REVIEW ARTICLE

IMPACT OF FINANCIAL RESULTS ANNOUNCEMENT ON SHARE PRICE IN INDIA WITH REFERENCE TO BSE SENSEX COMPANIES

Nithin, J.C.[1,*] and Nagendra Marisetty[2]

[1]MBA, IV Semester, REVA Business School (RBS), REVA University, Bangalore
[2]Faculty, REVA Business School (RBS), REVA University, Bangalore

ARTICLE INFO	ABSTRACT
	A financial results announcement is a significant event in the corporate world where a publicly traded company reports its financial performance to shareholders, investors, analysts, and the broader market. Financial results announcements are crucial disclosures that provide insight into a company's financial performance, impact stock prices, and play a vital role in maintaining transparency and accountability in the corporate world. They are essential tools for investors, analysts, and stakeholders to make informed decisions and assess the health and trajectory of a company. This study examines the market reactions to financial results announcements of BSE SENSEX companies over four quarters spanning 2022 to 2023. The analysis focuses on abnormal returns, providing insights into how these returns deviate from normal expectations during a 21-day window period surrounding each announcement. The findings reveal consistent quarterly patterns, with a notable negative trend in abnormal returns leading up to the event days (typically day 0), indicating a cumulative negative impact on returns during the pre-event period. However, after the event days, abnormal returns exhibit mixed patterns, reflecting both positive and negative deviations from normal returns. Notably, these differences in returns on event days are not statistically significant.

INTRODUCTION

Financial results announcements play a pivotal role in the dynamics of the stock market, serving as a critical source of information for investors and stakeholders. In India, where the Bombay Stock Exchange (BSE) Sensex is a prominent indicator of market performance, the release of financial results by companies listed on the Sensex can significantly influence share prices. This phenomenon highlights the intricate relationship between financial reporting, investor sentiment, and stock market fluctuations. The Indian stock market is characterized by its sensitivity to financial information due to the diverse set of investors participating, ranging from individual retail investors to institutional giants. Companies listed on the BSE Sensex are industry leaders and have a considerable impact on the overall market sentiment. Therefore, the disclosure of financial results by these companies triggers a chain reaction that can lead to substantial changes in share prices. Financial results announcements encompass a company's key financial metrics such as revenue, earnings, profit margins, and other relevant financial indicators. These figures reflect a company's performance over a specific period and provide insights into its financial health and growth prospects. Investors eagerly await these announcements as they form the basis for crucial investment decisions. The relationship between financial results and share prices is intricate. Favourable financial performance often leads to a surge in share prices, as investors interpret strong results as an indicator of company growth and profitability.

On the contrary, disappointing financial results can result in a decrease in share prices, reflecting concerns about the company's future prospects. The BSE Sensex, as a benchmark index, is highly sensitive to such changes. A positive or negative reaction to financial results announcements of Sensex companies can trigger market-wide movements, influencing other stocks and sectors. The interconnectedness of the stock market intensifies the impact of financial results announcements beyond the individual companies, creating a ripple effect. Several factors contribute to the impact of financial results announcements on share prices in India. Market sentiment, macroeconomic conditions, and global events can amplify or dampen the market's reaction to these announcements.

Additionally, the speed of information dissemination in the digital age accelerates market reactions, making it crucial for investors to stay informed and make quick decisions. In this study, we aim to explore the intricate relationship between financial results announcements and share prices of BSE Sensex companies. By analysing historical data and market trends, we seek to understand the patterns, dynamics, and factors influencing share price movements following the release of financial results. This research will provide valuable insights for investors, analysts, and policymakers seeking to navigate the complexities of the Indian stock market.

