Market Reactions in China to the US-Houthi Conflict: An Event Study Approach

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Abstract: This study aims to examine market reactions in the Chinese market to the US-Houthi conflict, employing the event study methodology with cumulative abnormal returns (CAR) as a proxy for market reactions. The analysis focuses on a sample of 2,114 Chinese companies. The findings reveal that the Chinese market exhibited significant reactions during the post-event period, with nearly all sectors affected rather than a single sector. This suggests that the conflict disrupted the Suez Canal trade route, a critical pathway for China's trade with Europe, leading to increased investor pessimism. These results provide implications for policy makers and managers in overcoming supply chain disruptions due to the war.

1 INTRODUCTION

The Israel-Hamas conflict, which began on October 9, 2023, has had profound global repercussions, influencing the geopolitical stance of multiple nations. One significant outcome is the emergence of another conflict involving the United States and the Houthis. The Houthis declared their aggression against ships associated directly or indirectly with the United States, the United Kingdom, or Israel as an expression of support for the Palestinian people[1]. Since November 2023, the Houthis have carried out over one hundred attacks on commercial vessels and warships, escalating maritime risks[2]. These attacks have resulted in at least two fatalities, four injuries, and several individuals reported missin[3]. Pandey et al. (2024) and Yudaruddin et al. (2024) demonstrated that conflicts in the Middle East have increased instability in capital markets, with the US-Houthi conflict eliciting predominantly negative reactions in global markets, particularly in the consumer cyclical sector (Yudaruddin et al., 2025).

Additionally, the US-Houthi conflict has disrupted a critical shipping route connecting Asia and Europe, causing blockades and necessitating rerouting via the southern tip of Africa. This has led to significantly higher transportation costs and risks, driving up global commodity prices[4]. Haralambides (2024) reported a decline in the use of the Suez Canal trade route due to the conflict, while traffic along the Cape of Good Hope has surged. This disruption has particularly affected China, which relies heavily on

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[4] https://www.nytimes.com/article/houthi-yemen-red-sea-attacks.html

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trade with Europe (Gonen, 2023). These developments prompted this study to examine market reactions in China, given that previous conflicts (e.g., the Russia-Ukraine war, the Israel-Hamas conflict) have consistently elicited negative responses.

The purpose of this study is to investigate the impact of the US-Houthi conflict on the Chinese capital market, focusing on market reactions across different sectors and company sizes. This research aims to understand how geopolitical tensions, particularly those disrupting critical trade routes like the Suez Canal, influence market stability in China, a country with significant reliance on international trade. By analyzing the sensitivity of the Chinese market to such conflicts, this study seeks to provide valuable insights into the broader implications of geopolitical risks on emerging markets. The findings are intended to guide policymakers, managers, and investors in formulating strategies to address market instability and mitigate the adverse effects of supply chain disruptions.

This study contributes to the literature in three ways. First, our study complements previous studies that discuss market reactions in China, particularly in the context of war, such as the Israel-Hamas conflict (Yudaruddin et al., 2024) and the Russia-Ukraine war (Boubaker et al., 2022; Wang and Su, 2024). Unlike prior studies, this research focuses on the US-Houthi conflict and its implications for the Suez Canal trade route in China (Yudaruddin et al., 2025). Second, this study highlights the heightened sensitivity of the Chinese market to geopolitical risks, corroborating findings from earlier studies (Yudaruddin et al., 2024; Wang and Su, 2024). Furthermore, China's significant role in the global economy implies that instability in its market could have far-reaching consequences for global markets (Kim, 2019). Third, the findings provide valuable insights for policymakers, managers, and investors in addressing supply chain disruptions and mitigating market instability.

2 METHOD

This study examines 2,114 companies listed in the Chinese market. The daily closing prices of the sample companies, along with the Shanghai Composite Index (SSEC), were obtained from the investing.com database for the period spanning December 1, 2022, to February 29, 2024.

We employed the event study approach proposed by Fama et al. (1969), which has been widely used in recent studies on market reactions to geopolitical risk such war (Lesmana & Yudaruddin, 2024b; Yudaruddin et al., 2023; Yudaruddin & Lesmana, 2024b; Pandey, 2024; Boubaker et al., 2023). This study focuses on the US-Houthi conflict that occurred on January 11, 2024[5,6,7], as the event day.

We utilized multiple event windows, including a 15-day pre-event period and a 15-day post-event period, to capture market reactions comprehensively. Furthermore, a 250-trading-day period prior to the event window was used to calculate normal returns, providing a robust benchmark that enhances the accuracy and reduces potential biases in the study's results.

