

On day t, P_{it} is the closing price of BTC i on day t, and $P_{i,t-1}$ is the closing price of BTC i on the previous day. In this study, event study approach to calculate the impact of a conflict on the returns of the sample firms. They determined that the day of the conflict, which is the day when Hamas attacked Israel, has the most significant impact on the returns. They also specified the period wherein the events were analyzed, and the event window, which is used to evaluate their effects.

Step b: Daily returns for market

The daily returns for the market are computed using daily values of CCI30 for the same period using:

$$R_{mt} = \log(I_{it} - I_{i(t-1)}) \quad (2)$$

Where, I_{it} and $I_{i(t-1)}$ are respective daily index values at time t and t-1 respectively, R_{mt} is the Return of Market portfolio for the period.

Step c: Abnormal returns calculation

Abnormal return is defined as actual return (R_{it}) minus normal return (NR_{it}).

$$AR_{it} = R_{it} - NR_{it} \quad (3)$$

After taking into account the expected returns, the researchers computed the abnormal returns of Bitcoin using equation 3. They subtracted the expected return from the event that was not taken into account.

Normal Return is calculated using the market model which is –

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

And, $NR_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{mt}$ (4)

R_{mt} is the return on the market index for day t. α_i measures mean returns not explained by the market. β_i measures the sensitivity of return (company i) to the market return and ϵ_{it} is the statistical error whose expectation is assumed to be zero.

Using Eq. (3) and Eq. (4), abnormal returns are defined as residuals or prediction errors of the model which is as under:

$$AR_{it} = R_{it} - NR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}) \quad (5)$$

Where, $\hat{\alpha}$ and $\hat{\beta}$

are OLS estimators of the regression coefficient estimated over the estimation window.

Step d: Average Abnormal returns (AARs)

To eliminate the effect of any one or group of shares on ARs, ARs (Abnormal returns) are aggregated and averaged for each day in the event window. The un-weighted cross-sectional AARs in period t are calculated using:

$$NAAR_{it} = \sum_{i=1}^N AR_{it} / N \quad (6)$$

Where, N is the number of shares for which ARs are present on day 't' in the event window.

the common response of BTC to the world conflict is examined by utilizing this formula to determine the average abnormal returns (AARs) for each day:

In equation (6), the AARs are computed for each day by dividing the ARs of each BTC by the total number. The last step in the analysis is to determine if the anomalous returns of cryptocurrencies during the period were statistically significant. They added in the adjustment period, the anticipation period, the event day, and the total event window to arrive at the CAARs. The results of the study are then analyzed by using statistical methods and Microsoft Excel. Previously computed AARs are added together to determine the CAARs over the anticipation period (-10, 0), adjustment period (0, +10), event day (0, 0), and total event window (-10, +10). The statistical significance of the results is assessed by using t statistics and Microsoft Office Excel is used for all calculations. All the data covers the period from 07.07.2023 to 17.10.2023 Israel-Palestine conflict.

4. EMPIRICAL FINDINGS

Table 2 shows the descriptive data of the collected information. During the period, there were 122 observations for Bitcoin.

Table 2. Descriptive Statistics

Name	Mean	Max	Min	Std.Dev	Obs
BTC	-2,453E-	0,0310099	-0,0444032	0,00937467	122

Note: The mean indicates that the returns were generally negative during the period. The minimum indicates that there were significant losses, while the positive maximum shows that there were periods of gains. The standard deviation indicates that returns can fluctuate both positively and negatively. Second, the abnormal returns (ARs) for BTC are calculated, the results are shown in Table 3.

Table 3. Abnormal Returns of BTC

Day	BTC
t-10	0,006262806
t-9	-0,007097375
t-8	-0,001551707
t-7	0,015278263
t-6	0,001460974
t-5	-0,004275395
t-4	0,012070597
t-3	-0,006063385
t-2	0,006964526
t-1	0,003080581
0	0,001095516
t+01	0,006678314
t+02	-0,004487195
t+03	-0,012616192
t+04	0,002698085
t+05	-0,002406446
t+06	-0,002726729
t+07	0,006627384
t+08	0,028815474
t+09	0,004370338
t+10	-0,293802278