LITERATURE REVIEW

Jain and Singh (2016) discovered that the influence of earnings announcements on stock prices varied based on companies' debt levels. Companies with high debt levels generally experienced more pronounced stock price increases post-earnings announcements. Kumar's (2015) study concentrated on evaluating the impact of quarterly results on the share prices of the leading 5 automobile companies listed on the BSE, specifically during the fiscal year 2013-14. The research aimed to analyze price fluctuations before and after these announcements and to comprehend the dynamic relationship between company growth and price adjustments. Khanna and Shukla (2015) discerned diverse impacts of earnings announcements on stock prices across various sectors. Companies in cyclical sectors often witnessed more substantial stock price increases following earnings announcements. Dr. Rajesh Kumar (May 2015) conducted a study investigating the effects of quarterly results on share prices of specific automobile companies. The research aimed to comprehend share price fluctuations in chosen automobile companies during pre- and post-announcement phases. Menike and Wang (2013) reported a statistically insignificant positive abnormal return and cumulative abnormal return during earnings announcements. They attributed positive reactions to favourable information that investors assimilated. Mallikarjunappa and Dsouza (2013) identified noteworthy cumulative average abnormal return values subsequent to earnings announcements, underscoring the informational value inherent in earnings announcements that might not be entirely factored into stock prices.

Menike and Wang (2013), the findings from these studies align closely with the information content hypothesis and the efficient market hypothesis (EMH). These theories suggest that earnings announcements hold information that is relevant to the value of stocks, and stock markets respond promptly and effectively to this information. Evaluating market reactions to information in emerging markets is a complex task due to distinct characteristics. Emerging markets often involve a substantial number of investors lacking adequate information, limited liquidity, and weak regulatory and institutional structures. Additionally, operational challenges further complicate the assessment of market responses. Sinha and Mukherjee (2012) highlighted distinct effects of earnings announcements based on companies' levels of institutional ownership. Companies with high institutional ownership typically experienced more pronounced stock price increases post-earnings announcements. Collins et al. (2009) hypothesized that the increasing importance of earnings announcements was attributed to investors' preference for specific informal announcements like Street earnings. These informal announcements were believed to exert an elevated impact on the market. Iqbal and Mallikarjunappa(2007) observed the Indian stock market's delayed response to quarterly earnings announcements, suggesting potential opportunities for abnormal returns. Their findings indicated the market's semi-strong inefficiency.

RESEARCH METHODOLOGY

Objectives

- To examine the immediate impact of financial results announcements on share prices in Indian companies.
- To identify whether positive or negative financial results have a stronger impact on share prices in the Indian stock market.
- To provide insights that can be used by investors to make informed decisions about their investments.

Hypothesis

Null Hypothesis (H_0): Financial Results announcements have no significant impact on share prices in the Indian market.

Alternative Hypothesis (H_1): Financial Results announcements have a significant impact on share prices in the Indian market. The research aims to investigate how the announcement of financial results affects the share prices of companies listed on the BSE Sensex in India. Specifically, it seeks to understand the immediate impact of positive and negative financial results on share prices, analyze the efficiency and speed of market reactions, assess the role of investor expectations, explore sectoral variations in response, and examine the longer-term effects on share prices. The study addresses these aspects to provide insights into market dynamics, investor behavior, and information dissemination efficiency for BSE Sensex companies. The scope of this study encompasses an analysis of the impact of financial results announcements on share prices for companies listed on the BSE Sensex in India. It will focus on both positive and negative financial outcomes and their immediate influence on share prices. The study will examine the efficiency of market reactions, considering factors like investor expectations and historical performance. It will also explore potential variations in response across different sectors and industries represented in the BSE Sensex. Additionally, the research will touch on the potential longer-term effects of these announcements on share prices. However, the study will not delve into the broader factors influencing stock markets or conduct an in-depth analysis of individual company strategies. It can help investors make better investment decisions. By understanding how financial results announcements affect share prices, investors can better assess the value of a company and make more informed investment decisions. It can help companies manage their expectations. Companies can use the study to understand how their financial results are likely to be received by the market and adjust their expectations accordingly. It can help regulators monitor the stock market. Regulators can use the study to identify any potential market manipulation or insider trading activity. It can help policymakers develop better economic policies. Policymakers can use the study to understand how financial results announcements affect economic activity and make more informed policy decisions.

