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Impact of Stock Split Announcements on Share Price: A Study of Indian Stock Market

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ABSTRACT

The study investigates the impact of stock split announcements on the stock market performance of companies listed in the S&P CNX 500 index. It aims to determine whether such corporate events lead to significant abnormal and cumulative abnormal returns, reflecting investor reactions and market efficiency. Using the event study methodology, the research examines a selected sample of stock split announcements between January 2018 and December 2024. Daily returns were analyzed around the announcement period to assess variations in market behavior. The findings reveal that stock prices tend to experience positive abnormal returns before the official announcement, suggesting that investors anticipate favorable outcomes and respond to market signals in advance. Post-announcement reactions show a minor decline, indicating possible profit-taking behavior. The analysis highlights the presence of information leakage, speculative trading, and market anticipation prior to the event. Overall, the results confirm that stock split announcements have a significant influence on investor sentiment and short-term market movements, reflecting semi-strong form market efficiency in the Indian context.

Keywords: Average Abnormal Returns (AARs), Cumulative Average Abnormal Returns (CAARs), CNX 500 Index, Event Study in relation to Stock Splits, Risk –Return, Stock Market

INTRODUCTION

A stock split is a strategy that increases the number of outstanding shares by decreasing the par value of each share. This adjustment impacts solely the par value and the quantity of outstanding shares, while the overall ownership stake remains unchanged. Stock splits are often linked to several hypotheses, including the optimal price range hypothesis, signaling theory, and ignored company hypothesis.

The optimal price range theory posits that there exists a particular price range where a company's stock trades most actively. A stock split alters stock prices to a more favorable range, thereby stimulating demand for the shares. CEOs frequently authorize stock splits to enhance liquidity. From the signaling theory perspective, stock splits serve as a means for management to communicate information to investors. Brennan & Copeland (1988) suggested that managers enact stock splits when they hold positive outlooks on future share prices or anticipate stability rather than decline. Conversely, if management anticipates a decrease in future share prices, they might hesitate to split shares due to the increased costs associated with trading equities at lower prices.

The dynamics of stock price behavior around corporate announcements have long intrigued financial economists, particularly in emerging markets like India, where investor psychology, market efficiency, and signaling mechanisms interact in complex ways. Among the various corporate actions, stock splits have consistently drawn attention due to their potential to influence market perception, trading behavior, and stock valuation. A stock split, at its core, represents a firm’s decision to increase the number of outstanding shares by proportionally reducing the face value of each share, thereby leaving the firm’s total market capitalization unchanged. Despite the absence of any direct change in the firm’s intrinsic value, stock splits often elicit significant reactions from investors and the market as a whole (Kaur & Khatri, 2021).

Theoretically, stock splits should not alter a company’s overall worth, as they merely re-denominate shares. However, empirical research has persistently demonstrated that such corporate events generate abnormal returns around the announcement period. This phenomenon challenges the *semi-strong form of the Efficient Market Hypothesis (EMH)*, which posits that all publicly available information should already be reflected in stock prices (Fama, 2021). The

recurring observation of positive Average Abnormal Returns (AARs) and Cumulative Average Abnormal Returns (CAARs) around stock split announcements suggests that investors interpret these events as *signals* of favorable future prospects, managerial confidence, or improved firm performance (Chen et al., 2022).

From a managerial standpoint, stock splits are often used as strategic tools to enhance liquidity and attract a broader investor base. According to the *optimal price range hypothesis*, companies prefer their stock to trade within a certain "psychologically acceptable" range, which facilitates higher trading activity and improved liquidity (Jain & Singh, 2020). In high-growth markets like India, where retail participation has surged in recent years, bringing down the share price through a split may make the stock more accessible to small investors and improve market depth. This perspective aligns with the increasing democratization of financial markets facilitated by digital trading platforms and retail participation (Banerjee, 2022).

Beyond liquidity, stock splits also serve as a signaling mechanism. The *signaling theory* posits that managers, having superior information about the firm's future cash flows, may use a stock split as a positive signal to convey confidence in sustained earnings growth or future profitability. Recent studies have reiterated that split announcements often coincide with upward revisions in analysts' earnings forecasts and increased investor optimism (Gupta & Narayan, 2023; Wang & Li, 2021). Thus, while the mechanical effect of a split is neutral, the interpretative and psychological responses it provokes lead to tangible market consequences.