Based on the works of Yudaruddin et al. (2023), Yudaruddin and Lesmana (2024a), and Boubaker et al. (2022), we use market reaction metrics such as normal returns, abnormal returns, and cumulative abnormal returns, defined as follows:

The normal rate of return is given by:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t}$$

The abnormal rate of return is defined as:

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t})$$

Lastly, the cumulative abnormal rate of return:

$$CAR_{i(t_1,t_2)} = \sum_{t=t_1}^{t_2} AR_{i,t}$$

where, $R_{i,t}$ is the return rate of stock i on the trading day t, $R_{m,t}$ is the return rate of the trading market, α_i and βi are regression coefficients. The expected normal return of individual stock i can be calculated when α_i and βi remain stable during the estimation period, while $\varepsilon_{i,t}$ is the idiosyncratic component of the stock return. Furthermore, $AR_{i,t}$ is the average abnormal return rate of stock i on the trading day t, obtained by subtracting the expected from the actual return, and $CAR_{i(t_1,t_2)}$ is the cumulative abnormal return rate of stock i in the event window period (t_1,t_2).

The purpose of this study is to explore the market response to the US-Houthi conflict in the Chinese market. To achieve this, the analysis is conducted in several stages. First, the overall market reaction is examined, followed by a sectoral analysis across Communication Services, Consumer Discretionary, Consumer Staples, Energy, Financials, Healthcare, Industrials, Information Technology, Materials, Real Estate, and Utilities. Second, the analysis is

[5] https://www.nytimes.com/2024/01/11/us/politics/us-houthi-missile-strikes.html

[6] https://edition.cnn.com/2024/01/11/politics/us-strikes-houthis-yemen/index.html

[7] https://www.aljazeera.com/news/2024/1/11/any-us-attack-on-yemens-houthis-will-not-go-without

segmented by company size, categorizing firms into small, medium, and large. Third, the study explores market reactions based on growth rates, divided into low, medium, and high-growth companies. Finally, the robustness of the results is tested using the Wilcoxon signed-rank test and an alternative event window of 150 days, ensuring the reliability and validity of the findings.

3 RESULT AND DISCUSSION

3.1 The Impact of the US-Houthi Conflict on Market Reactions by Market

In Table 1, this section analyzes the market reaction in China to the US-Houthi conflict, with a detailed examination of sectoral differences. Building on the research of He et al. (2019), which explored the Chinese market reaction to COVID-19, this study takes a distinct approach. The findings reveal that the Chinese market generally reacted significantly positively prior to the event and during the event window (0, +1), but post-event, the market experienced a significant negative reaction to the US-Houthi conflict. This suggests that the Chinese market remained stable before and during the event, but post-event disruptions, particularly to the Suez Canal trade route, had a profound impact. The negative reaction reflects investors' concerns regarding the disruption of the Suez Canal, a critical trade route connecting China to Europe. According to IMFPortwatch (2024), logistics in the Suez Canal declined by up to 70%, significantly affecting Chinese companies, as the canal plays a pivotal role in facilitating trade to Europe (Gonen, 2023). Essalamy et al. (2020) and Wu et al. (2022) highlight the Asian region's reliance on the Suez Canal for its cost, time efficiency, and lower risk of ship damage. The rerouting of trade increased inefficiencies and disrupted the effectiveness of distribution, negatively impacting corporate performance. Investors interpreted these developments as adverse signals, leading to panic selling, which resulted in significant declines in stock prices. This aligns with Basnet et al. (2022), who found that geopolitical risks, such as the Russia-Ukraine war, triggered pessimism among investors, prompting them to exit markets. Similarly, Hoque and Zaidi (2020) emphasize that geopolitical risks often have a detrimental effect on stock returns in developing countries.

More specifically, sectoral market reactions reveal interesting trends. Prior to the event, some sectors displayed significant positive reactions, including consumer staples, energy, financials, industrials, materials, and real estate. These findings support Nerlinger and Utz (2022), who identified a strong positive correlation between the energy sector and geopolitical events. In contrast, sectors such as communication services, consumer discretionary, healthcare, and information technology exhibited significant negative reactions. On the event day, however, most sectors experienced significant positive reactions, driven by China's monetary policy interventions, such as interest rate cuts and support for the property sector. These policies created optimism among investors regarding economic recovery. Several sectors, including consumer staples, utilities, and information technology, reacted positively to the monetary easing measures, which are known to stabilize economies during crises in developing countries (Lesmana and Yudaruddin, 2024a). Basistha and Kurov (2008) further note that markets tend to react more strongly to monetary policy during crises than under normal conditions.

Post-event, all sectors exhibited significant negative reactions to the US-Houthi conflict, with two sectors showing delayed negative reactions 15 days after the event. These results highlight the broad and severe impact of the conflict on all sectors, compounded by China's worsening economic conditions, which further dampened investor sentiment. The findings corroborate previous studies that identified certain sectors as particularly

Table 1: Cumulative abnormal returns for pre-event, the event day, and post-event windows by markets.