Financial results announcements significantly impact share prices of BSE Sensex companies. Share prices often experience rapid changes immediately after the announcement of financial results. Positive earnings surprises tend to lead to share price increases, while negative surprises can result in declines. Increased price volatility around the announcement indicates the market's sensitivity to the information. Financial data for the selected BSE Sensex companies were sourced from BSE SENSEX website. Daily share price data before and after earnings announcements were collected for a specified time period.

Market Model as fallows

Expected Return (E) = $\alpha + \beta\, R_M$

α = Alpha coefficient of security with Index;
β = Beta coefficient of the security with Index
R_M = Expected of the return of the Index
Abnormal returns calculated as fallows
AR = R − E, R = Actual Returns;AR = Abnormal returns

Average Abnormal returns calculated as fallows

$$AAR = \frac{\sum_{t=1}^{n} At}{n}$$

t = the number of securities in the study; n = total number of stocks in the class

t test used to determine the significance of average abnormal returns

$$t = \frac{AAR}{Standard\ Error}$$

AAR = Average abnormal return; (AAR) = Standard error of average abnormal return;

Standard error is calculated is $(AAR) = \frac{\sigma}{\sqrt{n}}$

Table 1. Q1 Results (2022 – 2023) Average Abnormal Returns and Cumulative Abnormal Returns for the 21 days window

Day	AAR	CAAR	SD	SE	t Static	p Value
-10	-0.027	-0.027	1.183	0.216	-0.125	0.901
-9	0.427	-0.054	1.281	0.234	1.825	0.078
-8	0.060	0.373	1.323	0.242	0.249	0.805
-7	-0.130	0.433	1.379	0.252	-0.517	0.609
-6	-0.317	0.303	0.810	0.148	-2.143	0.041*
-5	0.265	-0.014	1.330	0.243	1.093	0.284
-4	0.074	0.251	1.491	0.272	0.273	0.787
-3	0.005	0.326	1.151	0.210	0.023	0.982
-2	0.243	0.331	1.929	0.352	0.690	0.496
-1	-0.155	0.574	1.323	0.241	-0.643	0.526
0	0.078	0.418	2.183	0.399	0.196	0.846
1	-3.180	0.496	16.866	3.079	-1.033	0.310
2	0.076	-2.683	1.552	0.283	0.268	0.790
3	0.523	-2.607	1.946	0.355	1.472	0.152
4	-0.485	-2.085	1.269	0.232	-2.092	0.045*
5	-0.067	-2.569	1.270	0.232	-0.289	0.775
6	0.320	-2.636	1.032	0.188	1.699	0.100
7	-0.111	-2.316	1.086	0.198	-0.560	0.579
8	-0.145	-2.427	0.996	0.182	-0.799	0.431
9	0.340	-2.573	1.437	0.262	1.297	0.205
10	-0.127	-2.232	1.373	0.251	-0.506	0.617

(Source: Author's calculations) (* @ 5% significance level)
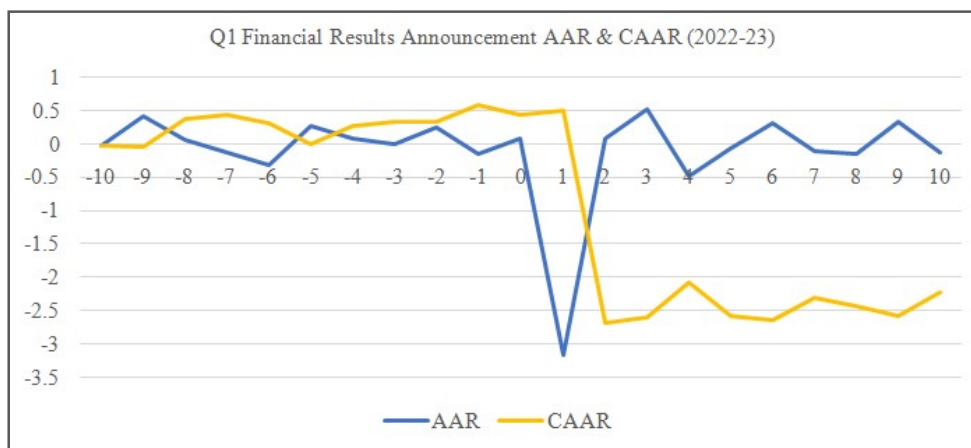
Graph 1.