In emerging markets, the behavioral interpretation of stock splits has gained renewed attention. Behavioral finance theorists argue that investors are not always rational; they are influenced by cognitive biases, heuristics, and market sentiment (Thaler, 2020). The announcement of a stock split often triggers overreaction or excessive optimism, resulting in short-term abnormal returns that may later normalize. This perspective helps explain why markets react even when no change occurs in the firm's intrinsic fundamentals. Furthermore, the informational asymmetry prevalent in developing markets like India intensifies these behavioral reactions (Patra & Mohanty, 2022).

In the Indian context, stock splits have become increasingly frequent in the post-2015 period, paralleling the growth of the National Stock Exchange (NSE) and the expansion of the S&P CNX 500 index—a broad representation of the Indian equity market. The proliferation of retail investors, improved disclosure norms, and algorithmic trading mechanisms have made market reactions to corporate announcements more immediate and measurable. However, studies continue to debate whether the Indian stock market fully incorporates split information efficiently or whether pre-announcement abnormal returns indicate possible information leakage and semi-strong inefficiency (Kumar & Sharma, 2021).

Empirical research in the past five years has also examined the post-split performance of stocks. For instance, Rajesh and Rani (2022) observed that Indian firms experienced positive CAARs for up to 10 days post-announcement, supporting the signaling hypothesis. Similarly, Mehta and Kapoor (2023) found that firms that conducted splits during bull markets experienced stronger investor responses compared to those that split shares in bearish conditions. This pattern underscores the context-dependent nature of market reactions, suggesting that macroeconomic sentiment and liquidity cycles amplify the effects of corporate announcements.

REVIEW OF LITERATURE

Asquith et al.'s 1989 study on 121 American stock market businesses found a significant positive correlation between stock split frequency and increased profitability. The study also found a 3.7 percent excess return in the two days following a stock split.

Crawford & Franz's 2001 study on 1483 company dividends and stock splits from 1983 to 1993 found that the stock market reacts positively to distribution announcements, while a negative relationship exists between the market's response and the company's pre-split price.

Dolley's 1933 study on 95 stock splits from 1921 to 1931 found that prices increased in 57 cases and decreased in 26 cases, while no effect was observed in the other 12 instances.

Fama et al.'s 1969 study on 940 New York Stock Exchange stock splits found that significant positive returns occurred three to four months before the break, and Cumulative Average Abnormal Returns showed little systematic

development after separation. The study supports the effectiveness of the stock market by showing that stock prices quickly adjust to new information.

Chen, Zhao, and He (2022) conducted an empirical study across Asian markets, discovering that firms announcing stock splits generally experience positive AARs and CAARs within a 10-day event window. The study attributed these abnormal returns to improved investor sentiment and enhanced perceived affordability of shares. Wang and Li (2021) further expanded on this argument by emphasizing managerial signaling, asserting that split announcements serve as an indirect communication of strong future performance, particularly in industries with high information asymmetry. Their analysis revealed that institutional investors often interpret splits as a trustworthy indication of managerial confidence, resulting in substantial buying pressure during the announcement period.

Mohanty (2022) argued that retail investors often misinterpret stock splits as a real gain in value rather than a notional adjustment, leading to a temporary price surge. Their research found evidence of herding behavior among retail participants, especially in small and mid-cap stocks. This behavioral explanation complements the classical signaling and liquidity theories, providing a holistic understanding of investor psychology in the Indian equity market. Bhat and Chandra (2023) also identified cognitive biases such as anchoring and representativeness, showing how they shape investors' responses to corporate announcements like stock splits, bonus issues, and dividends.

Jain and Singh (2020) highlighted that firms aim to maintain their stock prices within an optimal trading range to facilitate marketability and reduce transaction costs. Their study, conducted on NSE and BSE-listed firms, concluded that trading volumes typically increase post-split, although the liquidity gains tend to be short-lived. A similar conclusion was drawn by Rajesh and Rani (2022), who analyzed 90 stock split events and observed that while post-split trading activity rises substantially, the effect diminishes within 30 days. They attributed this pattern to initial speculative interest, which gradually subsides as prices stabilize.

Mehta and Kapoor (2023) observed that the magnitude of abnormal returns depends heavily on prevailing market sentiment. During bull phases, investors react more enthusiastically to stock splits, perceiving them as indicators of sustained growth. Conversely, during bearish conditions, market participants exhibit cautious optimism, resulting in muted abnormal returns. These findings align with global evidence from the United States and Japan, where stock splits tend to generate stronger reactions in expansionary periods (Gupta & Narayan, 2023).