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
All Sectors	2114	-0.0079***	0.0137***	-0.0004	0.0084***	0.0030***	0.0052***	-0.0152***	-0.0418***	-0.1061***
Communication Services	36	-0.0548***	-0.0128	-0.0174***	0.0116**	0.0006	0.0120**	0.0014	-0.0216	-0.0818***
Consumer Discretionary	299	-0.0210***	0.0132**	0.0120***	0.0073***	-0.0013	0.0006	-0.0122***	-0.0432***	-0.1224***
Consumer Staples	133	0.0084	0.0254***	0.0061**	0.0196***	0.0158***	0.0013	-0.0194***	-0.0520***	-0.1214***
Energy	85	0.0557***	0.0456***	0.0094*	-0.0008	0.0040	0.0034	-0.0123*	-0.0212***	-0.0520***
Financials	76	-0.0096	0.0103**	0.0105***	-0.0003	-0.0008	-0.0002	0.0270***	0.0483***	0.0481***
Healthcare	221	-0.0278***	-0.0015	-0.0166***	0.0046***	-0.0068***	-0.0029**	-0.0342***	-0.0719***	-0.1560***
Industrials	503	0.0120	0.0291***	0.0096	0.0108***	0.0074***	0.0120***	-0.0060	-0.0259	-0.0945***
Information Technology	288	-0.0720***	-0.0237***	-0.0261***	0.0086***	-0.0078***	0.0010	-0.0249***	-0.0765***	-0.1713***
Materials	327	0.0231***	0.0222***	-0.0009	0.0092***	0.0088***	0.0086***	-0.0182***	-0.0540***	-0.1265***
Real Estate	65	-0.0146**	0.0197***	0.0154***	0.0133***	0.0138***	0.0087***	-0.0171***	0.0217**	-0.0290*
Utilities	81	0.0071	0.0179***	-0.0079**	-0.0014	0.0078***	0.0121***	-0.0260***	-0.0315***	0.0841

Note (s): CAR stands for cumulative abnormal return. The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

Table 2: Size-based Cumulative abnormal returns for before-event, the event day, and post-event windows.

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
Small Cap	530	-0.0054	0.0274***	0.0009	0.0044***	-0.0026**	0.0018	-0.0265***	-0.0680***	-0.1751***
Mid Cap	538	-0.0116***	0.0171***	-0.0013	0.0099***	0.0017	0.0051***	-0.0223***	-0.0628***	-0.1535***
Large Cap	1046	-0.0072	0.0050	-0.0006	0.0097***	0.0065***	0.0071***	-0.0057	-0.0178*	-0.0467***

Note (s): This table presents the cumulative abnormal return (CAR) of a size-based tercile portfolio formed using the average market value over the estimation period. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

to war and macroeconomic shocks, including consumer staples (Yudaruddin et al., 2023), utilities, healthcare, information technology (He et al., 2019), and real estate (Yudaruddin and Lesmana, 2024b). Investor pessimism deepened as geopolitical risks escalated due to the US-Houthi conflict, particularly with changes in trade routes affecting Chinese companies reliant on the Suez Canal. This pessimism manifested in widespread share sell-offs, leading to plunging stock prices (Basnet et al., 2022).

3.2 The Impact of the US-Houthi Conflict on Market Reactions by Size Firm

Next, we conduct an analysis of market reactions in China based on company size, as presented in Table 2. Our findings indicate that small and medium-sized companies exhibit similar reactions to the US-Houthi conflict before and after the event. Before the announcement, these companies experienced a significant negative reaction, followed by a significant positive reaction on the event day, and then another positive reaction 5 to 15 days post-event. In contrast, large-scale companies reacted significantly positively only on the event day but displayed a significant negative reaction 10 to 15 days post-event. These results suggest that the US-Houthi conflict impacts all company sizes in China, with small and medium-sized companies being the most affected. This heightened impact reflects the vulnerability of smaller companies that rely heavily on exports, as they tend to be less stable than their larger counterparts. Additionally, the disruption of trade routes and the resulting tariff increases exacerbated the challenges faced by small and medium-sized companies during the US-Houthi conflict (Yudaruddin et al., 2025). Similar findings were reported by Kamal et al. (2023) in their analysis of the Russian-Ukrainian war in Australia, where small and medium-sized companies were more adversely affected than larger firms due to disrupted export dependencies.