Table 2: Q2 Results (2022 – 2023) Average Abnormal Returns and Cumulative Abnormal Returns for the 21 days window

Day	AAR	CAAR	SD	SE	t Static	p Value
-10	0.0281	0.0281	0.9958	0.1818	0.1543	0.8784
-9	0.1924	0.0561	1.1855	0.2164	0.8890	0.3813
-8	0.0326	0.2485	1.2072	0.2204	0.1479	0.8834
-7	0.0314	0.2811	1.1623	0.2122	0.1480	0.8833
-6	0.1269	0.3126	1.0727	0.1958	0.6481	0.5220
-5	-0.1844	0.4395	1.0107	0.1845	-0.9992	0.3260
-4	0.3119	0.2551	1.2382	0.2261	1.3797	0.1782
-3	-0.0447	0.5670	1.0453	0.1908	-0.2341	0.8165
-2	-0.0187	0.5223	1.5245	0.2783	-0.0673	0.9468
-1	0.3403	0.5036	1.2135	0.2216	1.5360	0.1354
0	0.1648	0.8439	1.6212	0.2960	0.5569	0.5819
1	-0.3293	1.0087	2.9108	0.5314	-0.6196	0.5403
2	-0.4127	0.6795	1.2576	0.2296	-1.7974	0.0827
3	-0.2827	0.2667	1.6353	0.2986	-0.9470	0.3515
4	-0.2456	-0.0160	1.2465	0.2276	-1.0790	0.2895
5	-0.2073	-0.2616	1.1867	0.2167	-0.9566	0.3467
6	-0.0265	-0.4688	0.8177	0.1493	-0.1777	0.8602
7	-0.0835	-0.4953	1.3130	0.2397	-0.3484	0.7301
8	0.0153	-0.5789	0.9338	0.1705	0.0898	0.9290
9	0.1239	-0.5635	1.3018	0.2377	0.5212	0.6062
10	0.0199	-0.4397	0.7376	0.1347	0.1475	0.8837

(Source: Author's calculations) (* @ 5% significance level)

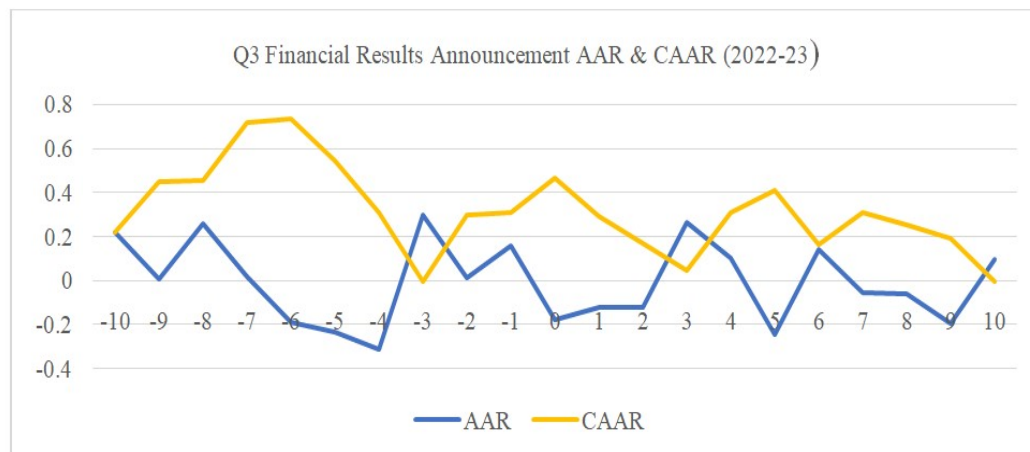**Table 3. Q3 Results (2022 – 2023) Average Abnormal Returns and Cumulative Abnormal Returns for the 21 days window**

