Trump's Tariffs Announcement and Media Sentiment: An Event Case Study of Market Reactions from S&P 500 Firms

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Abstract

This study examines U.S. equity market reactions to the April 2, 2025 executive order by President Donald Trump imposing a new round of tariffs, which marked a sudden escalation in trade tensions. Using a market-adjusted event study methodology, we analyze abnormal returns (AR) and cumulative abnormal returns (CAR) for S&P 500 firms across multiple event windows. Results reveal a sharp initial decline in stock prices, followed by rapid reversals—a pattern consistent with investor overreaction. These reversals temporally align with post-announcement clarifications and a partial 90-day tariff implementation pause issued on April 9. Sectoral analysis highlights asymmetric impacts, with Real Estate and Financials most adversely affected due to their macro-sensitivity. Supplementary sentiment analysis using GDELT data shows a strong co-movement between negative media tone and market downturns, reinforcing the role of narrative framing in amplifying uncertainty. This study underscores how politically salient policy shocks, such as Trump-era tariffs, transmit through both fundamental valuation and sentiment-driven channels.

Keywords: Trump tariffs; Event study; Abnormal returns; Media sentiment; Sectoral heterogeneity; China retaliation

JEL Codes: G14; G18; D83; E65; F13

1. Introduction

Trade policy uncertainty (TPU) remains a central driver of asset price volatility in global markets, with growing evidence that sudden policy shifts trigger immediate and often amplified investor reactions (Baker et al., 2016; Caldara et al., 2020). On April 2, 2025, U.S. President Donald Trump issued an executive order announcing a new round of tariffs (White House, 2025a)—targeting multiple import categories and interpreted as a renewed escalation in trade tensions with China and strategic allies. This policy shock offers a unique opportunity to assess how equity markets digest real-time geopolitical signals and evolving media narratives.

This study employs a market-adjusted event study framework (Ahern, 2009; MacKinlay, 1997) to evaluate the abnormal returns (AR) and cumulative abnormal returns (CAR) of S&P 500 firms across three symmetric event windows. Beyond aggregate reactions, we examine as supplementary the cross-sectoral heterogeneity and integrate news sentiment data from GDELT filtered by tariff-related and Trump-specific keywords. By jointly analyzing asset price movements and media tone, the paper captures both fundamental and sentiment-driven channels of policy shock transmission.

Our results reveal a statistically significant market decline on April 2, followed by rapid reversals, consistent with investor overreaction and short-term inefficiency (Daniel et al., 1998; Hirshleifer, 2001). These reversals align temporally with emerging reports of a 90-day implementation pause and diplomatic clarifications (White House, 2025d, 2025c, 2025b). Sectoral CARs show that Real Estate, Financials, and Consumer Staples bore disproportionate losses, underscoring their macro-sensitivity. Moreover, the synchronization between tone shifts in the media and equity returns supports the sentiment-channel hypothesis (Bask et al., 2024; Tetlock, 2007).

This study contributes to the literature on policy-induced volatility by showing that tariff shocks—especially those issued by politically salient actors—are transmitted through both risk-based fundamentals and sentiment-amplified narratives.

2. Methodology

This study employs a market-adjusted event study framework to assess the stock price response of S&P 500 firms to the April 2, 2025, tariff-related executive order issued by U.S. President Donald Trump. Event studies remain a foundational empirical approach in financial economics to isolate the impact of unanticipated events on security prices (Ahern, 2009; Fama et al., 1969; MacKinlay, 1997). We evaluate firm- and sector-level responses across three symmetric event windows: [-3,+3], [-5,+5], and [-10,+10], capturing both immediate and persistent effects.

2.1. Abnormal Returns (AR)

We retrieved daily closing prices P_{it} for 503 S&P 500 firms from Bloomberg¹. Daily returns were computed using log differences:

$$R_{it} = \ln (P_{it}) - \ln (P_{it-1})$$

¹ The closing price for each firm was obtained via Bloomberg's *PX_OFFICIAL_CLOSE* field, which represents the official exchange-reported end-of-day price.