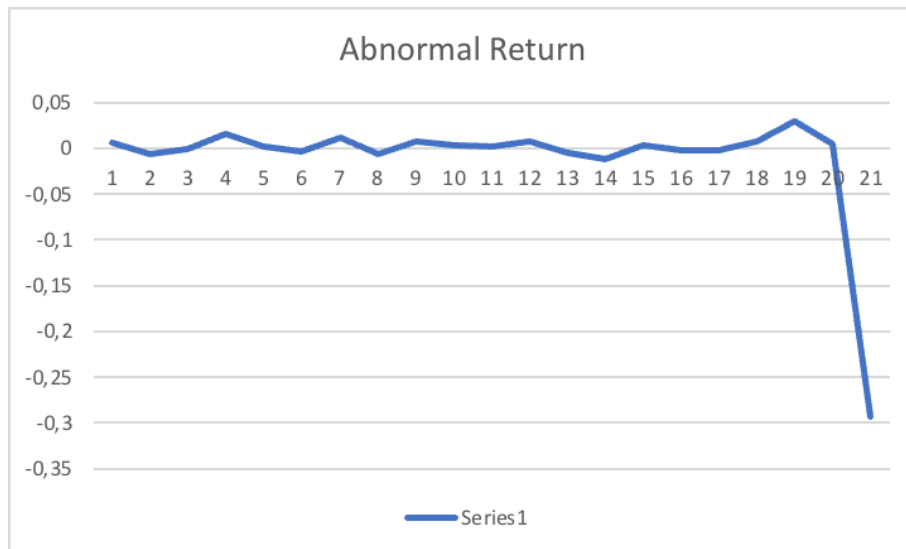


Figure 1. Abnormal Returns Over Event Period

Since it is difficult to evaluate overall patterns with the individual abnormal returns, in the third step, the cumulative market reactions (CARs) of BTC are evaluated for the anticipation period (-10, 0), adjustment period (0, +10), event day (0, 0) and total event window (-10, +10), and the results are presented in Table 4.

According to the results, we didn't find a statistically significant difference in the cumulative abnormal returns of Bitcoin during the period. The returns were also positively affected by the events.

Table 4. Cumulative Abnormal Returns of BTC

Code	AnticipationPeriod (-10, 0)	Event Day(0,0)	Adjustment Period (0, +10)	Total Period(-10, +10)
BTC	0,02613	0,001096	-0,26575	-0,23962

Note: The main results showed that during the Anticipation Period (-10, 0), EventDay (0, 0), the cumulative average abnormal returns were not statistically significant. The Adjustment Period (0, +10), and Total Period (-10, +10), the cumulative average abnormal returns were statistically significant.

This indicates that the Israel-Palestine war on October 7, 2023, may have a significant impact on Bitcoin's market performance.

