SSRG International Journal of Economics and Management Studies
ISSN: 2393–9125 / https://doi:10.14445/23939125/IJEMS-V10I8P101

Volume 10 Issue 8, 1-6, August 2023

Short Communication

The End of GCC Crisis and its Impact on the Saudi Stock Exchange: An Event Study Approach

Somaiyah Alalmai

Department of Finance, Faculty of Economics and Administration, King Abdulaziz University, Jeddah, Saudi Arabia.

Corresponding Author : Salalmaee@kau.edu.sa

Received: 15 June 2023 Revised: 21 July 2023 Accepted: 08 August 2023 Published: 24 August 2023

Abstract *- In this research paper, we investigate the impact of the Qatari-Saudi reconciliation on the Saudi stock market return by implementing an event study approach. To analyze the event's effect, we calculate the abnormal return and the cumulative abnormal return around the announcement date using two methods. First, we apply the mean-adjusted returns model, then the OLS market model. The empirical evidence shows that the initial market reaction is negative; however, the estimated CARs are insignificant in most event windows other than for [−1, 1], [−2, 2], and [−3, 3]. The results highlight the limited economic effects experienced by Saudi Arabia.*

Keywords *- Event study, GCC stock markets, Market reaction, Qatar blockade, Saudi Arabia.*

Classification Codes *- G12, G14, G15.*

1. Introduction

The effects of geopolitical events on stock prices have always attracted the interest of financial economists. Geopolitical risk can impact the stock market performance and investors' decisions. Naturally, in times of political unrest, stock markets exhibit increased levels of volatility. Throughout the world, geopolitical challenges such as potential international conflicts, cyberattacks, blockades, sanctions, cross-border conflicts, and disruption of political ties can have a great influence on stock market performance, economic development, and growth (Charfeddine and Al Refai, 2019; Charfeddine and Goaied, 2019; Goel et al., 2017; Lehkonen and Heimonen, 2015). Geopolitical risks can increase the volatility of financial markets. In emerging markets, these geopolitical risks can have a negative influence on stock prices and can increase the level of uncertainty among market participants, which in turn will affect diversification and portfolio allocation.

The efficient market hypothesis by Fama (1970) states, "When new information comes into the market, it is immediately reflected in stock prices" This entails that "share prices reflect all available information". New information about geopolitical risks can trigger risk aversion among market participants. The literature on the impact of geopolitical tensions is somehow mixed. According to Kongprajya (2010), the stock market reacts negatively to unfavorable political news; however, favorable political news can cause a positive market reaction. Serval studies such as (Berkmane et al., 2011; Bouoiyour and Selmi, 2019; He et al., 2017; Mnasri and Nechi, 2016; Mnif, 2017) have shown that geopolitical tensions can have a negative and significant impact on stock market returns. These tensions can cause investors to lose confidence. The lack of investors' confidence can lead to capital outflow, leading to losses of financial assets.

In recent years, a major geopolitical upheaval occurred in the Gulf region when three members of the Gulf Cooperation Council severed diplomatic and economic ties with Qatar. Saudi Arabia, Emirates, Egypt, and Bahrain led the severance of the relations. This geopolitical crisis began in June 2017, when the involved GCC countries and Egypt imposed economic sanctions on Qatar. The restriction on Qatar included land, air, and sea blockades. Several studies, such as Bouoiyour and Selmi (2019), analyzed the effect of Qatar's economic blockade on the volatility of stock market returns across the GCC member countries. By using GARCH models, they conclude that both sides endured financial losses due to the imposed blockade. Moreover, the blockade led to higher stock market volatility across the involved GCC countries; however, the volatility was short lasting. Their finding shows that the imposed sanctions on Qatar had a short-lasting positive influence on the stock markets of Saudi, Qatar, and the Emirates.

Charfeddine and Al Refai (2019) examine the impact of recent geopolitical and economic crises in the GCC region.

They study the effects of the 2014 conflict and 2017 GCC crises on the "dependence structure and volatility spillover" of the stock markets across the Gulf Cooperation Council member countries. Their finding suggests that Saudi Arabia's stock market exhibits a lower dependence on Qatar's stock market, meaning that the sanctions have lowered dependence between both countries. However, the sanctions did not break the link between both stock markets. Buigut and Kapar (2020) investigate the impact of the Gulf crisis on the stock markets of the GCC countries. By employing an event study approach, they observe that Saudi Arabia's economy did not face significant effects. However, the Saudi banking industry registered a positive reaction. The positive reaction can be attributed to the expectation that Saudi Banks would attract foreign investments quitting the local market in Qatar. Their empirical findings align with those of Bouoiyour and Selmi (2019) and Charfeddine and Refai (2019).