Market returns R_{mt} were proxied using the total return version of the S&P 500 index, which includes gross dividend reinvestments²—providing a more accurate benchmark than price-only indices for short-term studies. Abnormal returns were computed via the market-adjusted return model, assuming unit beta and zero alpha:

$$AR_{it} = R_{it} - R_{mt}$$

This model is widely applied in event studies focused on macroeconomic or policy shocks due to its parsimony and robustness over short windows (Brown and Warner, 1985; Strong, 1992). The analysis includes three event windows centered on April 2, 2025:

- [-3,+3] days
- [-5,+5] days
- [-10,+10] days

Abnormal returns were calculated at both the individual firm level and aggregated by sector to examine cross-sectional variation in response to the policy shock.

2.2. Cumulative Abnormal Returns (CAR)

To assess the aggregate market response, Cumulative Abnormal Returns were computed for each firm as:

$$CAR_{i}(T_{1}, T_{2}) = \sum_{t=T_{1}}^{T_{2}} AR_{it}$$

where $[T_1, T_2] \in \{-10, +10\}, \{-5, +5\}, \{-3, +3\}$. Sector-level CARs were calculated by averaging across all firms in each Bloomberg-defined sector:

$$\overline{CAR}_s = \frac{1}{N_s} \sum_{i \in s} CAR_i$$

To test whether observed CARs were statistically different from zero, we applied standard ttests on the cross-sectional CAR means:

$$t(\overline{CAR}) = \frac{\overline{CAR}}{\sigma_{CAR}/\sqrt{N}}$$

where σ_{CAR} is the standard deviation across firm-level CARs and N is the number of firms.

While the standard market model with estimated parameters is common in long-window studies, we apply the market-adjusted model given the short event windows and sudden nature of the announcement (Ahern, 2009; Nguyen and Phan, 2017). This choice avoids parameter estimation bias and is well-suited for analyzing policy shocks.

2.3. News Tone (Supplementary)

² Market returns were sourced from Bloomberg's *TOT_RETURN_INDEX_GROSS_DVDS* field, which captures total returns including reinvested gross dividends for the S&P 500 Index.

As a supplementary analysis, we incorporate daily news tone data from Global Database of Events, Language, and Tone (GDELT), filtered for articles containing "Trump" and "tariff." The average tone score was computed per day and standardized to align with the scale of AR and CAR. This series, plotted in the appendix, facilitates a visual comparison of media sentiment and market reactions, offering context on the information environment surrounding the event. This approach follows the sentiment-channel framework of Tetlock (2007), extended by Engelberg and Parsons (2011).

3. Results and Discussion

3.1. Daily Abnormal Returns Around the Event

Figure 1–3 and Table 1 show that the market responded swiftly to the April 2, 2025 tariff executive order. On the announcement day, a statistically significant negative AR of -0.26% (t = -3.02) indicates an immediate reassessment of future cash flows under increased trade policy uncertainty. Notably, the post-event period shows a rapid reversal—AR rebounded to 0.22% by April 4—suggesting an initial overreaction followed by market recalibration, in line with behavioral hypotheses (Daniel et al., 1998; De Bondt and Thaler, 1985).

This pattern is visible across all event windows. In the [-3,+3] and [-5,+5] intervals, the event day marks the lowest AR, followed by statistically significant positive returns within two trading days. Within the [-10,+10] window, the trajectory becomes more volatile, with extreme swings on April 8 (+0.40%) and April 9 (-0.44%). These fluctuations coincide with media speculation over the executive order's scope and potential exemptions, including emerging discussions around a 90-day tariff pause for allies and key supply chain actors.

Collectively, the AR evidence underscores the market's sensitivity to evolving narratives and the fluidity of investor expectations in the face of ambiguous policy signals.

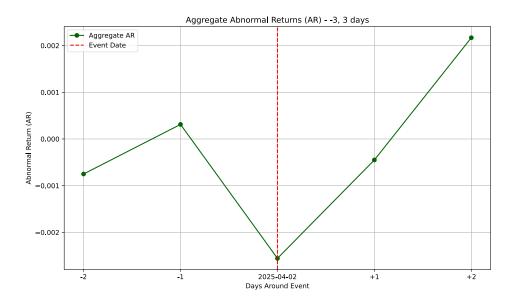


Figure 1. AR Time Series for [-3, +3]