A deeper analysis of market reactions by sector and company size (Table 3) provides further insights. Among small companies, sectoral reactions varied significantly prior to the conflict. Negative reactions were observed in the healthcare, information technology, and communication services sectors, while positive reactions occurred in the consumer discretionary, consumer staples, energy, industrials, materials, real estate, and utilities sectors. The negative reactions likely stemmed from investor concerns regarding the disruption of the Red Sea-Suez Canal trade route, a vital export pathway from China to Europe. From the event day to the post-event period, most sectors consistently showed negative reactions, with the exception of the financial sector, which remained resilient. This aligns with Yudaruddin et al. (2024), who found that most sectors exhibited significant negative reactions to the Israel-Hamas conflict, although the financial sector displayed a significant positive reaction post-event.

Medium-sized companies demonstrated a more uniform pattern of reactions both before and after the announcement. Prior to the event, significant negative reactions were observed in the healthcare and information technology sectors, while significant positive reactions were recorded in the consumer discretionary, consumer staples, industrials, materials, real estate, and utilities sectors. On the event day, medium-sized companies, as indicated in baseline Table 1, experienced significant positive reactions across multiple sectors, including communication services, consumer staples, industrials, materials, real estate, and utilities, reflecting a shift from negative to positive sentiment. However, post-event reactions turned predominantly negative across almost all sectors except financial and real estate, highlighting the broader economic impact of the conflict.

Finally, large-scale companies showed positive reactions on the event day, particularly in the communication services, consumer discretionary, consumer staples, industrials, materials, real estate, and utilities sectors. However, the healthcare and information technology sectors reacted significantly negatively, underscoring the high sensitivity of the healthcare sector to geopolitical risks. This finding aligns with He et al. (2019), who observed a similar negative reaction in the healthcare sector during the COVID-19 pandemic, despite high demand within the sector. Post-event, the majority of sectors across both small and large companies exhibited negative reactions, reinforcing the findings of previous studies on the prolonged impact of geopolitical risks on market vulnerability. These include the consumer staples sector (Yudaruddin et al., 2023; Hohler et al.,

Table 3: Cumulative abnormal returns for pre-event, the event day, and post-event windows by sector and size base.

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
Panel A: Small Cap										
Communication Services	7	-0.0586**	0.0032	-0.0097	0.0031	-0.0124**	-0.0001	-0.0338*	-0.1102***	-0.2315***
Consumer Discretionary	99	-0.0067	0.0284***	0.0168***	0.0019	-0.0095***	-0.0053	-0.0136*	-0.0575***	-0.1656***
Consumer Staples	39	0.0016	0.0274**	0.0105**	0.0128***	0.0031	-0.0034	-0.0268***	-0.0591***	-0.1593***
Energy	13	0.0279	0.0545**	0.0187	0.0018	0.0006	-0.0033	-0.0631***	-0.0789***	-0.0952
Financials	2	-0.0173	0.0595	0.0315	0.0012	-0.0306**	-0.0356	0.2169	0.2715*	0.1056
Healthcare	45	-0.0222***	0.0114	-0.0108**	0.0060***	-0.0079***	-0.0050*	-0.0476***	-0.0782***	-0.1943***
Industrials	135	0.0036	0.0359***	-0.0015	0.0023	-0.0006	0.0073***	-0.0283***	-0.0717***	-0.1888***
Information Technology	62	-0.0601***	-0.0035	-0.0235***	0.0042**	-0.0120***	-0.0023	-0.0404***	-0.1018***	-0.2242***
Materials	91	0.0243***	0.0373***	0.0001	0.0052**	0.0038	0.0073***	-0.0193***	-0.0726***	-0.1841***
Real Estate	21	-0.0123	0.0313**	0.0216***	0.0148***	0.0153**	0.0116**	-0.0148**	0.0073	-0.0427
Utilities	16	0.0037	0.0374***	-0.0070	-0.0019	0.0039	0.0131***	-0.0323***	-0.0533***	-0.1095***
Panel B: Mid Cap										
Communication Services	7	-0.0404	0.0129	0.0054	0.0440***	0.0170	0.0195	0.0119	-0.0598**	-0.1459***
Consumer Discretionary	77	-0.0169	0.0158	0.0152**	0.0061	-0.0095*	-0.0036	-0.0236***	-0.0562***	-0.1359***
Consumer Staples	30	-0.0082	0.0294***	0.0066	0.0207***	0.0141***	-0.0030	-0.0300***	-0.0674***	-0.1492***
Energy	14	0.0039	0.0286	-0.0308	-0.0032	-0.0003	0.0130	0.0002	-0.0244	-0.0960**
Financials	2	-0.0478	-0.0045	-0.0265	0.0114	0.0050	0.0034	0.0885	0.2888	0.1075
Healthcare	58	-0.0304***	0.0054	-0.0143**	0.0060*	-0.0067**	-0.0038	-0.0387***	-0.0868***	-0.1810***
Industrials	145	0.0056	0.0285***	0.0045	0.0068***	0.0016	0.0069***	-0.0249***	-0.0611***	-0.1533***
Information Technology	83	-0.0663***	-0.0120	-0.0242***	0.0119***	-0.0071**	0.0046**	-0.0250***	-0.0914***	-0.1989***
Materials	88	0.0223***	0.0260***	0.0031	0.0138***	0.0144***	0.0129***	-0.0078	-0.0558***	-0.1504***
Real Estate	16	-0.0024	0.0370***	0.0192***	0.0161***	0.0208**	0.0114	-0.0192	0.0056	-0.0581
Utilities	18	0.0066	0.0180**	-0.0032	0.0069**	0.0149***	0.0177***	-0.0342***	-0.0525***	-0.1169***
Panel C: Large Cap										
Communication Services	22	-0.0582**	-0.0261	-0.0271***	0.0040	-0.0003	0.0135**	0.0093	0.0186	-0.0138
Consumer Discretionary	123	-0.0352***	-0.0007	0.0062	0.0124***	0.0103***	0.0082***	-0.0039	-0.0235***	-0.0792***
Consumer Staples	64	0.0204**	0.0223***	0.0032	0.0232***	0.0245***	0.0064**	-0.0099*	-0.0404***	-0.0853***
Energy	58	0.0745***	0.0477***	0.0170***	-0.0008	0.0058	0.0026	-0.0039	-0.0076	-0.0317**
Financials	72	-0.0083	0.0094**	0.0109***	-0.0006	-0.0002	0.0005	0.0200***	0.0354***	0.0449***
Healthcare	118	-0.0286***	-0.0098**	-0.0199***	0.0033	-0.0064**	-0.0017	-0.0268***	-0.0623***	-0.1291***
Industrials	223	0.0213	0.0254	0.0198	0.0186**	0.0160***	0.0181**	0.0197	0.0246	0.0008
Information Technology	143	-0.0804***	-0.0392***	-0.0284***	0.0086***	-0.0064**	0.0005	-0.0181***	-0.0568***	-0.1324***
Materials	148	0.0228***	0.0106**	-0.0041	0.0088***	0.0086***	0.0069***	-0.0237***	-0.0415***	-0.0767***
Real Estate	28	-0.0233**	0.0011	0.0086	0.0105***	0.0087**	0.0050*	-0.0176***	0.0417***	-0.0021
Utilities	47	0.0084	0.0112	-0.0100*	-0.0044	0.0064	0.0096**	-0.0208***	-0.0161**	0.2270