Unlike earlier research that focus on market volatility caused by the GCC crises, this research paper studies the effect of the Saudi-Qatari reconciliation on the stock market returns of Saudi Arabia. Tensions between Saudi Arabia and Qatar eased when Saudi Arabia announced that it would open its sea, land, and air borders to Qatar on 4 January 2021, ending the three-year diplomatic dispute. The GCC countries signed the Alula Declaration at the GCC Summit on 5 January 2021.

This event has impacted the involved GCC member countries; however, in our analysis, our primary goal is to investigate the impact on the stock market returns of Saudi Arabia. Our main focus in this study is to analyse whether the new information affected shares listed on the Saudi Exchange significantly. Saudi Arabia's Tadawul Index TASI increased by 0.2% on signs of an easing dispute, and Qatar's benchmark stock index rose as well and closed 1.8% higher. The key findings of this paper highlight that the Saudi Arabia Tadawul Index, TASI, does not seem much affected. The analysis results show that the Saudi stock market performance exhibits independence and that the three-year blockade weakened the financial link between the stock markets across the member states of the GCC. The rest of this article is structured as follows: In section 2, we report the research data and the research methodology, followed by section 3, where we display our results and discuss our findings, and finally, in section 4, we conclude the research paper.

2. Data and Research Methodology

In our study, we use an event study approach. We analyse daily prices of stocks listed on the Saudi Exchange. The study examines the returns derived from the stock prices before and after the end of the dispute. The data set incorporates information of all publicly listed companies in Saudi Arabia. The data sample is obtained from Thomson Reuters, covering the period between 20 January 2020 to 13 January 2021.

Holler (2014), who reviewed 400 event studies, finds that the length of the estimation window is between 30 and 750 days. The event window includes days surrounding the announcement date, and researchers usually choose event windows ranging between 1 and 11 days. Nonetheless, no rule exists on the length of an event study's estimation and event window. This study follows the most commonly used choice of estimation and event window length. Following Bash et al. (2020), the estimation window length is [-250, -11], and the event window length is [-10, +7], including the event date.

The actual daily return (the normal return) for Tadawul Index (TASI) and the actual daily return for all listed stocks are measured as the first difference of the natural logarithms of daily prices.

$$DR_i = \ln\left(\frac{P_t}{P_{t-1}}\right) \quad (1)$$

$$DR_i = \ln(P_t) \; - \; \ln(P_{t-1}) \quad (2)$$

where DR_i simply refer to the daily returns for a particular share i, $\ln(\cdot)$ refer to the natural logarithm function, P_t refer to the price of security i on day t and P_{t-1} refer to the price of security i on day t-1.

To measure the impact of the Saudi-Qatari reconciliation, we must calculate the "abnormal returns." The abnormal return is simply the return that deviates from the expected return. The abnormal return AR is simply measured by taking the difference between the normal returns (the actual) and the estimates of the normal returns. According to Dodd and Warner (1983) and Brown and Warner (1985), the daily abnormal returns (ARs) can be calculated using (1) the mean-adjusted return model, (2) the OLS market model, and (3) the market-adjusted model. However, in our analysis, we will employ the first two models:

2.1. The First Model, the Mean Adjusted Returns

This model is implemented by taking the difference between the daily return for particular security i, and the simple average daily return of security i, in the estimation period $[-250, -11]$. We compute the simple average using the data within the estimation window, which entails the days before the event window. The mean adjusted return is measured for each firm and day in the event window.

$$AR_{i,t} = DR_{i,t} - \overline{DR}_i \quad (3)$$

$$\overline{DR}_i \; = \frac{1}{239} \sum_{t=250}^{-11} DR_{i,t} \quad (4)$$

2.2. The Second Model, the OLS Market Model

This model is the most commonly used in event studies. The OLS market model can be measured as follows:

$$AR_{i,t} = DR_{i,t} - (\alpha_i + \beta_i\, DR_{m,t}) \quad (5)$$

Where α_i and β_i are OLS values for the period $[-250, -11]$. $DR_{i,t}$ denotes the daily return for a particular share, i, at day t, and $DR_{m,t}$ denotes the daily return on TASI weighted index for day t.

