The Impact of Credit Rating Changes on Stock Returns: A Study on NSE Listed Companies

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Abstract

This study examines the influence of credit rating changes on the stock returns of NSE listed companies using an event study approach over a 40-day event window. Large cap, mid cap, and small cap companies are analysed, aiming to determine if investors react strongly to credit rating changes and if there is a notable difference in share price before and after the rating announcement. The research includes 30 NSE listed companies with credit ratings announced by Moody & Fitch from January 2010 to January 2023. The findings reveal that credit rating changes significantly impact stock returns, with downgrades having a greater effect on share prices compared to upgrades.

Keywords: *Credit Ratings, Upgrades & Downgrades, Event Study, Stock Returns*

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1. Introduction

Credit ratings are vital for investors to assess a company's financial health, provided by agencies like Moody's, Standard & Poor's, and Fitch Ratings based on their ability to meet their financial obligations. These ratings help investors gauge the risk associated with investing in a particular company. Jindal and Narang (2019) analysed the impact of credit rating changes on the stock returns of Indian companies and found that rating changes had a significant impact on stock returns.

Upgrades in credit ratings indicate improved financial health, leading to increased demand for the company's stock and higher returns for investors. This may be due to several factors, such as an increase in revenue or a reduction in debt. Conversely, downgrades suggest deteriorated financial health, resulting in decreased demand for the stock and lower returns. This may be due to factors such as a decline in revenue, an increase in debt, or a failure to meet financial obligations. Singh and Jha (2020) found that downgrades have a more significant negative impact on stock returns than upgrades, and the impact is more pronounced for firms with lower liquidity and higher leverage.

Additionally, credit rating changes can indirectly affect a company's ability to raise capital through debt financing, impacting its growth prospects and stock price. As studied by Mishra and Mohapatra (2020) in their study on the impact of credit rating changes on stock prices of NSE-listed companies, they found that a change in credit rating has a significant impact on stock prices of companies, and the impact is more pronounced for downgrades than upgrades. Their findings suggest that investors should pay close attention to credit rating changes when making investment decisions.

B G Poornima et al. (2015) came to the conclusion that rating upgrades and downgrades have a considerable impact on investors' stock returns. The effects of such announcements are evident not only around the announcement date but also in the long run. It has been found that downgrade statements have a greater influence on company share prices than upgrading ones. If a company's credit rating is downgraded, it may become more difficult or expensive for the company to raise capital through debt financing. This, in turn, can impact the company's growth prospects and ultimately affect its stock price. Understanding the effects of credit rating changes is crucial for investors (Bhatia, P., & Patel, A.K. (2020).

2. Literature review

Several studies have explored the impact of changes in credit ratings on the stock prices of companies. Kumar and Thakur (2019), Arora and Kumar (2019), Giri and Bandyopadhyay (2018) and Srinivasan and Srinivasan (2013) found that downgrades have a more significant negative impact on stock prices than upgrades. Moreover, Abdul et al. (2017) utilized an ordered probit model and panel data regression to investigate three main areas: the factors influencing credit ratings, the impact of credit ratings on the performance of firms, and the correlation between credit ratings and stock returns of 50 companies rated by Taiwan Ratings Corporation (TRC) and found that firms with superior credit ratings perform better. Meanwhile, Reddy et al. (2018) found that credit rating downgrades trigger a sizable reaction in US companies listed on Standard & Poor 500 using event study approach and T-test.

Klimaviien (2011) found that there is an asymmetric reaction to sovereign credit rating announcements, with negative events having a much higher price impact than favourable ones, using event study approach. While Amin et al. (2018) concluded that announcement period abnormal returns can be considerably predicted by pre-announcement cumulative abnormal returns using event study approach and regression. Furthermore, Angeline et al. (2019) examined using event study approach, the effects of changes in credit rating, including upgrades, downgrades, new ratings, and affirmation ratings, on stock returns and found a considerable impact on stock returns for Shariah-compliance stocks around the time new ratings and affirmation ratings were announced.