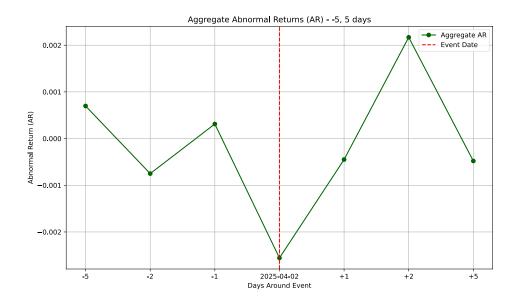


Figure 2. AR Time Series for [-5, +5]

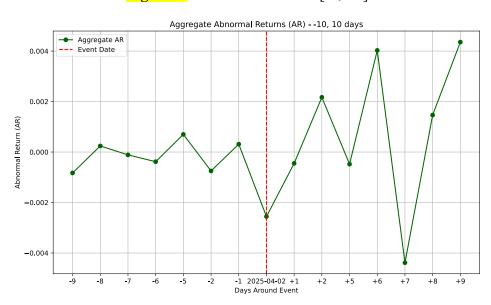


Figure 3. AR Time Series for [-10, +10]

Table 1. Daily Abnormal Returns with T values by Date and Window

Event Window	Date	AR	t-value
-3, 3 days	2025-03-31	-0.000750***	-3.2918
-3, 3 days	2025-04-01	0.000312	1.4837
-3, 3 days	2025-04-02	-0.002557***	-3.021
-3, 3 days	2025-04-03	-0.000449	-0.7155
-3, 3 days	2025-04-04	0.002169***	3.9121
-5, 5 days	2025-03-28	0.000698**	2.1662
-5, 5 days	2025-03-31	-0.000750***	-3.2918
-5, 5 days	2025-04-01	0.000312	1.4837
-5, 5 days	2025-04-02	-0.002557***	-3.021
-5, 5 days	2025-04-03	-0.000449	-0.7155
-5, 5 days	2025-04-04	0.002169***	3.9121

-5, 5 days	2025-04-07	-0.000480*	-1.9153
-10, 10 days	2025-03-24	-0.000829***	-3.5217
-10, 10 days	2025-03-25	0.000241	1.4059
-10, 10 days	2025-03-26	-0.000113	-1.17
-10, 10 days	2025-03-27	-0.000383*	-1.7054
-10, 10 days	2025-03-28	0.000698**	2.1662
-10, 10 days	2025-03-31	-0.000750***	-3.2918
-10, 10 days	2025-04-01	0.000312	1.4837
-10, 10 days	2025-04-02	-0.002557***	-3.021
-10, 10 days	2025-04-03	-0.000449	-0.7155
-10, 10 days	2025-04-04	0.002169***	3.9121
-10, 10 days	2025-04-07	-0.000480*	-1.9153
-10, 10 days	2025-04-08	0.004026***	3.9279
-10, 10 days	2025-04-09	-0.004386***	-3.6868
-10, 10 days	2025-04-10	0.001464***	3.3001
-10, 10 days	2025-04-11	0.004356**	2.0954

^{***, **} and * denote statistical significance at the 1 %, 5 % and 10 % level, respectively.

3.2. Cumulative Abnormal Returns

CAR trajectories further validate the asymmetric adjustment pattern (Figures 4–6, Appendix: Table A1, and). In the [-3,+3] window, CAR bottomed out on April 2 at -1.29% (t=-3.02) and rebounded sharply to +1.09% by April 4 (t=3.91), nearly offsetting the initial loss. This V-shaped response typifies short-term overreaction, consistent with behavioral models of bounded rationality under policy shocks.

The [-5,+5] window reveals a similar dynamic: CAR fell to -1.29% at the event and climbed to over +1.09% within two trading sessions. In the [-10,+10] window, CAR peaked at +2.03% on April 8 before reversing again on April 9 (-2.21%), coinciding with conflicting reports of tariff scope extension and subsequent diplomatic de-escalation. These fluctuations are not purely noise; rather, they reflect real-time repricing of firm value as policy clarity evolves.

This pattern reinforces the notion that even in highly liquid markets, uncertainty surrounding exogenous policy shocks can lead to short-lived mispricing and reversal patterns typical of semi-strong market efficiency violations (Hirshleifer, 2001).