Day	AAR	CAAR	SD	SE	t Static	p Value
-10	0.2231	0.2231	0.8981	0.1640	1.3607	0.1841
-9	0.0086	0.4462	0.8944	0.1633	0.0524	0.9586
-8	0.2586	0.4548	1.0862	0.1983	1.3041	0.2024
-7	0.0194	0.7134	1.0600	0.1935	0.1000	0.9210
-6	-0.1876	0.7328	1.1688	0.2134	-0.8789	0.3867
-5	-0.2349	0.5452	1.2106	0.2210	-1.0627	0.2967
-4	-0.3123	0.3103	0.9353	0.1708	-1.8291	0.0777
-3	0.2994	-0.0020	1.1698	0.2136	1.4019	0.1716
-2	0.0120	0.2974	1.2756	0.2329	0.0515	0.9593
-1	0.1571	0.3094	1.8232	0.3329	0.4719	0.6405
0	-0.1756	0.4665	1.8125	0.3309	-0.5306	0.5998
1	-0.1217	0.2909	2.5082	0.4579	-0.2658	0.7922
2	-0.1231	0.1692	1.4507	0.2649	-0.4649	0.6455
3	0.2630	0.0460	1.1515	0.2102	1.2509	0.2210
4	0.1009	0.3090	1.3407	0.2448	0.4121	0.6833
5	-0.2462	0.4099	1.2192	0.2226	-1.1062	0.2777
6	0.1446	0.1637	1.2530	0.2288	0.6319	0.5324
7	-0.0551	0.3082	1.1562	0.2111	-0.2608	0.7961
8	-0.0609	0.2532	0.9117	0.1665	-0.3660	0.7170
9	-0.1935	0.1922	1.3104	0.2392	-0.8089	0.4252
10	0.0996	-0.0013	1.3015	0.2376	0.4192	0.6781

(Source: Author's calculations) (* @ 5% significance level)

Graph 3.

Table 4. Q4 Results (2022 – 2023) Average Abnormal Returns and Cumulative Abnormal Returns for the 21 days window

Day	AAR	CAAR	SD	SE	t Static	p Value
-10	0.1197	0.1197	0.9629	0.1758	0.6808	0.5014
-9	0.0621	0.2394	1.0216	0.1865	0.3328	0.7417
-8	-0.3167	0.3014	1.1150	0.2036	-1.5560	0.1306
-7	0.1211	-0.0153	0.9545	0.1743	0.6951	0.4925
-6	-0.0240	0.1058	1.1888	0.2170	-0.1104	0.9128
-5	-0.1906	0.0818	1.1205	0.2046	-0.9315	0.3593
-4	0.2513	-0.1087	1.1694	0.2135	1.1769	0.2488
-3	-0.0298	0.1425	1.0431	0.1904	-0.1565	0.8767
-2	0.1280	0.1127	1.1974	0.2186	0.5855	0.5627
-1	-0.0532	0.2407	0.8811	0.1609	-0.3307	0.7432
0	-0.1203	0.1875	1.4846	0.2711	-0.4438	0.6605
1	-0.4656	0.0672	2.2588	0.4124	-1.1290	0.2681
2	0.2204	-0.3984	1.0569	0.1930	1.1424	0.2626
3	-0.0201	-0.1779	0.9451	0.1726	-0.1162	0.9083
4	0.0503	-0.1980	0.8748	0.1597	0.3150	0.7550
5	0.2683	-0.1477	0.7579	0.1384	1.9393	0.0623
6	0.0613	0.1207	1.2085	0.2206	0.2776	0.7833
7	0.2521	0.1819	0.8462	0.1545	1.6316	0.1136
8	-0.2543	0.4340	0.9905	0.1808	-1.4063	0.1703
9	0.0765	0.1797	1.2069	0.2204	0.3471	0.7310
10	0.0626	0.2562	0.7820	0.1428	0.4385	0.6643