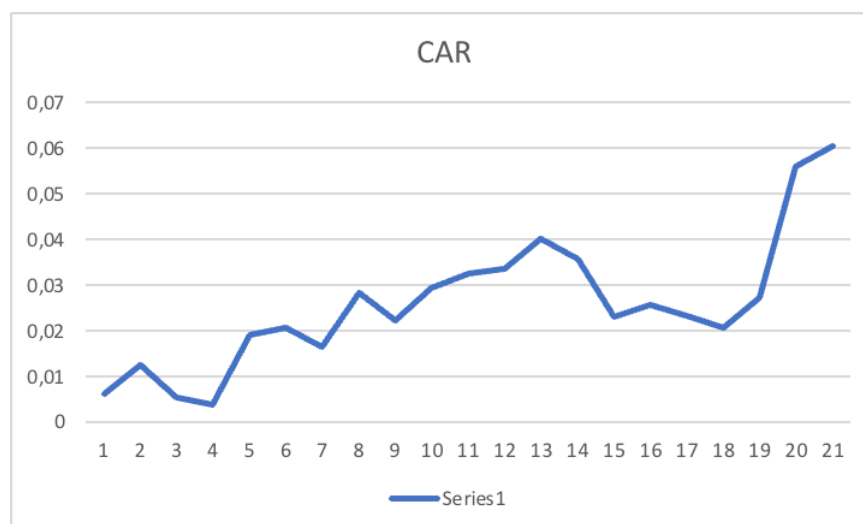


Figure 2. Cumulative Abnormal Returns (CAR) Over Event Period

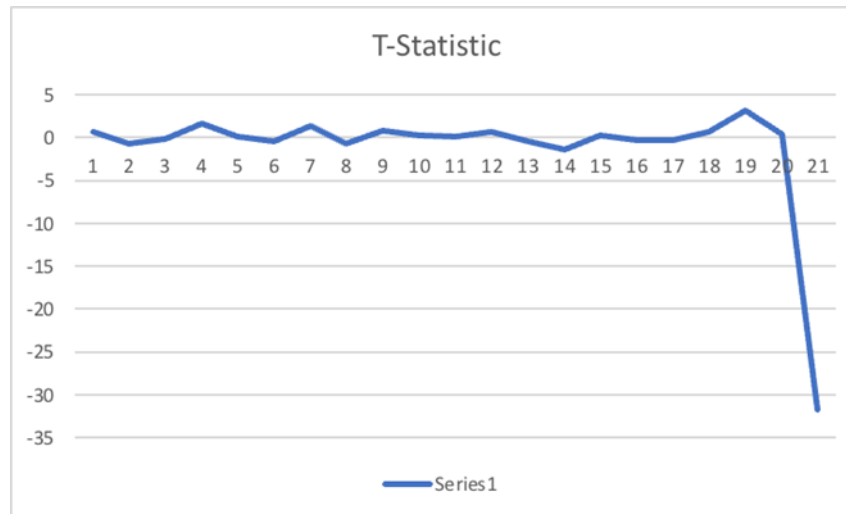
In the next step, the average abnormal returns (AARs) for each day, For BTC, are computed to depict the entire reaction of BTC to an event. The results are shown in Table 5 and the market seems not affected by the event.

The next step is to analyze the daily average abnormal returns (ARs) for Bitcoin (BTC) to determine the total reaction of the market to an event. The results show that the market doesn't seem affected by the event. On the fourth day before the event, there is a positive and statistically significant AR.

Table 5. Average Abnormal Returns of BTC

	Day	AARs	t-test	Significant
Anticipation Period (Pre-event)	t-10	0,00395909	0,675416774	NO
	t-9	-0,000417284	-0,765416774	NO
	t-8	0,004324541	-0,167344956	NO
	t-7	0,006863278	1,647695149	NO
	t-6	0,008369619	0,157559766	NO
	t-5	-0,001407211	-0,461083006	NO
	t-4	0,003897601	1,301762101	NO
	t-3	0,003003606	-0,65391007	NO
	t-2	0,00045057	0,751094203	NO
	t-1	0,005022553	0,332227448	NO
	0	0,002088048	0,118146656	NO
Adjustment Period (post-event)	t+1	0,003886915	0,720227534	NO
	t+2	0,00109556	-0,483924676	NO
	t+3	-0,008551693	-1,360602184	NO
	t+4	-0,004959053	0,290976909	NO
	t+5	0,00014582	-0,259524873	NO
	t+6	-0,002566588	-0,294066063	NO
	t+7	0,001950327	0,714734967	NO
	t+8	0,017721429	3,107625234	Yes
	t+9	0,016592906	0,471322164	NO
	t+10	-0,14471597	-31,68531495	Yes

Note: If your t-statistics are more extreme (e.g., greater than 3 or less than -30), the p-values will be very small, typically indicating strong evidence against the null hypothesis and suggesting that the observed abnormal returns are highly significant. The results shown in table 5 demonstrate that t+9 and t+8 are significant statistically.

**Figure 3.** T-Statistic Over Event Period

Since the AARs can't capture the overall performance of the market, cumulative average CAARs are used to analyze the various periods and days of the cryptocurrency market. Table 6 shows the results of the analysis, which are none of them statistically significant. It is concluded that all the conflicts and wars have an impact on certain cryptocurrencies, but the overall performance of the market seems unaffected.

Table 6. Cumulative Average Abnormal Returns of BTC

Statistics	Anticipation period (- 10,0)	Event day (0,0)	Adjustmentperiod (0,+10)	Total Period (-10,+10)
CAAR	0,02613	0,001096	-0,26575	-0,23962
t-stats	2,818	0,118115	-28,6604	-25,8424

Note: for the Anticipation period (-10,0) and the Event day(0,0) The p-value is greater than 0.05, so the result is not statistically significant. For the Adjustment period (0,+10) and the Total period (-10,+10) The p-value is below 0.05, The p-value is extremely small, indicating very strong statistical significance.