Finally, Ozturk (2008) found that downgrade ratings had little impact on stock returns and volatility, but they weaken and raise the volatility of the Turkish lira/USD and TL/EUR exchange rates using event study approach. Overall, these studies suggest that investors should consider the credit rating of a company when making investment decisions, as changes in credit rating can have a significant impact on stock returns and prices.

This study is important for investors to closely monitor changes in credit ratings for companies in which they hold stock. By understanding the impact of these changes on stock returns, investors can make more informed investment decisions. Additionally, investors should consider diversifying their portfolios to mitigate the risks associated with changes in credit ratings for individual companies.

2.1 Research Gap

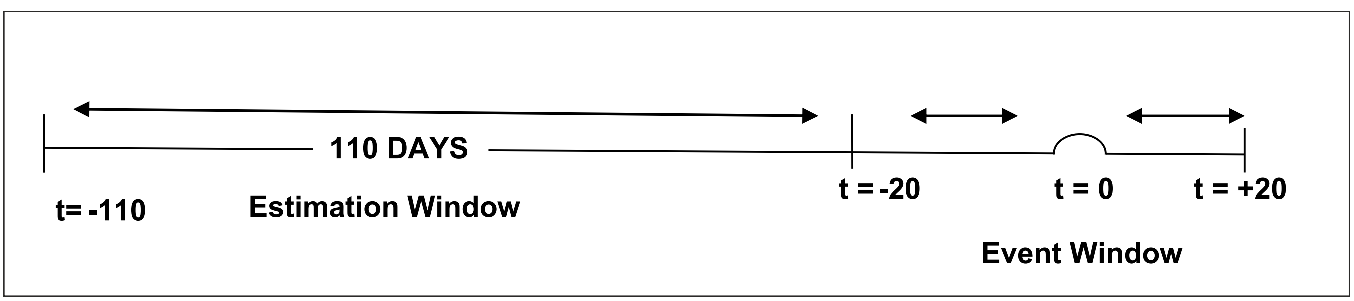
1. According to the literature review, companies that are listed on the Bombay Stock Exchange are the subject of greater research. This study fills the research gap concerning the categorization of companies listed on the National Stock Exchange into large cap, mid cap, and small cap categories. The results from these categories are diverse.
2. The literature review also suggests that due to limitations in the information's availability, the study's sample size and time frame were insufficient.

3. Objectives of the study

1. To study whether the share price value differs significantly before and after the credit rating announcement date.
2. To determine whether investors react strongly to changes in a company's credit rating.

4. Research Methodology

The influence on stock returns due to credit rating upgrades and downgrades is examined using an event research approach, as well as whether firm share prices depart from expectations before and after the rating announcement. The following are the steps used in the event study technique:



1. **Defining the Event:** The event day for the study was the credit rating announcement day, focusing on changes that impacted long-term debt ratings. Only credit ratings from the top two agencies, Fitch Ratings and Moody's, were considered for the analysis.
2. **Firms Selection for Conducting the Study:** The study collected credit rating announcement events from Moody and Fitch websites and stock return data from the National Stock Exchange (NSE) website. The research covers the period from January 2010 to January 2023 and focuses on 30 NSE-listed companies. These companies were categorized as Large Cap, Mid Cap, and Small Cap based on the presence of at least one upgrade and one downgrade for each company.
3. **Defining the Estimation Window and Event window:**

a) The beta (a market risk indicator) and the intercept were computed using an estimation window of 110 days prior to the event window.

b) The time frame of 20 days, pre- and post-event was considered

4. **Computation of Expected Returns: The expected returns were calculated using the market model approach.**

The following formula was used to compute the expected returns: $E(R_{it}) = \alpha + \beta \times R_{mt}$ where E(Rit) = Expected return ofstock; α = Intercept of the stock; β = Beta value of the stock; and Rmt = Market return. This approach is based on the assumption that expected and market returns during the event window is linearly related. Moreover, it offers more sensitive stock return adjustment for the following two reasons:

a. Given that the market return is zero, the intercept of the regression shows the average return on stock.

b. B x Rmt captures sensitivity of stock returns to market returns.