(Source: Author's calculations) (* @ 5% significance level)
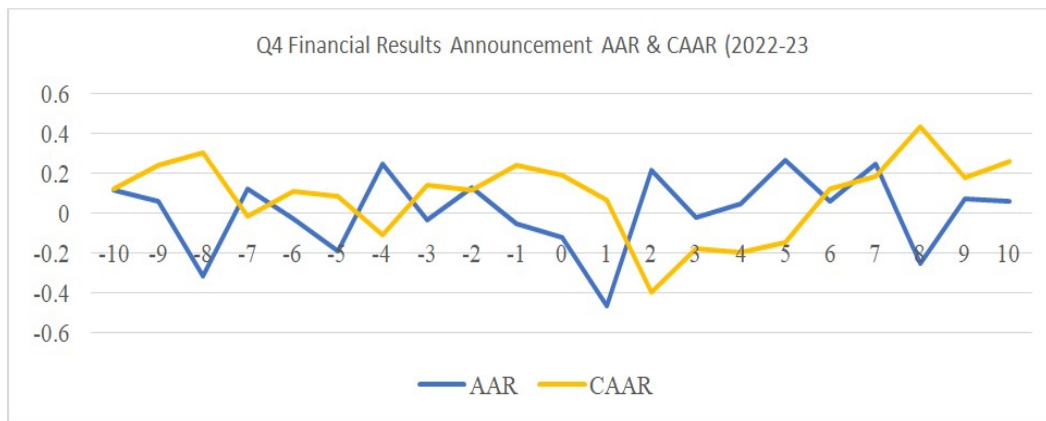
Graph 4.

Cumulative Abnormal returns calculated as fallows

$CAR = AR_t + AR_{t-1}$
AR_t = Abnormal returns present day;
AR_{t-1} = Abnormal returns of the previous day

Cumulative Average Abnormal returns calculated as fallows

$$CAAR = \frac{\sum_{t=1}^{n} Ct}{n}$$

t = the number of securities in the study; n = total number of stocks in the class

t test used to determine the significance of average abnormal returns

$$t = \frac{CAAR}{Standard\ Error}$$
CAAR = Average abnormal return;
(C*AAR*) = Standard error of average abnormal return;

Standard error is calculated is $(CAAR) = \frac{\sigma(CAAR)}{\sqrt{n}}$

Data Analysis

Q1 Results (2022 – 2023): The table 1 provides insights into how returns deviate from normal expectations over 21 days window period for the Q1 financial results announcements of the BSE SENSEX companies. Over the -10 to +10 time window, AAR values vary from -3.180 to 0.574. The most negative AAR is observed at day 1 (-3.180), suggesting a significant negative deviation from expected returns during that period. The most positive AAR is observed at day -9 (0.427), indicating a positive deviation from expected returns during that period. CAAR values fluctuate between -2.683 and 0.574. The CAAR at day 1 is the most negative (-2.683), indicating a significant cumulative negative abnormal return. The CAAR at day -9 is the most positive (0.574), suggesting a cumulative positive abnormal return.

On the event day (day 0), the data suggests that there was a small positive average abnormal return, indicating that returns were slightly higher than expected. However, this difference is not statistically significant based on the high p-value.Some days have low p-values (e.g., 0.041 and 0.045 at days -6 and 4, respectively), indicating statistically significant abnormal returns during those periods. Other days have higher p-values (e.g., 0.609 and 0.617 at days -7 and 10, respectively), suggesting returns that are not statistically significant. There are significant abnormal returns observed at specific time days, especially at day -6 and day 4, where both the t-statistic and p-value indicate statistical significance. The cumulative abnormal returns (CAAR) indicate the overall impact of deviations from normal returns over time, with some days showing cumulative positive abnormal returns and others showing cumulative negative abnormal returns. The table 2 provides insights into how returns deviate from normal expectations over 21 days window period for the Q2 financial results announcements of the BSE SENSEX companies.