5. CONCLUSION

This study analyzed the impact of recent geopolitical events, particularly the Israel-Palestine conflict on October 7, 2023, on the cryptocurrency market, with a focus on Bitcoin. By examining Bitcoin's price movements and abnormal returns during this period, the research sheds light on its role in the global economy as both a speculative and safe-haven asset. While our findings indicate that the immediate market reaction to the conflict was not significant, Bitcoin did exhibit resilience during the adjustment period, recovering from initial negative abnormal returns. This highlights Bitcoin's dual nature, where it can both react to geopolitical shocks and later stabilize as a hedge against further risks.

Comparing our findings with existing literature, we observe similarities and differences. Prior research, such as studies by Dyhrberg (2016) and Klein et al. (2018), supports the view of Bitcoin acting as a safe-haven asset during crises, while others like Raza et al. (2022) have found that Bitcoin and other cryptocurrencies may not always provide refuge during conflicts. Their results show that Bitcoin's reaction to geopolitical instability involves initial volatility followed by a stabilization period. The volatility observed in the aligns with Corbet, Lucey & Yarovaya (2019), although their findings suggest more sustained volatility than what we observed.

Our study also emphasizes the importance of investor behavior in the cryptocurrency market. Although geopolitical events like the Gaza conflict may not lead to dramatic immediate shifts in Bitcoin's returns, investors should remain cautious about future crises, as Bitcoin's volatility can lead to both significant gains and losses. This suggests a high-risk investment environment, reinforcing the need for effective risk management strategies.

6. RECOMMENDATIONS FOR FUTURE RESEARCH

Broader Cryptocurrency Market Analysis: While Bitcoin was the primary focus of this study, future research should explore the effects of geopolitical events on other cryptocurrencies, such as Ethereum, Ripple, and Litecoin. This will allow for a more comprehensive understanding of how the broader cryptocurrency market behaves during geopolitical crises.

Long-Term Geopolitical Event Analysis: Our study was limited to the short-term impact of the conflict. Future studies should investigate the long-term effects of sustained geopolitical instability on cryptocurrency markets, as this would provide deeper insights into how digital assets respond over extended periods.

Impact of Global Regulatory Changes: Given the decentralized nature of cryptocurrencies, global regulatory changes can significantly influence market behavior. Future research should examine how upcoming or existing regulatory frameworks affect cryptocurrencies, especially during times of geopolitical uncertainty.

Incorporating Macroeconomic Factors: Further research should also explore how macroeconomic variables, such as inflation, interest rates, and global trade patterns, interact with cryptocurrencies during geopolitical events. This could provide a more nuanced understanding of market dynamics.

Advanced Methodological Approaches: To enhance the accuracy of future analyses, researchers could use more advanced econometric techniques, such as vector autoregression (VAR) or GARCH models, to better capture the complexities of market volatility and interdependencies between assets during periods of crisis.

Our findings suggest that Bitcoin has the potential to act as both a speculative and a safe-haven asset during geopolitical events. Policymakers should consider this when crafting regulations for cryptocurrencies, particularly in terms of financial stability and risk management. Introducing transparent and comprehensive reporting requirements for the cryptocurrency market would help mitigate risks. Moreover, investors should be advised to include cryptocurrencies in their portfolios to hedge against geopolitical risks, while also implementing stop-loss

orders and portfolio recalibration strategies to manage potential losses due to the inherent volatility of digital assets.

In conclusion, while Bitcoin displayed resilience and recovery after the initial shock of the October 7, 2023, Hamas attack, the market's reaction was mixed, demonstrating both volatility and stabilization. The findings highlight Bitcoin's unique characteristics as both a speculative and a safe-haven asset, depending on market conditions. Future research should expand upon these results by studying other cryptocurrencies, integrating macroeconomic factors, and using more advanced methodologies to better understand the full scope of how geopolitical events influence the cryptocurrency market. Through these insights, policymakers, investors, and academics can better navigate the growing role of cryptocurrencies in the global financial system.

AUTHORS' DECLARATION:

This paper complies with Research and Publication Ethics, has no conflict of interest to declare, and has received no financial support.

AUTHORS' CONTRIBUTIONS:

Conceptualization, writing-original draft, editing – **ME** and **AK**, data collection, methodology, formal analysis – **ME**, Final Approval and Accountability – **ME** and **AK**

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