5. Computation of Abnormal Returns: Abnormal returns were calculated by deducting expected returns from actual returns. $AR = R_{it} - E(R_{it})$

where Rit = Actual return on the stock, and

E(Rit) = Expected return on the stock.

6.Computation of Aggregate Abnormal Returns: Daily abnormal returns were added up to create cumulative abnormal returns, which were then used to draw general conclusions.

7.Analysing the Significant Impact: To determine whether the occurrence significantly affected stock returns, t-tests of abnormal returns and cumulative abnormal returns were computed. The significance of the t-tests was also tested by calculating their p values. The significant impact was tested using 1%, 5%, and 10% significance levels. By comparing the abnormal returns, expected returns, and cumulative abnormal returns, the final conclusion was made.

5. Analysis & Interpretation

Table 1 & 2 includes the credit ratings from Moody and Fitch for NSE listed companies, categorized as large cap, mid cap, and small cap. The ratings cover upgrades and downgrades from January 2010 to January 2023.

There are 7 large cap firms, 9 mid cap firms, and 1 small cap firm with upgrades, while 11 large cap firms, 11 mid cap firms, and 3 small cap firms experienced downgrades.

The event day for examining stock return impact is the rating announcement date, with an estimation window of 110 days across a 41-day event window.

Table 1 & 2 includes the credit ratings from Moody and Fitch for NSE listed companies, categorized as large cap, mid cap, and small cap. The ratings cover upgrades and downgrades from January 2010 to January 2023. There are 7 large cap firms, 9 mid cap firms, and 1 small cap firm with upgrades, while 11 large cap firms, 11 mid cap firms, and 3 small cap firms experienced downgrades.

The event day for examining stock return impact is the rating announcement date, with an estimation window of 110 days across a 41-day event window.

Table 1: Ratings for NSE listed companies with only Upgrades

Market Cap	Company Name	Upgrades			
		Date	Agency	Current Rating	Last Rating
Large Cap	JSW steel Ltd.	06-03-2018	Moody	Ba2	Ba3
	Tata steel Ltd.	19-04-2021	Fitch	BB	BB-
	Tata Motors Ltd.	26-10-2010	Moody	Ba3	B2
	Indian oil corporation Ltd.	17-11-2017	Moody	Baa2	Baa3
	Reliance Industries Ltd.	04-05-2010	Fitch	BBB	BBB-
	Tata Consultancy Services	15-12-2021	Fitch	A	A-
	Hindustan petroleum corporation Ltd.	17-11-2017	Moody	Baa2	Baa3
Mid Cap	Punjab National Bank	20-01-2023	Moody	Baa3	Ba1
	Canara Bank	20-01-2023	Moody	Baa3	Ba1
	Tata chemicals Ltd.	18-09-2014	Moody	Ba1	Ba2
	Yes Bank	03-08-2020	Moody	B3	Caa1
	Bayer Cropscience Ltd.	18-03-2013	Fitch	A	A-
	ABB Ltd.	01-06-2011	Moody	A2	A3
	AIA Engineering Ltd.	23-11-2017	Fitch	AA-	A+
	SKF India Ltd.	20-12-2018	Fitch	BBB+	BBB
	Vodafone Idea Ltd	06-08-2004	Fitch	A-	BBB+
Small Cap	Capri Holdings Ltd.	25-08-2021	Fitch	BBB-	B+