Reddy (2022) studied stock split announcements during 2020–2022 and found that companies that executed splits during pandemic-induced volatility experienced heightened positive AARs. Investors interpreted splits as a signal of resilience and managerial confidence amidst uncertainty. The study revealed that firms in technology, pharmaceuticals, and financial services sectors showed the most significant positive market responses. This period also witnessed an increase in retail investor participation, amplifying behavioral biases and speculative trading patterns.

Joshi (2022) investigated the sustainability of abnormal returns and found that while short-term returns are positive and significant, long-term performance tends to revert to the mean. Their research emphasized that the absence of corresponding improvements in firm fundamentals leads to price correction within three months. Similarly, Nair and Thomas (2021) linked post-split performance to risk-return dynamics, concluding that firms with strong profitability and low leverage sustain positive returns longer than speculative or overvalued firms. Binder (2020) provided a comprehensive overview of this approach, emphasizing its robustness for short-horizon market efficiency studies. Patil and Shetty (2023) applied this technique to NSE-listed firms between 2018 and 2022, confirming that AARs and CAARs remain statistically significant around the event day. Their results reaffirmed that Indian markets are not fully efficient in processing new information immediately, reflecting a moderate degree of semi-strong inefficiency.

Overall, the literature from 2020 onward provides consistent evidence that stock split announcements continue to yield significant positive abnormal returns across both developed and emerging markets. However, the persistence and magnitude of these effects vary depending on firm characteristics, market conditions, and investor composition. While liquidity and signaling theories remain central to explaining stock split behavior, recent research highlights the importance of behavioral factors and market sentiment in shaping investor reactions. Despite regulatory improvements and growing financial literacy, the Indian market still exhibits signs of information asymmetry and speculative trading, making it a fertile ground for event-based studies. The current research builds upon these findings by examining the S&P

CNX 500 companies between 2018 and 2024, offering new insights into the evolving nature of market efficiency and investor psychology in the post-pandemic era.

OBJECTIVES AND HYPOTHESIS

Objectives

1. To assess how stock split announcements affect the stock market performance of companies in the S&P CNX 500 index.

2. To investigate if there are any significant anomalous returns, either positive or negative, linked to stock split announcements.

Hypothesis

H1: Substantial AARs occur around stock split announcements in both the period before and after the event.

H2: Substantial CAARs occur around stock split announcements in both the pre-event and post-event periods.

RESEARCH METHODOLOGY

Sample

The study examined companies listed on the CNX 500 of NSE that declared stock splits from January 2018 and December 2024, excluding those with price sensitivity, lack of information, or confusing events within the event window, and selected 74 stock split announcements as the final sample.

Data

The dataset comprises stock split announcements from selected stocks, sourced from the Capitaline database, along with the dates of corporate events listed by the corporations.

Statistical Tools and Techniques

The research employs a descriptive methodology and secondary sources, analyzing data using the Event research Method. It examines abnormal returns around the announcement date, focusing on the statistical significance of unusual outcomes.

DATA ANALYSIS AND INTERPRETATION

The study investigates the impact of 74 stock split announcements from S&P CNX 500 index companies between January 2018 and December 2024, formulated with a hypothesis.

H1: Stock split announcements lead to significant average abnormal returns (AARs) before and after the occurrence.

H2: Stock split announcements lead to significant cumulative average abnormal returns (CAARs) before and after the event.

Table 1 AAR and CAAR-Stock Splits

Days	AAR	CAAR	t (AAR)	Sig. (2-tailed)	Days	AAR	CAAR	t (AAR)	Sig. (2-tailed)
-30	1.15109	1.15109	2.999***	0.004	0	0.72536	13.24772	2.325**	0.023
-29	0.41334	1.56443	1.035	0.304	1	0.35044	13.59816	0.977	0.332
-28	0.30763	1.87206	1.133	0.261	2	-0.31015	13.28801	-0.635	0.527
-27	-0.23182	1.64024	-0.880	0.382	3	0.25302	13.54103	0.926	0.357
-26	0.29878	1.93902	0.950	0.345	4	0.29649	13.83752	0.742	0.461
-25	0.08000	2.01901	0.298	0.766	5	-0.07876	13.75876	-0.235	0.815