To measure the impact of the end of the dispute, first, we compute the daily abnormal returns AR, then sum up the abnormal return to get the "cumulative abnormal return" CAR. To calculate the cumulative abnormal return over the event window, we sum up all the abnormal returns over the days in the event window as follows:

$$CAR_{i(t1,t2)} = \sum_{t=t1}^{t2} AR_{i,t} \quad (6)$$

Where t1 refers to the start of the event window, and t2 refers to the end of the event window.

3. Results and Discussion

Figure 1 displays the change in the abnormal ARs and the cumulative abnormal return, CARs, for the periods before and after the announcement date [-10, +7] using the first method, the mean-adjusted returns. The market did not have a strong positive reaction to the news. One can see that on window day [-10], the return declined. Both the abnormal and the cumulative abnormal returns exhibited a minor increase before the event day [0]. Figure 2 shows the change in the abnormal returns, ARs, and the cumulative abnormal returns, CARs, over the event window [-10, +7] using the second method, the OLS market model. The figure provides similar inferences to Figure 1.

Table 1 displays the descriptive statistics for the abnormal returns in window days [-10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5, +6, +7]. The table gives Mean, Median, Skewness, and Kurtosis. Table 2 displays descriptive statistics for the cumulative abnormal returns in window days [-10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5, +6, +7]. The table gives Mean, Median, Skewness, and Kurtosis. The values of the abnormal returns and the cumulative abnormal returns shown in the tables are measured using both methods (1) the mean-adjusted returns model and (2) the OLS market model. The results of the cumulative abnormal return, CARs, in Table 2 show a negative reaction on window day [0] along with window days [-10, -9, -6, -5, -2, -1, +1, +2, +3, +4]. In fact, by using the OLS market model, the results are negative for all window days.

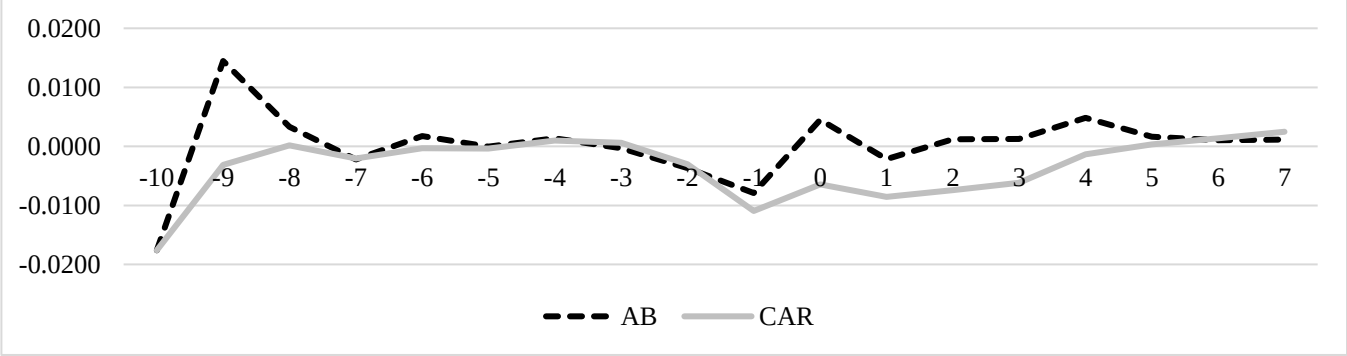

Fig. 1 $AR_{i,t}$ and $CAR_{i,t}$, following the first approach: the mean-adjusted returns model