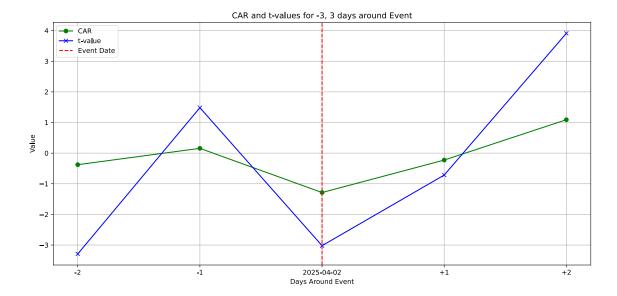


Figure 4. CAR and t-values [-3, +3]

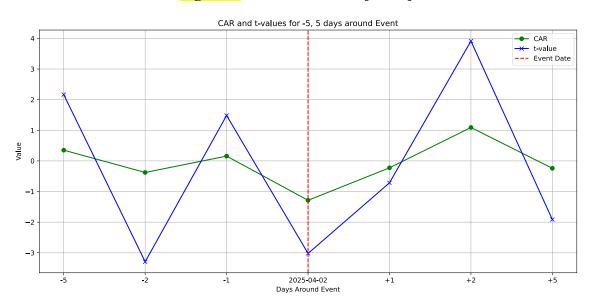


Figure 5. CAR and t-values [-5, +5]

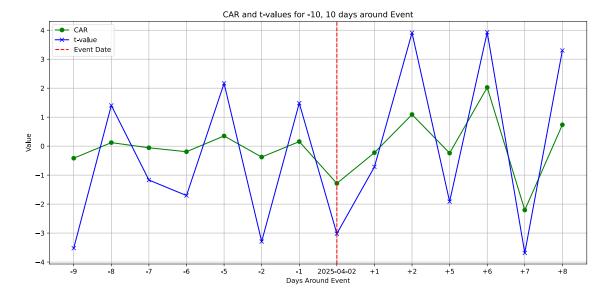


Figure 6. CAR and t-values [-10, +10]

3.3. Sectoral Exposure to the Tariff Shock

Sector-level CARs reveal heterogeneous responses (Figure 7, Appendix: Table 2A, complemented with sectoral AR in Figure A1), reflecting varying exposures to trade-policy risk. Real Estate exhibited the sharpest and most persistent declines (e.g., -0.51% in [-3,+3], t = -3.52), consistent with sensitivity to macro-financial volatility. Financials and Consumer Staples also recorded significant losses. Technology showed delayed declines in [-10,+10], likely tied to escalating geopolitical risk. Notably, partial reversals after April 4 coincide with reports of a 90-day implementation pause, highlighting investor responsiveness to evolving policy signals. These findings reinforce evidence that policy shocks are unevenly priced across sectors, shaped by regulatory exposure, capital intensity, and perceived retaliation risk (Ahern, 2009; Nguyen and Phan, 2017).

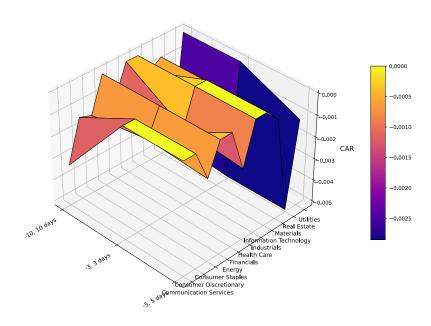


Figure 7. 3D Surface Plot of Sectoral CARs Across Event Windows

3.4. Media Sentiment (Supplementary)

The time-series of standardized media tone, AR, and CAR (Figure 8) illustrates a strong narrative alignment. News sentiment dropped sharply on April 2, with a near-identical pattern to market returns. Tone remained negative through April 5 and then began to improve—mirroring the market's recovery. This lends support to the sentiment-channel hypothesis (Engelberg and Parsons, 2011; Tetlock, 2007), where investor expectations are not solely governed by fundamentals but also by how the media frames policy developments.