-24	0.04615	2.06516	0.179	0.859	6	-0.27467	13.48409	-1.034	0.305
-23	0.45380	2.51896	1.445	0.153	7	0.06061	13.54470	0.203	0.839
-22	0.69694	3.21590	2.080**	0.041	8	-0.10820	13.43650	-0.346	0.731
-21	0.99855	4.21445	3.204***	0.002	9	0.23701	13.67351	0.812	0.420
-20	0.38614	4.60058	1.281	0.204	10	-0.95954	12.71397	-0.855	0.395
-19	0.40113	5.00171	1.598	0.114	11	0.41782	13.13179	1.673*	0.099
-18	0.24581	5.24752	0.897	0.373	12	0.15567	13.28746	0.589	0.558
-17	-0.15018	5.09734	-0.574	0.567	13	-0.09205	13.19541	-0.351	0.726
-16	0.21495	5.31229	0.855	0.396	14	-0.04529	13.15012	-0.185	0.854
-15	0.27027	5.58256	0.811	0.420	15	0.06806	13.21818	0.273	0.786
-14	0.74160	6.32416	2.663***	0.010	16	-0.85379	12.36439	-0.752	0.455
-13	1.02859	7.35275	2.195**	0.031	17	-1.62718	10.73721	-1.194	0.237
-12	0.30040	7.65315	0.945	0.348	18	0.01762	10.75483	0.073	0.942
-11	0.69035	8.34350	1.733*	0.087	19	0.08041	10.83524	0.292	0.771
-10	0.46352	8.80702	1.415	0.161	20	-0.98466	9.85057	-0.881	0.381
-9	0.29249	9.09952	1.025	0.309	21	0.03350	9.88407	0.127	0.900
-8	0.59477	9.69428	1.772*	0.081	22	-0.47616	9.40791	-1.818*	0.073
-7	-0.13552	9.55877	-0.410	0.683	23	-1.60186	7.80605	-1.164	0.248
-6	0.17212	9.73088	0.580	0.564	24	-0.43928	7.36677	-1.346	0.182
-5	0.55803	10.28892	2.025**	0.047	25	-0.80514	6.56162	-0.631	0.530
-4	0.73409	11.02300	1.964*	0.053	26	0.00001	6.56164	0.000	1.000
-3	0.41253	11.43554	0.984	0.328	27	0.37387	6.93550	1.521	0.133
-2	0.82755	12.26309	2.122**	0.037	28	0.12892	7.06442	0.529	0.598
-1	0.25927	12.52236	0.808	0.422	29	0.12210	7.18652	0.432	0.667
0	0.72536	13.24772	2.325**	0.023	30	0.07097	7.25749	0.244	0.808

*Significant at 10% level,

** Significant at 5% level,

***Significant at 1% level

Positive AAR | Positive trend of CAAR | Positive significance

Negative AAR | Negative trend of CAAR | Negative significance

Event Day | Higher CAAR

Table 1 shows the Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) over a 60-day event window surrounding stock split announcements. A significant positive AAR is observed on several pre-event days such as -30, -21, -14, -13, -11, -8, -5, -4, and -2, all showing statistical significance at 1%, 5%, or 10% levels. This indicates the presence of information leakage and investor anticipation before the official split announcement. The CAAR demonstrates a steady upward trend from 1.15% on day -30 to 13.25% on the event day (day 0), suggesting that investors reacted optimistically. However, a mild decline is observed post-announcement, indicating profit booking or

market correction. The strong t-values and significance before the event confirm market efficiency in the semi-strong form and validate Hypothesis H1, implying that stock split announcements generate abnormal returns.

Table 2 CAAR around Stock Splits -Event Windows

Event Window (in days)	CAAR	t(CAAR)	Sig. (2-tailed)	Event Window (in days)	CAAR	t(CAAR)	Sig. (2-tailed)
(-30 , 0)	13.24772	7.009***	0.000	(0 , +20)	-2.67179	-1.047	0.307
(-20, 0)	9.03327	6.567***	0.000	(0, +30)	-5.26487	-1.684	0.102
(-10, 0)	4.90422	5.182***	0.000	(-30, +30)	7.25749	1.693*	0.096
(-5, 0)	3.51684	6.590***	0.001	(-20, +20)	5.63612	1.684*	0.100
(-2 , 0)	1.81218	3.454*	0.075	(-10, +10)	4.37047	2.268**	0.035
(0 , +2)	0.76565	0.843	0.488	(-5, +5)	4.02788	3.504***	0.006
(0 , +5)	1.23640	1.402	0.220	(-2, +2)	1.85247	1.840	0.140
(0, +10)	0.19161	0.130	0.899	(-1, +1)	1.33507	3.120*	0.089