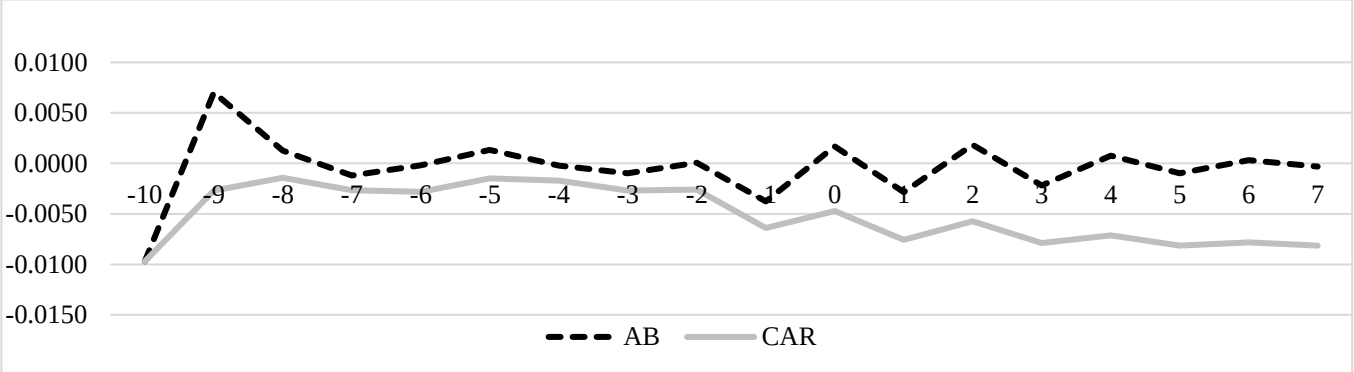

Fig. 2 $AR_{i,t}$ and $CAR_{i,t}$, following the second approach: the OLS market model

Table 1. Summary results of the abnormal returns $AR_{i,t}$ on the reconciliation day, before the reconciliation, and after the reconciliation day

	(1) Mean-Adjusted Returns $AR_{i,t}$					(2) OLS Market Model $AR_{i,t}$			
	Mean	**Median**	**Kurtosis**	**Skewness**		**Mean**	**Median**	**Kurtosis**	**Skewness**
W-Day [-10]	-0.0176	-0.0165	-0.5838	-0.0208		-0.0097	-0.0084	-0.3188	-0.0012
W-Day [–9]	0.0145	0.0132	0.0631	0.7026		0.0070	0.0056	0.6458	0.8975
W-Day [-8]	0.0033	0.0018	7.2003	0.9553		0.0013	0.0000	7.3834	0.9873
W-Day [-7]	-0.0022	-0.0017	6.6794	-0.6687		-0.0012	-0.0008	6.7209	-0.6323
W-Day [-6]	0.0017	0.0007	4.6644	0.9831		-0.0002	-0.0007	4.6898	0.9233
W-Day [-5]	-0.0001	-0.0016	9.8790	6.4233		0.0013	-0.0002	9.5408	6.4069
W-Day [-4]	0.0014	0.0004	7.8304	1.8761		-0.0002	-0.0010	7.7794	1.8346
W-Day [-3]	-0.0003	-0.0006	3.8943	0.4529		-0.0010	-0.0011	3.7767	0.4279
W-Day [-2]	-0.0037	-0.0041	18.9564	2.8710		0.0001	-0.0002	19.2727	3.0176
W-Day [-1]	-0.0079	-0.0074	6.9432	-0.8133		-0.0038	-0.0032	8.7970	-0.8654
W-Day [0]	0.0045	0.0028	9.6348	2.3884		0.0017	0.0000	9.9050	2.4526
W-Day [+1]	-0.0022	-0.0026	11.3461	2.1233		-0.0029	-0.0034	10.9107	2.0602
W-Day [+2]	0.0012	0.0000	13.2978	2.1517		0.0018	0.0004	13.3190	2.1557
W-Day [+3]	0.0012	0.0012	15.8672	-1.5273		-0.0022	-0.0021	15.0719	-1.4357
W-Day [+4]	0.0048	0.0035	7.6540	1.8607		0.0008	-0.0003	7.3836	1.8453
W-Day [+5]	0.0016	0.0007	10.2747	2.3827		-0.0010	-0.0017	9.8119	2.3172
W-Day [+6]	0.0010	-0.0004	13.7485	3.1294		0.0003	-0.0011	13.8790	3.1328
W-Day [+7]	0.0011	0.0000	11.2708	2.7131		-0.0003	-0.0015	11.2065	2.7002

Note: W-Day refers to Window Day

Table 2. Summary of the cumulative abnormal returns $CAR_{i,t}$ on the reconciliation day, before the reconciliation, and after the reconciliation day