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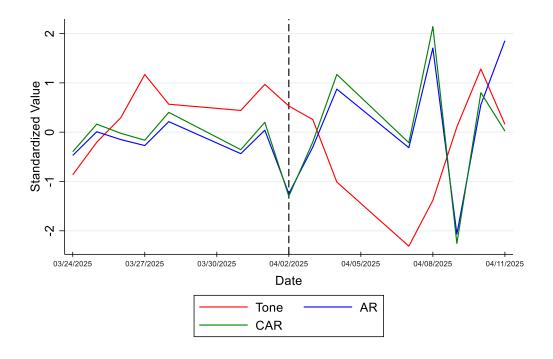


Figure 8. News Tone, Abnormal Returns (AR), and Cumulative Abnormal Returns (CAR)

3.5. Interpretation and Theoretical Implications

The pronounced negative abnormal returns on April 2, 2025, and their swift reversal align with the overreaction hypothesis (Daniel et al., 1998; De Bondt and Thaler, 1985), suggesting investors initially overreacted to the tariff order. Positive ARs on April 4, 8, and 11 coincide with post-announcement developments, including clarifications and reports of a 90-day delay, indicating rapid reassessment under evolving policy signals. This pattern supports a semi-strong form of efficiency with temporary mispricing under uncertainty (Hirshleifer, 2001).

Sectoral variation—particularly in Real Estate, Financials, and Consumer Staples—reflects differential exposure to macro-financial volatility and supply chains (Gulen and Ion, 2016; Pástor and Veronesi, 2013). The temporal alignment of negative media sentiment and market declines further supports the sentiment-channel hypothesis (Bask et al., 2024; Tetlock, 2007), with media narratives amplifying investor anxiety during early April.

4. Conclusion

Using the April 2, 2025 tariff order as a natural experiment, this study shows that U.S. equity markets reacted immediately and asymmetrically to trade-policy uncertainty. Market-adjusted event study estimates reveal sharp declines followed by rapid reversals, mirroring updates on policy implementation. Sectoral patterns highlight the role of industry-specific risk channels, while media tone dynamics underscore the impact of sentiment in shaping short-run price movements. Overall, the findings emphasize that tariff shocks—especially when politically salient—transmit through both fundamental and behavioral channels. Future research may explore cross-market spillovers or the role of algorithmic trading in amplifying sentiment-driven volatility.

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Retaliation and Alignment.

White House, 2025d. Clarification of Exceptions Under Executive Order 14257 of April 2, 2025, as Amended.

Appendix

Table A1. Cumulative Abnormal Returns and t-values by Date and Window

Event Window	Date	CAR	t-value
-3, 3 days	2025-03-31	-0.3772 ***	-3.2918
-3, 3 days	2025-04-01	0.1567	1.4837
-3, 3 days	2025-04-02	-1.2861 ***	-3.021
-3, 3 days	2025-04-03	-0.2257	-0.7155
-3, 3 days	2025-04-04	1.0909 ***	3.9121
-5, 5 days	2025-03-28	0.3510 **	2.1662
-5, 5 days	2025-03-31	-0.3772 ***	-3.2918
-5, 5 days	2025-04-01	0.1567	1.4837
-5, 5 days	2025-04-02	-1.2861 ***	-3.021
-5, 5 days	2025-04-03	-0.2257	-0.7155
-5, 5 days	2025-04-04	1.0909 ***	3.9121
-5, 5 days	2025-04-07	-0.2414 *	-1.9153
-10, 10 days	2025-03-24	-0.4171 ***	-3.5217
-10, 10 days	2025-03-25	0.1213	1.4059
-10, 10 days	2025-03-26	-0.0570	-1.17
-10, 10 days	2025-03-27	-0.1926 *	-1.7054
-10, 10 days	2025-03-28	0.3510 **	2.1662
-10, 10 days	2025-03-31	-0.3772 ***	-3.2918
-10, 10 days	2025-04-01	0.1567	1.4837
-10, 10 days	2025-04-02	-1.2861 ***	-3.021
-10, 10 days	2025-04-03	-0.2257	-0.7155
-10, 10 days	2025-04-04	1.0909 ***	3.9121
-10, 10 days	2025-04-07	-0.2414 *	-1.9153
-10, 10 days	2025-04-08	2.0250 ***	3.9279
-10, 10 days	2025-04-09	-2.2060 ***	-3.6868
-10, 10 days	2025-04-10	0.7364 ***	3.3001
-10, 10 days	2025-04-11	-0.0137	

^{***, **} and * denote statistical significance at the 1 %, 5 % and 10 % level, respectively.