Note (s): The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

Table 4. Growth-based cumulative abnormal return over the window slides for before-event, the event day, and post-event windows

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
Low	530	0.0041	0.0221***	0.0076***	0.0044***	0.0060***	0.0052***	-0.0111***	-0.0038	-0.0318***
Medium	525	0.0004	0.0211***	0.0017	0.0071***	0.0030**	0.0048***	-0.0146***	-0.0440***	-0.1205***
High	1059	-0.0181***	0.0058	-0.0055	0.0111***	0.0014	0.0054***	-0.0175***	-0.0598***	-0.1361***

Note (s): This table presents the cumulative abnormal return (CAR) of three book-to-market equity groups based on the breakpoints for the bottom 25% (Low), middle 50% (Medium), and top 25% (High) of the ranked values of the average book-to-market ratio over the estimation period. The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

3.3 The Impact of the US-Houthi Conflict on Market Reactions by Growth Firm

In the next section, we explore China's market reaction to the US-Houthi conflict based on company growth rates, classified into three categories: low, medium, and high growth (Table 4). The findings reveal differing market reactions before the event. Companies with low and medium growth experienced significant positive reactions to the US-Houthi conflict, while companies with high growth showed significant negative reactions. These results suggest that high-growth companies, which are more likely to have international trade relations, were negatively impacted by geopolitical tensions. The anticipation of war, signaled by military mobilization and fleet preparations, created negative investor sentiment. This pessimism stemmed from concerns over potential trade route disruptions, particularly in the Suez Canal, a vital trade artery. These findings are consistent with Kamal et al. (2023), who demonstrated that companies engaged in international trade are more susceptible to geopolitical risks. Furthermore, the results underscore the critical role of supply chains in companies of all growth rates. Disruptions to these chains negatively impacted investor confidence, amplifying concerns compared to prior geopolitical events like the Israel-Palestine conflict.

To further examine sector-specific market reactions based on growth rates, we analyzed the data in Table 5. Among low-growth companies, the results were largely consistent with previous findings, with a few sector-specific deviations. For instance, the energy sector exhibited a significant negative reaction before the event, which persisted post-announcement. Similarly, the information technology sector showed significant negative reactions before the event. However, most sectors aligned with baseline findings, except for the communication services sector.