	(1) Mean-Adjusted Returns $CAR_{i,t}$					(2) OLS Market Model C$AR_{i,t}$			
	Mean	**Median**	**Kurtosis**	**Skewness**		**Mean**	**Median**	**Kurtosis**	**Skewness**
W-Day [-10]	-0.0176	-0.0165	-0.5838	-0.0208		-0.0097	-0.0084	-0.3188	-0.0012
W-Day [–9]	-0.0032	-0.0037	10.3294	2.2552		-0.0027	-0.0033	10.4200	2.2708
W-Day [-8]	0.0001	-0.0013	9.5828	2.3129		-0.0014	-0.0031	9.5292	2.2900
W-Day [-7]	-0.0021	-0.0028	5.1754	0.9246		-0.0027	-0.0033	5.1557	0.9124
W-Day [-6]	-0.0003	-0.0005	5.4760	0.1878		-0.0028	-0.0027	5.4293	0.1428
W-Day [-5]	-0.0004	-0.0009	13.7454	1.9700		-0.0015	-0.0022	13.7688	1.9635
W-Day [-4]	0.0010	-0.0007	19.0067	2.6430		-0.0017	-0.0031	19.1111	2.6322
W-Day [-3]	0.0006	-0.0003	11.3402	1.3782		-0.0027	-0.0032	11.4225	1.3601
W-Day [-2]	-0.0030	-0.0034	21.6453	2.2747		-0.0026	-0.0029	21.6347	2.2765
W-Day [-1]	-0.0109	-0.0087	9.4096	0.5996		-0.0064	-0.0037	9.4380	0.6309
W-Day [0]	-0.0064	-0.0065	5.3599	1.0072		-0.0047	-0.0052	5.3507	1.0211
W-Day [+1]	-0.0086	-0.0077	3.9391	0.6034		-0.0076	-0.0065	3.9392	0.6123
W-Day [+2]	-0.0074	-0.0068	3.4792	0.2318		-0.0057	-0.0051	3.4879	0.2518
W-Day [+3]	-0.0062	-0.0056	3.3558	-0.4015		-0.0079	-0.0073	3.3616	-0.4231
W-Day [+4]	-0.0013	-0.0025	3.6602	-0.0645		-0.0071	-0.0070	3.6379	-0.1453
W-Day [+5]	0.0003	-0.0006	5.1007	0.2568		-0.0081	-0.0091	4.9686	0.1322
W-Day [+6]	0.0013	-0.0006	6.3329	0.6341		-0.0078	-0.0094	6.0674	0.5078
W-Day [+7]	0.0025	0.0000	5.2660	0.8588		-0.0082	-0.0090	4.9618	0.7171

Note: W-Day refers to Window Day

Table 3. Summary of results of the cumulative abnormal returns $CAR_{i,t}$ for several event windows

	(1) Mean-Adjusted Returns $CAR_{i,t}$					(2) OLS Market Model $CAR_{i,t}$			
	Before	**After**	**After–Before**	**t-test**		**Before**	**After**	**After–Before**	**t-test**
CAR [-1, +1]	-0.0079	-0.0022	-0.0055	-3.3783***		-0.0038	-0.0029	-0.0050	-3.0255***
CAR [-2, +2]	-0.0037	0.0012	-0.0080	-3.1642***		0.0001	0.0018	-0.0030	-1.2001
CAR [-3, +3]	-0.0003	0.0012	-0.0071	-2.0516**		-0.0010	-0.0022	-0.0062	-1.7810*
CAR [-4, +4]	0.0014	0.0048	-0.0009	-0.2037		-0.0002	0.0008	-0.0056	-1.2314
CAR [-5, +5]	-0.0001	0.0016	0.0007	0.1201		0.0013	-0.0010	-0.0053	-0.9628
CAR [-6, +6]	0.0017	0.0010	0.0034	0.5195		-0.0002	0.0003	-0.0052	-0.7803
CAR [-7, +7]	-0.0022	0.0011	0.0023	0.3018		-0.0012	-0.0003	-0.0067	-0.8660
CAR [-8, +7]	0.0033	0.0011	0.0056	0.7225		0.0013	-0.0003	-0.0055	-0.6975
CAR [-9, +7]	0.0145	0.0011	0.0201	2.4792**		0.0070	-0.0003	0.0016	0.1960

*Note: *denotes that coefficients are significant at the 10% level, ** denotes that coefficients are significant at the 5% level, and *** denotes that coefficients are significant at the 1% level.*