Days -9 and 0 have positive AAR values, indicating returns higher than expected on those days. Days -5, 1, 2, 3, 4, 5, 6, 7, and 10 have negative AAR values, indicating returns lower than expected on those days. The CAAR remains positive for several days after the event (0 to 2), suggesting a cumulative positive impact on returns during this period. The CAAR is negative on days 1 to 7 and 10, indicating a cumulative negative impact on returns during these days. Day 2 stands out as it has a relatively low p-value (0.0827), suggesting a statistically significant negative AAR (p < 0.10). This indicates that returns on day 2 are significantly different from what would be expected. Other days do not show statistically significant AAR values based on conventional significance levels (typically p < 0.05).On the event day (day 0), the data suggests that there was a negative average abnormal return, indicating that returns were lower than expected. However, this negative impact is not statistically significant based on the high p-value. The standard deviation (SD) varies across days, suggesting different levels of volatility in returns. For example, day 1 and day 10 have relatively high SD values, indicating higher volatility. The CAAR values show a cumulative trend, with fluctuations in returns over time. There is a period of cumulative positive returns followed by cumulative negative returns after the event. The negative CAAR values on multiple days (especially day 2) suggest that there might have been significant adverse events or factors affecting returns during those periods. The positive CAAR values before and after the event date suggest that returns were higher than expected during those periods.

Q3 Results (2022 – 2023): The table 3 provides insights into how returns deviate from normal expectations over 21 days window period for the Q3 (2022 – 23) financial results announcements of the BSE SENSEX companies. Days -10, -8, -7, -3, -2, -1, and 3 have positive AAR values, indicating returns higher than expected on those days. Days -6, -5, -4, 0, 1, 2, 5, 7, 8, and 9 have negative AAR values, indicating returns lower than expected on those days. The CAAR remains positive on several days, suggesting a cumulative positive impact on returns during these periods. This indicates that, on average, returns during these days were higher than the expected or normal returns. The CAAR is negative on several days, indicating a cumulative negative impact on returns during these periods. This suggests that, on average, returns during these days were lower than the expected or normal returns. On the event day (day 0), the data suggests that there was a negative average abnormal return, indicating that returns were lower than expected. However, this negative impact is not statistically significant based on the p-value.Day -4 stands out as it has a relatively low p-value (0.0777), suggesting a statistically significant negative AAR. This means that returns on day -4 are significantly different from what would be expected (typically p < 0.10). Other days do not show statistically significant AAR values based on conventional significance levels (typically p < 0.05). This implies that most of the abnormal returns observed in this period may not be statistically significant. The standard deviation (SD) varies across days, suggesting different levels of volatility in returns. The CAAR values show a cumulative trend, with fluctuations in returns over time.

This suggests that the impact of abnormal returns accumulates over multiple days. The positive and negative CAAR values indicate that there were periods of both positive and negative abnormal returns during this window period. Statistically significant results are observed on one day only, indicating events or factors that significantly impacted returns. For example, day -4 had a significant negative impact.