Medium-growth companies display more varied sectoral reactions compared to low-growth firms.

Table 5: Cumulative abnormal returns for pre-event, the event day, and post-event windows by sector and size base.

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
Panel A: Low										
Communication Services	7	-0.0539*	-0.0210	-0.0170***	0.0002	-0.0075	0.0028	0.0172	0.0327	0.0281
Consumer Discretionary	58	0.0023	0.0399***	0.0217***	0.0085**	0.0080	0.0058	-0.0033	-0.0041	-0.0537***
Consumer Staples	13	-0.0051	0.0216***	0.0141***	0.0170***	0.0150***	0.0057	-0.0181**	-0.0158	-0.0916***
Energy	32	0.0227*	0.0238***	-0.0085	-0.0149***	-0.0123***	-0.0069**	-0.0297***	-0.0063	0.0151
Financials	60	0.0040	0.0160***	0.0156***	-0.0010	0.0012	0.0019	0.0220***	0.0328***	0.0615***
Healthcare	28	-0.0029	0.0194**	0.0015	0.0127***	0.0053*	-0.0007	-0.0332***	-0.0324***	-0.0774***
Industrials	131	0.0007	0.0183***	0.0062**	0.0023	0.0058***	0.0069***	-0.0129***	-0.0015	-0.0301***
Information Technology	24	-0.0521***	-0.0021	-0.0112**	0.0063*	-0.0010	0.0051	-0.0196***	-0.0243*	-0.1025***
Materials	95	0.0276***	0.0301***	0.0082***	0.0093***	0.0115***	0.0069***	-0.0176***	-0.0365***	-0.0791***
Real Estate	46	-0.0184**	0.0158**	0.0144***	0.0121***	0.0149***	0.0095**	-0.0123***	0.0468***	0.0030
Utilities	36	0.0277***	0.0303***	0.0002	-0.0024	0.0067*	0.0100***	-0.0173**	-0.0165**	-0.0277**
Panel B: Medium										
Communication Services	6	-0.0580*	-0.0288	-0.0086*	-0.0006	-0.0130**	-0.0060	-0.0092	-0.0326	-0.0462
Consumer Discretionary	104	-0.0165	0.0183**	0.0116**	0.0069**	-0.0005	0.0036	-0.0081	-0.0411***	-0.1233***
Consumer Staples	31	0.0000	0.0280***	0.0116**	0.0169***	0.0110***	0.0004	-0.0169*	-0.0368***	-0.1107***
Energy	26	0.0533***	0.0434***	0.0153***	-0.0016	0.0074	0.0057	0.0084	-0.0096	-0.0402*
Financials	14	-0.0600***	-0.0115	-0.0101	0.0020	-0.0090**	-0.0095**	0.0495*	0.1173***	-0.0032
Healthcare	53	-0.0215***	0.0035	-0.0175***	0.0017	-0.0094***	-0.0062***	-0.0416***	-0.0810***	-0.1674***
Industrials	118	0.0254***	0.0402***	0.0089**	0.0094***	0.0086***	0.0108***	-0.0107**	-0.0418***	-0.1178***
Information Technology	46	-0.0477***	-0.0045	-0.0170***	0.0112***	-0.0046	0.0011	-0.0279***	-0.0761***	-0.1737***
Materials	89	0.0296***	0.0285***	0.0001	0.0092***	0.0106***	0.0111***	-0.0120*	-0.0517***	-0.1273***
Real Estate	10	-0.0173	0.0135	0.0059	0.0051	-0.0048	-0.0065	-0.0398**	-0.0361*	-0.1149***
Utilities	28	-0.0131	0.0038	-0.0095***	-0.0022	0.0048	0.0096***	-0.0346***	-0.0433***	-0.0853***
Panel C: High										
Communication Services	23	-0.0543**	-0.0061	-0.0197**	0.0183**	0.0067	0.0195***	-0.0006	-0.0353	-0.1246***
Consumer Discretionary	137	-0.0344***	-0.0020	0.0082	0.0071**	-0.0059	-0.0037	-0.0191***	-0.0613***	-0.1509***
Consumer Staples	89	0.0133*	0.0250***	0.0031	0.0209***	0.0176***	0.0010	-0.0204***	-0.0625***	-0.1295***
Energy	27	0.0972**	0.0734***	0.0249*	0.0167**	0.0201**	0.0135	-0.0116	-0.0501***	-0.1430***
Financials	2	-0.0658	-0.0047	0.0033	0.0067	-0.0068	-0.0027	0.0182	0.0285	0.0055
Healthcare	140	-0.0351***	-0.0076	-0.0198***	0.0040*	-0.0082***	-0.0021	-0.0316***	-0.0764***	-0.1674***
Industrials	254	0.0116	0.0295	0.0118	0.0159**	0.0076	0.0152**	-0.0003	-0.0310	-0.1168**
Information Technology	218	-0.0793***	-0.0301***	-0.0297***	0.0083***	-0.0092***	0.0006	-0.0248***	-0.0823***	-0.1784***
Materials	143	0.0160**	0.0130**	-0.0078**	0.0090***	0.0059**	0.0081***	-0.0224***	-0.0671***	-0.1574***
Real Estate	9	0.0079	0.0464**	0.0312*	0.0285***	0.0288*	0.0217*	-0.0164**	-0.0422	-0.0973**
Utilities	17	-0.0032	0.0150	-0.0226**	0.0020	0.0151	0.0206*	-0.0306***	-0.0440***	0.6002