Table 3 reports the cumulative abnormal returns along with their statistical significance for several event windows. The estimated cumulative abnormal returns are calculated using (1) the mean-adjusted returns and (2) the OLS market model. Based on the t stat in Table 3, the end of the dispute between Saudi Arabia and Qatar did not positively impact Saudi Arabia's Tadawul All Share Index, TASI, on the event day. Using the first method, the mean adjusted return, the results indicate that the stock market reaction is positive only on the event window [−9, +7]. Indicating that the new information took longer to be processed by market participants. However, in the other event windows, it is evident that the market reaction is different. Table 3 shows that the initial market reaction is negative. One can see that during the event windows [−1, +1], [−2, +2], and [−3, +3], the market reaction is negative and highly significant. The CAR coefficients for the rest of the event widows are insignificant. However, according to (Dyckman et al., 1984), the OLS market model is better used for an event study analysis. Table 3 reports the results computed by using the OLS market model. Based on the t stat of the second model, it is evident that the market reaction is negative and highly significant only on the event windows [−1, +1] and [−3, +3]. The CARs for the rest of the event widows are insignificant.

The 2017 GCC crisis influenced international investors' decisions, where international investors fleeing Qatar were attracted to Saudi Arabia's dominant, fast-growing, and more stable economy. This indicates that the embargo on Qatar in 2017 positively impacted the returns of Tadawul all share index, TASI. According to Buigut and Kapar (2020), the Saudi banking industry responded positively to the blockade announcement 2017. Nevertheless, according to Lanouar and Refai (2019), the dependence between Qatar and Saudi Arabia's stock markets decreased, yet, it has not been severed since the start of the blockade.

The Saudi-Qatari reconciliation will increase foreign direct investment flows between the two countries because people will be encouraged to invest when confident. The end of the embargo on Qatar brings political stability to the region, which will increase investors' confidence, increase the level of domestic and foreign investment and promote economic growth. Several studies in the finance literature suggest that investors' sentiment significantly impacts the pricing dynamics (Baker and Wurgler, 2006; Baker and Wurgler, 2007; Brown and Cliff, 2005).

4. Conclusion

This research paper examines the impact of the Saudi-Qatar reconciliation on the Share Market returns of Saudi Arabia. We analyze the abnormal and cumulative abnormal returns around the announcement date. The end of the dispute between Saudi Arabia and Qatar had a mild impact on Saudi Arabia's Tadawul All Share Index. Based on the first method, the mean adjusted return model, the market's initial reaction is negative; however, insignificant in all event windows, other than for [−1, +1], [−2, +2], and [−3, +3]. Foreign and domestic investors took longer to process the new information, and the market recorded a significant and positive response only on the event window [-9, +7]. However, when considering the second model, the OLS market model, the CARs for most event widows are insignificant, other than for [−1, +1] and [−3, +3].

Our results align with those of (Bouoiyour and Selmi, 2019; Lanouar and Refai, 2019; and Buigut and Kapar, 2020), highlighting the limited economic effects experienced by Saudi Arabia. This study helps investors to anticipate the performance of the market. For future studies, we suggest investigating the impact of the reconciliation on the Qatar Exchange and global oil prices.

References

[1] Ahmad Bash, Khaled Alsaifi, and Abdullah M.Al-Awadhi, "Failed Terror Attack and Stock Market Returns: The Case of Pakistan Stock Exchange," *Applied Economics Letter*, vol. 28, pp. 1698-1702, 2020. [CrossRef] [Google Scholar] [Publisher Link]

[2] Malcolm Basker, and Jeffrey Wurgler, "Investor Sentiment and the Cross-section of Stock Returns," *Journal of Finance*, vol. 61, no. 4, pp. 1645-1680, 2006. [CrossRef] [Google Scholar] [Publisher Link]

[3] Malcolm Basker, and Jeffrey Wurgler, "Investor Sentiment in the Stock Market," *Journal of Economic Perspectives*, vol. 21, no. 2, pp. 129–152, 2007. [CrossRef] [Google Scholar] [Publisher Link]

[4] Henk Berkman, Ben Jacobsen, and John B. Lee, "Time-Varying Rare Disaster Risk and Stock Returns," *Journal of Financial Economics*, vol. 101, no. 2, pp. 313–332, 2011. [CrossRef] [Google Scholar] [Publisher Link]