Source: Authors Compilation

Table 2: Ratings of NSE listed companies with only Downgrades

Market Cap	Company Name	Downgrades			
		Date	Agency	Current Rating	Last Rating
Large Cap	Oil & natural gas Ltd.	12-04-2012	Moody	Baa	Baa1
	HDFC Bank	02-06-2020	Moody	Baa3	Baa1
	ICICI Bank	03-06-2019	Fitch	BB+	BBB-
	Axis Bank	12-06-2018	Moody	Baa3	Baa2
	Infosys	02-06-2020	Moody	Baa1	A3
	Bank of Baroda	04-03-2020	Moody	Baa3	Baa2
	Tata Consultancy Services	02-06-2020	Moody	Baa1	A3
	JSW steel Ltd.	01-04-2016	Fitch	BB	BB+
	Tata steel Ltd.	01-04-2016	Fitch	BB	BB+
	Tata Motors Ltd.	16-11-2018	Fitch	BB	BB
	Indian oil corporation Ltd.	02-06-2020	Moody	Baa3	Baa2
	IDBI Bank	28-04-2017	Fitch	BB+	BBB-
	Indian bulls housing Ltd.	14-10-2019	Moody	B2	Ba2
	Capri Holdings Ltd.	01-04-2020	Fitch	BB+	BBB
Small Cap	Pfizer limited	01-08-2019	Fitch	A	A+
	Indian Bank	23-09-2013	Fitch	Baa3	Baa2
	Shriram Finance Ltd	27-03-2020	Fitch	BB	B+
Mid Cap	Steel Authority of India	01-04-2016	Fitch	BB	BBB-
	Hindustan petroleum corporation Ltd.	02-06-2020	Moody	Baa3	Baa2
	Oracle financial service software Ltd.	30-03-2020	Fitch	A-	A
	Punjab National Bank	02-06-2020	Moody	Ba1	Baa3
	Canara Bank	04-09-2020	Moody	Ba1	Baa3
	Tata chemicals Ltd.	17-04-2009	Moody	Ba1	Baa3
	Yes Bank	28-08-2019	Moody	Ba2	Baa3
	Bayer Cropscience Ltd.	08-07-2019	Fitch	BBB+	A
	ABB Ltd.	08-04-2020	Moody	A3	A2

Source: Authors Compilation

Table 3: The impact of credit rating changes during upgrades on the stock return

Market Cap	Company Name	Date of the rating announcement	Effect – UPGRADES			
			Before the event		After the event	
			Return	No of days	Return	No of days
Large Cap	Bank of Baroda	20-01-2023	Positive	13*	Positive	10
	Reliance Industries Ltd	04-05-2010	Positive	8	Positive	10
		25-06-2020	Positive	13*	Positive	13*
	JSW Steel Ltd	06-03-2018	Positive	9	Positive	11
		13-05-2022	Positive	6	Positive	10
		27-06-2022	Positive	11	Positive	10
	Tata Steel Ltd	19-04-2021	Positive	13*	Positive	15*
		13-05-2022	Positive	8	Positive	10
	Tata Motors Ltd	28-04-2017	Positive	8	Positive	14*
		26-10-2010	Positive	12*	Positive	12*
		18-09-2014	Positive	9	Positive	10
		27-09-2016	Positive	11	Positive	9
	Indian Oil Corporation Ltd	17-11-2017	Positive	9	Positive	9
	Tata Consultancy Services	15-12-2021	Positive	12	Positive	15
Mid Cap	SKF India Ltd	20-12-2018	Positive	13	Positive	11
	AIA Engineering Ltd	23-11-2017	Positive	11	Positive	15*
	Abb Ltd	01-06-2011	Positive	10	Positive	8
	Bayer Cropscience Ltd	18-03-2013	Positive	10	Positive	7
	Yes Bank	03-08-2020	Positive	5	Positive	11
	Tata Chemicals Ltd	18-09-2014	Positive	11	Positive	10
	Canara Bank	20-01-2023	Positive	12*	Positive	10
	Punjab National Bank	20-01-2023	Positive	13*	Positive	7
	Oracle Financial Service Software Ltd	23-05-2011	Positive	7	Positive	10
	Hindustan Petroleum Corporation Ltd	17-11-2017	Positive	7	Positive	13*
Small Cap	Capri Holdings Ltd	25-08-2021	Positive	9	Positive	10

Source: Authors Compilation

**Indicates stocks having positive returns during upgrades*

The table provides a summary of substantial positive returns for NSE listed companies following credit rating upgrade announcements. Out of 27 upgrades, 13 had a significant positive impact on stock returns, while 14 showed a decline in the number of days with positive returns after the rating announcements. Certain companies, including Punjab National Bank, Yes Bank, Bayer Crop Science Ltd, ABB Ltd, and Vodafone Idea Ltd, experienced significantly negative results.