Note (s): The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

Before the announcement, sectors such as communication services, financials, healthcare, information technology, and utilities exhibit significant negative reactions. This divergence suggests that medium-growth companies have a less robust positive reaction compared to low-growth firms. On the event day, there are both positive and negative reactions across sectors. Sectors like consumer discretionary, consumer staples, industrials, information technology, materials, and utilities show significant positive reactions. Conversely, communication services, financials, and healthcare sectors display significant negative reactions. Post-announcement, most sectors experience significant negative reactions to the US-Houthi conflict, with the exception of the communication services and financial sectors, which remain resilient.

Finally, we analyze large-growth companies and find their sectoral reactions largely consistent with baseline findings. A few sectors deviate from the baseline, such as consumer staples, energy, and real estate, which react positively before the announcement. On the event day, only the healthcare and information technology sectors deviate from baseline expectations. After the announcement, all sectors demonstrate consistent reactions, further reinforcing earlier findings. These results highlight how high-growth companies, often in the midst of expansion, are particularly reliant on efficient international distribution via sea routes. This reliance makes them more vulnerable to disruptions like those caused by the US-Houthi conflict. Kamal et al. (2023) similarly observed that companies dependent on international distribution channels, such as the Suez Canal, are disproportionately affected by supply chain disruptions. Such disruptions result in additional costs from alternative shipping routes, including increased fuel expenses, vessel maintenance, and cooling requirements for perishable goods (Hohler et al., 2024).

3.4 Robustness Test

In this section, we conduct a robustness test to examine the consistency of the results obtained in the previous section. We perform two distinct analyses: first, we apply the Wilcoxon test (Table 6), and second, we use a 150-day transaction window to further substantiate our findings (Table 7). Our analysis reveals that the market reacts significantly negatively before the announcement, but shifts to a significantly positive reaction at the time of the announcement. Subsequently, the market reacts significantly negatively again up to 30 days after the announcement. These results demonstrate the consistency of the market reaction observed in the baseline (Table 1). This finding also highlights the heightened concerns among investors in China, driven by the disruption of the China-Europe trade

Table 6: Robustness test using non–parametric tests (Wilcoxon signed-rank Test).

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
All Sectors	2114	-4.344***	10.678***	-2.887***	15.424***	3.497***	9.811***	-20.328***	-25.597***	-32.568***
Communication Services	36	-3.551***	-1.697*	-3.661***	2.074**	-0.440	2.247**	-0.157	-1.555	-2.891***
Consumer Discretionary	299	-2.752***	3.975***	3.874***	4.966***	-0.577	1.170	-5.542***	-9.058***	-12.853***
Consumer Staples	133	2.357**	6.242***	2.826***	8.517***	6.444***	1.178	-5.654***	-8.382***	-9.148***
Energy	85	4.274***	5.983***	2.215**	-0.949	0.186	0.296	-2.807***	-2.890***	-4.099***
Financials	76	-1.222	2.092**	3.339***	0.285	-0.404	-0.311	6.353***	6.881***	6.373***
Healthcare	221	-6.723***	-0.050	-7.028***	3.637***	-4.104***	-2.218**	-10.401***	-11.015***	-12.412***
Industrials	503	2.215**	8.364***	1.163	6.618***	3.879***	9.010***	-8.780***	-11.075***	-15.241***
Information Technology	288	-11.602***	-6.548***	-10.778***	6.897***	-5.824***	0.515	-10.258***	-13.255***	-14.298***
Materials	327	6.782***	8.087***	0.673	8.180***	5.925***	7.853***	-8.709***	-12.171***	-14.255***
Real Estate	65	-2.003**	3.669***	4.480***	5.747***	4.277***	3.571***	-4.499***	2.493**	-2.179**
Utilities	81	1.693*	3.670***	-2.272**	-1.184	3.552***	5.323***	-6.467***	-5.511***	-5.276***

Note (s): CAR stands for cumulative abnormal return. The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

Table 7: Robustness test using estimation window 150 days.