Table A2. Sectoral CARs and t-values

Sector	Event Window	CAR	t-value	
Health Care	-3, 3 days	-0.0016**	-2.066	
	-5, 5 days	-0.0019**	-2.3864	
	-10, 10 days	-0.0001	-0.2108	
	-3, 3 days	0.0002	0.4168	
Information Technology	-5, 5 days	0	-0.0398	
	-10, 10 days	-0.0010*	-1.986	
	-3, 3 days	-0.0009	-0.732	
Consumer Discretionary	-5, 5 days	-0.0001	-0.2677	
_	-10, 10 days	-0.0014*	-1.7219	
	-3, 3 days	-0.0015**	-2.6012	
Financials	-5, 5 days	-0.0013	-1.3998	
	-10, 10 days	-0.0014**	-2.4684	
	-3, 3 days	-0.0012*	-1.7787	
Consumer Staples	-5, 5 days	-0.0014**	-2.3261	
_	-10, 10 days	-0.0016**	-2.44	
	-3, 3 days	-0.0008	-1.5517	
Industrials	-5, 5 days	-0.0002	-0.6861	
	-10, 10 days	-0.0003	-1.6519	
	-3, 3 days	-0.0017	-1.4777	
Utilities	-5, 5 days	-0.0012*	-1.7523	
	-10, 10 days	0.0008	0.782	
	-3, 3 days	-0.0006*	-1.7746	
Materials	-5, 5 days	-0.0006*	-1.773	
	-10, 10 days	-0.0006*	-1.774	
Real Estate	-3, 3 days	-0.0051***	-3.5168	
	-5, 5 days	-0.0051***	-3.3001	
	-10, 10 days	-0.0048***	-4.763	
	-3, 3 days	-0.0012	-1.1794	
Energy	-5, 5 days	-0.0011	-1.2446	
	-10, 10 days	0.0011	0.9631	
	-3, 3 days	-0.0021	-1.4201	
Communication Services	-5, 5 days	-0.0003	-0.4487	
	-10, 10 days	-0.0033*	-1.9148	
*** ** and * denote statistical significance at the 1 % 5 % and 10 % level respectively				

^{***, **} and * denote statistical significance at the 1 %, 5 % and 10 % level, respectively.

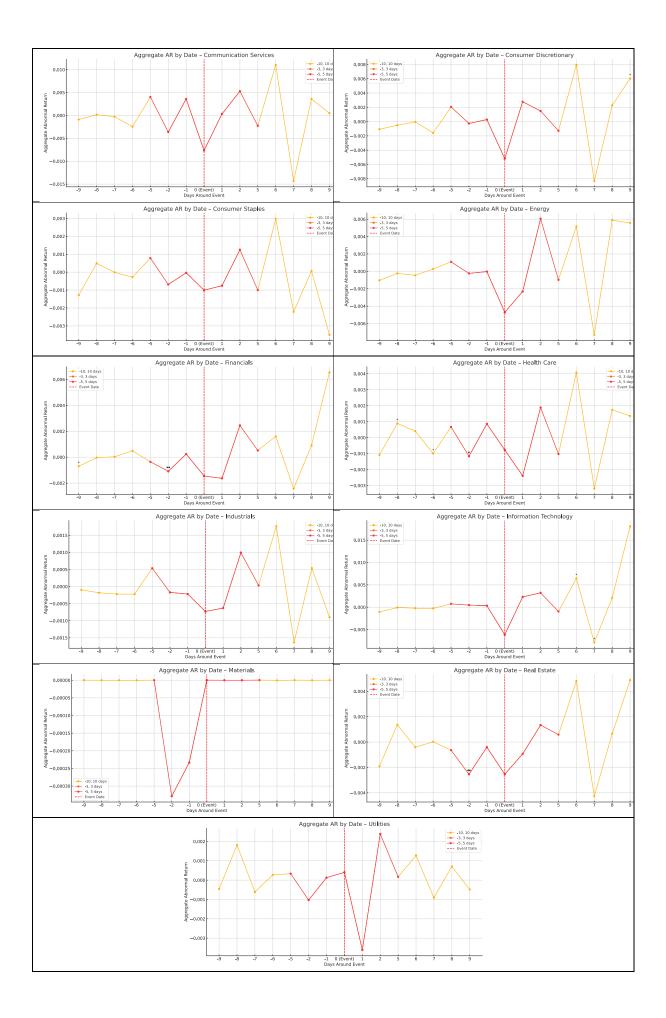


Figure A1. Sector-wise Abnormal Returns Around the Event