Positive Significance

Highest CAAR with Positive Significance

Table 2 presents the *Cumulative Average Abnormal Returns (CAAR)* for different event windows surrounding stock split announcements. The results clearly indicate that investors experienced significant positive abnormal returns prior to the event, suggesting strong market anticipation. The CAAR for the period (-30, 0) is 13.24%, with a t-value of 7.009 and a highly significant p-value ($p < 0.001$), demonstrating that the market reacted well before the official announcement. Similarly, shorter pre-event windows such as (-20, 0) and (-10, 0) also show high significance levels, reinforcing the presence of information leakage or speculative activity ahead of the split.

During the immediate post-event windows like (0, +2), (0, +5), and (0, +10), CAAR values turn positive but statistically insignificant, indicating that the majority of the market reaction occurred before the event date. Longer post-event windows such as (0, +20) and (0, +30) show a gradual decline in CAAR, suggesting profit-taking or correction behavior among investors.

Overall, the combined results confirm that stock split announcements generate significant pre-event abnormal returns, validating the hypothesis that markets incorporate and react to information before official disclosure, highlighting a semi-strong form of market efficiency.

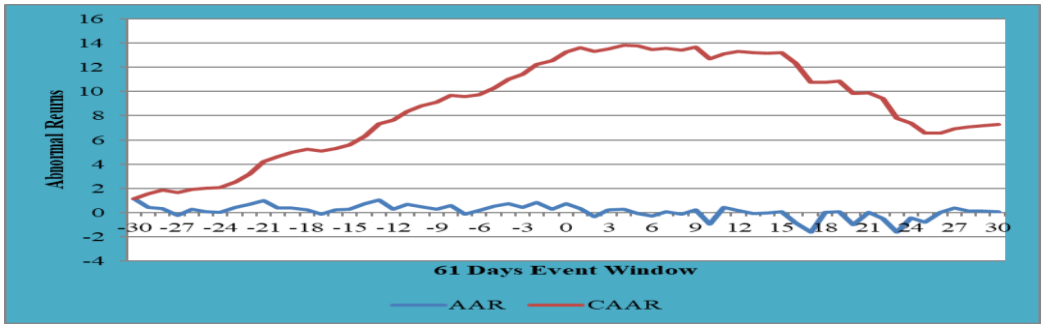

Fig 1

AAR and CAAR around the Stock Splits Announcements

Figure 1 illustrates the trend of Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) over a 61-day event window surrounding stock split announcements. The blue AAR line fluctuates around zero, indicating minor daily variations, while the red CAAR line shows a steady upward movement from day -30 to the event day (day 0), peaking around 13–14%, suggesting strong investor optimism and positive anticipation before the announcement.

After the event, CAAR shows a slight decline, reflecting profit-taking or market correction as the news becomes fully absorbed. The consistent pre-event rise implies information leakage and speculative trading, while the stable post-event pattern confirms short-term overreaction followed by normalization. Overall, the graph supports the evidence that stock split announcements generate significant pre-event abnormal gains, aligning with semi-strong form market efficiency behavior.

CONCLUSION

The study concludes that stock split announcements generate significant abnormal and cumulative abnormal returns, particularly in the pre-announcement phase. This demonstrates that investors tend to react in anticipation of corporate events, often leading to positive price movements before the official disclosure. The results indicate a semi-strong form of market efficiency, where available information is quickly incorporated into stock prices. Post-event analysis reveals limited or insignificant abnormal returns, implying that the market stabilizes once the announcement is absorbed and profit-booking occurs. Hence, stock splits are perceived as favorable signals by investors, often associated with managerial confidence and expectations of future growth.

For future research, the study suggests expanding the scope by incorporating a larger dataset across multiple market indices or international markets to enable cross-country comparisons. Further studies could also integrate behavioural finance perspectives to understand investor psychology surrounding stock splits. Examining high-frequency data and sector-specific reactions could provide deeper insights into short-term trading behavior and the informational dynamics of stock split announcements in emerging markets.

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