On the other hand, Tata Motors, Reliance Industries, and Indian Oil Corporation showed no difference in returns. Overall, there were fewer positive returns after the upgrade announcements compared to the pre-announcement period, suggesting a limited impact on stock returns.

Table 4 summarizes the number of days with significant negative returns following downgrade announcements for the selected companies. Out of 45 downgrades for NSE-listed businesses, around 17 had a substantial negative impact on stock returns compared to returns before the downgrade announcement. However, 14 downgrades resulted in favorable returns for investors. Indian Bank, HDFC Bank, and Tata Steel Ltd. showed no variation in stock returns. Some downgrades even produced profitable results, but the stock of Yes Bank was severely impacted by the downgrade announcement during the post-event window.

Table 4: The impact of credit rating changes during downgrades on the stock return

Market Cap	Company Name	Date of the rating announcement	Effect - DOWNGRADES			
			Before the event		After the event	
			Return	No of days	Return	No of days
Large Cap	Tata Consultancy Services	02-06-2020	Negative	8	Negative	10
	JSW steel Ltd	03-02-2016	Negative	11	Negative	6
		04-04-2016	Negative	6	Negative	11
		22-05-2020	Negative	8	Negative	7
	Tata steel Ltd	01-04-2016	Negative	5	Negative	11
		22-05-2020	Negative	8	Negative	8
	Tata Motors ltd	16-11-2018	Negative	9	Negative	10
		24-07-2019	Negative	10	Negative	13*
		16-04-2020	Negative	11	Negative	8
		20-06-2019	Negative	16*	Negative	9
		18-06-2020	Negative	8	Negative	8
	Indian oil corporation ltd	02-06-2020	Negative	8	Negative	12*
	Oil & natural gas ltd	12-04-2012	Negative	12	Negative	11
		24-03-2020	Negative	16*	Negative	9
		02-06-2020	Negative	7	Negative	12
	HDFC Bank	02-06-2020	Negative	10	Negative	10
	ICICI Bank	03-06-2019	Negative	10	Negative	11
		03-04-2020	Negative	12	Negative	9

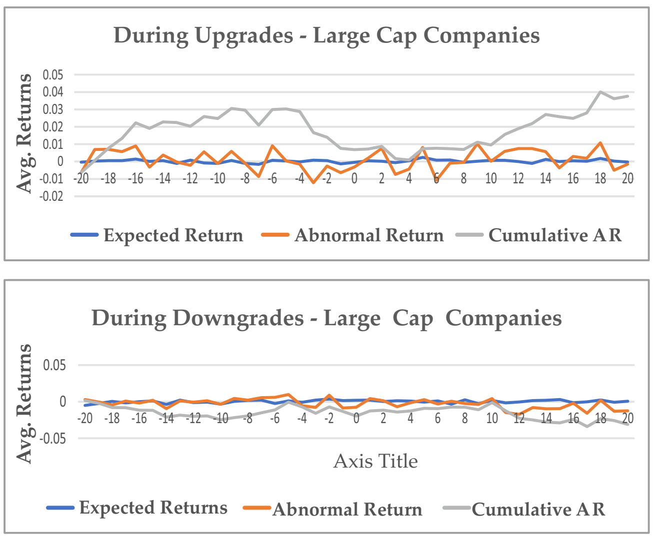
Table 4: The impact of credit rating changes during downgrades on the stock return