[5] Jamal Bouoiyour, and Refk Selmi, "The Changing Geopolitics in the Arab World: Implications of the 2017 Gulf Crisis for Business," *The 25th ERF Annual Conference*, Kuwait, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[6] J. Bouoiyour, and R. Selmi, "The Qatar-Gulf Crisis and Risk Management in Oil and Gas Markets," *Hal Working Paper*, No. Hal-02101633, 2019. [Google Scholar] [Publisher Link]

[7] Gregory W. Brown, and Michael T. Cliff, "Investor Sentiment and Asset Valuation," *Journal of Business*, vol. 78, no. 2, pp. 405–440, 2005. [CrossRef] [Google Scholar] [Publisher Link]

[8] S. J. Brown, and J. B. Warner, "Using Daily Stock Returns: The Case of Event Studies," *Journal of Financial Economics*, vol. 14, no. 1, pp. 3-31, 1985. [CrossRef] [Google Scholar] [Publisher Link]

[9] Steven Buigut, and Burcu Kapar, "Effect of Qatar Diplomatic and Economic Isolation on GCC Stock Markets: An Event Study Approach," *Finance Research Letters*, vol. 37, p. 101352, 2020. [CrossRef] [Google Scholar] [Publisher Link]

[10] Charfeddine Lanouar, and Mohamed Goaied, "Tourism, Terrorism and Political Violence in Tunisia: Evidence from Markov-Switching Models," *Tourism Management*, vol. 70, pp. 404–418, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[11] Radwa Radwan Said, "The Effects of American Monetary Policy on GCC Economies," *SSRG International Journal of Economics and Management Studies*, vol. 6, no. 9, pp. 121-125, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[12] Peter Dodd, and Jerold B. Warner, "On Corporate Governance: A Study of Proxy Content," *Journal of Financial Economics*, vol. 11, no. 1-4, pp. 401–438, 1983. [CrossRef] [Google Scholar] [Publisher Link]

[13] Thomas Dyckman, Donna Philbrick and Jens Stephan, "A Comparison of Event Study Methodologies Using Daily Stock Returns: A Simulation Approach," *Journal of Accounting Research*, vol. 22, pp. 1–30, 1984. [CrossRef] [Google Scholar] [Publisher Link]

[14] Eugene F. Fama, "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance*, vol. 25, no. 2, pp. 383-417, 1970. [CrossRef] [Google Scholar] [Publisher Link]

[15] Sanjay Goel, Seth Cagle, and Hany Shawky, "How Vulnerable are International Financial Markets to Terrorism? An Empirical Study Based on Terrorist Incidents Worldwide," *Journal of Financial Stability*, vol. 33, pp. 120–132, 2017. [CrossRef] [Google Scholar] [Publisher Link]

[16] Yinghua He, Ulf Nielsson, and Yonglei Wang, "Hurting Without Hitting: The Economic Cost of Political Tension," *Journal of International Financial Markets, Institutions and Money*, vol. 51, pp. 106–124, 2017. [CrossRef] [Google Scholar] [Publisher Link]

[17] J. Holler, "Event-Study Methodology and Statistical Significance," Oldenburg, Germany: O1WIR Publisher for Economics," *Computer Science and Law*, 2014.

[18] A. Kongprajya, "*An Analysis of the Impact of Political News on Thai Stock Market*," MA (Res) thesis, University of Nottingham, Nottingham, England, 2010. [Google Scholar] [Publisher Link]

[19] Lanouar Charfeddine, and Hisham Al Refai, "Political Tensions, Stock Market Dependence and Volatility Spillover: Evidence from the Recent Intra-GCC Crises," *The North American Journal of Economics and* Finance, vol. 50, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[20] Heikki Lehkonen, and Kari Heimonen, "Democracy, Political Risks and Stock Market Performance," *Journal of International Money and Finance*, vol. 59, pp. 77–99, 2015. [CrossRef] [Google Scholar] [Publisher Link]

[21] Ayman Mnasri, and Salem Nechi, "Impact of Terrorist Attacks on Stock Market Volatility in Emerging Markets," *Emerging Markets Review*, vol. 28, pp. 184–202, 2016. [CrossRef] [Google Scholar] [Publisher Link]

[22] Afef Trabelsi Mnif, "Political Uncertainty and Behavior of Tunisian Stock Market cycles: Structural Unobserved Components Time Series Models," *Research in International Business and Finance*, vol. 39, pp. 206–214, 2017. [CrossRef] [Google Scholar] [Publisher Link]