Q4 Results (2022 – 2023): The table 4 provides insights into how returns deviate from normal expectations over 21 days window period for the Q4 (2022 – 23) financial results announcements of the BSE SENSEX companies. Days -10, -9, -7, -2, and 6 have positive AAR values, indicating returns higher than expected on those days. Days -8, -6, -5, -3, -1, 0, 1, 4, and 8 have negative AAR values, indicating returns lower than expected on those days. The CAAR is positive on day -10 and from day -2 to day 6, suggesting a cumulative positive impact on returns during these periods. The CAAR is negative on days -8, -6, -5, -3, -1, 0, 1, and 8, indicating a cumulative negative impact on returns during these periods. None of the days show statistically significant AAR values based on conventional significance levels (typically $p < 0.05$). On day 0, the AAR is -0.1203, the data suggests that there was a negative average abnormal return, indicating that returns were lower than expected. However, this difference is not statistically significant based on the high p-value. None of the AAR values are statistically significant, indicating that the abnormal returns observed on these days are not significantly different from zero at a 95% confidence level. The standard deviation (SD) varies across days, suggesting different levels of volatility in returns. For example, day 1 and day 4 have relatively high SD values, indicating higher volatility. The CAAR values show a cumulative trend, with fluctuations in returns over time. There are periods of both positive and negative cumulative returns. The CAAR values suggest that there were periods of both positive and negative abnormal returns during this quarter.

Year wise - Consolidated (All four quarters of 2022 - 2023): The table 5 provides insights into how returns deviate from normal expectations over 21 days window period for the all four quarters (2022 – 23) financial results announcements of the BSE SENSEX companies. Days from -10 to -1 show negative AAR values, indicating that, on average, returns during this period were lower than expected. The negative trend suggests that there was a consistent negative impact on returns leading up to the event day. On the event day (ED 0), the AAR is -0.0972, which confirms that returns on the event day were lower than expected. This aligns with the negative trend observed in the preceding days. Days 1 to 10 show mixed AAR values. While there are negative AAR values on some days, there are also positive AAR values. This suggests a less clear trend in returns after the event day. None of the AAR values are statistically significant, indicating that the abnormal returns observed are not significantly different from zero at a 95% confidence level. The CAAR values, which represent the cumulative impact of abnormal returns over time, show a consistent negative trend from days -10 to -1, indicating a cumulative negative impact on returns leading up to the event day (ED 0). The CAAR remains negative even on ED 0. After ED 0, the CAAR values fluctuate, sometimes turning positive, but there isn't a clear and consistent trend in the post-event period. The standard deviation (SD) values are relatively high throughout the entire period, suggesting substantial volatility or variation in returns. The data in Table 5 suggests a consistent negative trend in abnormal returns leading up to the event day (ED 0), indicating that the event had a negative impact on returns during this period. After the event day, there is less consistency in the abnormal returns, with both positive and negative returns observed in the post-event period.

CONCLUSION

Across all four quarters, there is a consistent negative trend in abnormal returns leading up to the event days (typically day 0), indicating a cumulative negative impact on returns during the pre-event period. After the event days, abnormal returns exhibit mixed patterns, with both positive and negative deviations from normal returns. There isn't a clear and consistent trend in the post-event period. On event days (day 0), there are mixed observations. While some event days show slightly positive average abnormal returns, others show slightly negative ones. However, none of these differences are statistically significant based on high p-values. Significant abnormal returns are observed on specific days, but these are relatively rare and not consistent across quarters.

The standard deviation (SD) values fluctuate across days, indicating varying levels of volatility or variation in returns. Some days experience higher volatility than others. Cumulative Average Abnormal Return (CAAR) values are informative in assessing the overall impact of deviations from normal returns over time. They reveal cumulative negative impacts leading up to event days and mixed impacts afterward. None of the observed AAR values are statistically significant based on conventional significance levels (typically $p < 0.05$). This suggests that the abnormal returns observed are not significantly different from zero at a 95% confidence level. The analysis indicates that financial results announcements for BSE SENSEX companies tend to be associated with a cumulative negative impact on returns leading up to the event. However, post-event returns exhibit mixed patterns, with some quarters experiencing positive cumulative returns, while others exhibit cumulative negative returns. It's important to note that statistically significant abnormal returns are relatively rare and not consistent across quarters, indicating that market reactions may vary depending on specific factors and circumstances surrounding each announcement. Further research and analysis could delve into the specific events, market conditions, and company-specific factors that may have influenced these observed returns, providing a more comprehensive understanding of market reactions to financial results announcements.

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