Markets	Number of Company	Pre-Event days			Event days			Post-Event days		
		(-15, 0)	(-10, 0)	(-5, 0)	(-1, 0)	(-1, +1)	(0, +1)	(0, +5)	(0, +10)	(0, +15)
All Sectors	2114	-0.0233*	0.0018	-0.0087	0.0032	-0.0044	0.0001	-0.0309**	-0.0744**	-0.1565***
Communication Services	36	-0.0524***	-0.0110	-0.0166***	0.0119**	0.0011	0.0124**	0.0023	-0.0197	-0.0806***
Consumer Discretionary	299	-0.0263***	0.0089	0.0119***	0.0068***	-0.0020	-0.0000	-0.0130***	-0.0489***	-0.1269***
Consumer Staples	133	0.0066	0.0234***	0.0065**	0.0194***	0.0159***	0.0013	-0.0178***	-0.0534***	-0.1220***
Energy	85	0.0499***	0.0416***	0.0071	-0.0015	0.0029	0.0027	-0.0144*	-0.0252***	-0.0578***
Financials	76	-0.0097	0.0104**	0.0099***	-0.0003	-0.0009	-0.0002	0.0268***	0.0487***	0.0475***
Healthcare	221	-0.0301***	-0.0034	-0.0159***	0.0045***	-0.0070***	-0.0032**	-0.0345***	-0.0744***	-0.1555***
Industrials	503	0.0115	0.0290***	0.0089	0.0109***	0.0073***	0.0120***	-0.0064	-0.0255	-0.0945***
Information Technology	288	-0.1616*	-0.0942	-0.0827	-0.0268	-0.0587	-0.0338	-0.1327	-0.2967	-0.5241
Materials	327	0.0131***	0.0157***	-0.0033	0.0080***	0.0071***	0.0074***	-0.0232***	-0.0616***	-0.1346***
Real Estate	65	-0.0238***	0.0121**	0.0140***	0.0111***	0.0103***	0.0056**	-0.0196***	0.0145	-0.0380**
Utilities	81	0.0078	0.0186***	-0.0084**	-0.0013	0.0079***	0.0123***	-0.0259***	-0.0303***	0.0841

Note (s): CAR stands for cumulative abnormal return. The ordinate represents the event window. ***, **, and * are significant at 1%, 5%, and 10% confidence levels, respectively.
Source: Authors' calculation.

route caused by the US-Houthi conflict. Furthermore, the majority of sectors, including consumer discretionary, consumer staples, energy, healthcare, industrials, information technology, materials, real estate, and utilities, experience negative impacts.Additionally, we expand the analysis by using different windows compared to the previous analysis (Table 7). We find that the post-event reaction remains consistently negative across most sectors, such as communication services, consumer discretionary, consumer staples, energy, financials, healthcare, industrials, materials, real estate, and utilities. This consistency indicates that investor behavior, reflecting market reactions to the Middle East conflict, has contributed to global economic instability. One key factor is the disruption of trade routes through the Suez Canal, which leads investors to anticipate declines in corporate performance due to strong geopolitical pressures. Consequently, many investors choose to withdraw their funds, driving stock prices down and suppressing buying prices (Basnet et al., 2022).

4 CONCLUSIONS

This study examines the market reaction to the US-Houthi conflict, with a particular focus on the Chinese market. The sample includes 2,114 companies operating in China. Utilizing an event study approach and measuring cumulative abnormal returns (CAR), we find that the US-Houthi conflict has a significant negative impact on the Chinese stock market, especially following the event, which triggers a pronounced negative market reaction. Specifically, three sectors—Communication Services, Consumer Discretionary, and Utilities—experience the most severe negative effects from the conflict, both pra and post the event, although almost all sectors show negative impacts post the event. Furthermore, the analysis reveals that the US-Houthi geopolitical risk particularly affects small and medium-sized companies, as well as those with medium to high growth rates.

The findings of this study underscore the significant sensitivity of the Chinese market to geopolitical risks, particularly those involving critical trade routes such as the Suez Canal. Policymakers should consider enhancing strategies to mitigate the economic impact of such conflicts by promoting market diversification and strengthening the resilience of trade routes. Furthermore, regulators may need to implement more robust risk assessment frameworks for small and medium-sized companies that are vulnerable to such external shocks. For managers and investors, the study highlights the importance of incorporating geopolitical risk factors into strategic planning and investment decisions to better navigate the volatility caused by such conflicts.

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