Market Cap	Company Name	Date of the rating announcement	Effect - DOWNGRADES			
			Before the event		After the event	
			Return	No of days	Return	No of days
	Axis Bank	12-06-2018	Negative	10	Negative	11
		03-06-2019	Negative	11	Negative	10
	Infosys	02-06-2020	Negative	7	Negative	12*
Mid Cap	Hindustan petroleum corporation ltd	02-06-2020	Negative	11	Negative	10
	Oracle financial service software ltd	30-03-2020	Negative	12*	Negative	7
		07-11-2022	Negative	10	Negative	8
	Punjab National Bank	02-06-2020	Negative	11	Negative	8*
	Bank of Baroda	04-03-2020	Negative	10	Negative	13*
		04-09-2020	Negative	8	Negative	12*
	Canara Bank	04-09-2020	Negative	13*	Negative	13*
	Tata chemicals ltd	06-04-2009	Negative	7	Negative	9
		16-12-2010	Negative	11	Negative	9
	Yes Bank	28-08-2019	Negative	11	Negative	12
		05-12-2019	Negative	11	Negative	11
		06-03-2020	Negative	10	Negative	19**
	Bayer Crop science Ltd	08-07-2019	Negative	11	Negative	16*
	ABB LTD	08-04-2020	Negative	13*	Negative	14*
	Pfizer limited	01-08-2019	Negative	12*	Negative	12
		23-09-2011	Negative	12*	Negative	10
	Indian Bank	23-09-2013	Negative	7	Negative	7
	Shriram Finance Ltd	27-03-2020	Negative	13*	Negative	7
	Steel Authority of India	01-04-2016	Negative	7	Negative	10
	Vodafone Idea Ltd	06-08-2014	Negative	5	Negative	11
Small Cap	Capri Holdings ltd	01-04-2020	Negative	11	Negative	11
	IDBI Bank	28-04-2017	Negative	10	Negative	13*
	Indian bulls housing Ltd	14-10-2019	Negative	14*	Negative	11
		24-03-2020	Negative	10	Negative	8
		27-03-2020	Negative	11	Negative	7

Source: Authors Compilation
**Indicate stocks having negative returns after downgrades*

In Chart 1, The average returns, including expected returns, abnormal returns, and cumulative abnormal returns during upgrades and downgrades for large cap businesses, are shown in chart 1. The event window, which ranges from -20 to +20, indicates that the cumulative abnormal returns during upgrades exhibited positive returns for both pre- and post-event periods which indicates that the stocks performed well with the positive rating announcement. In contrast, the cumulative abnormal returns for downgrades exhibited negative returns for both pre and post-event periods which indicates that the stocks performed worse then expected or normal performance.

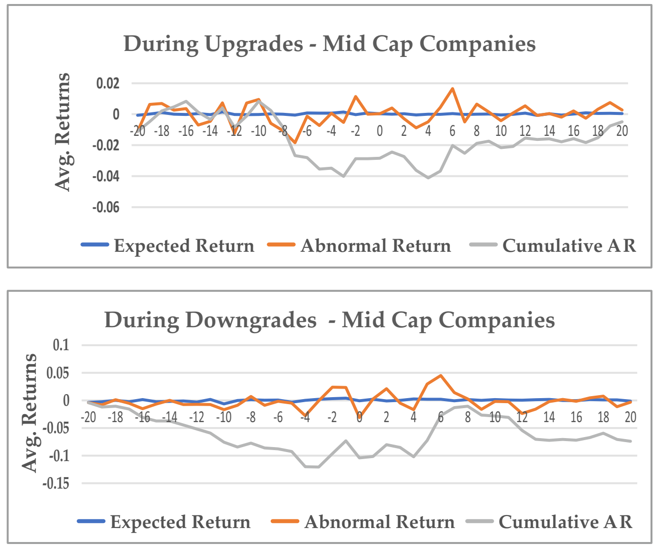
Chart 1: Average Expected Returns, Abnormal Returns and Cumulative AR during Upgrades and Downgrades for large Cap Companies



Source: Authors Compilation

Chart 2, Illustrates the typical returns for mid cap companies, covering expected returns, abnormal returns, and cumulative abnormal returns during upgrades and downgrades. The chart shows that cumulative abnormal returns during upgrades were positive before the event but turned negative afterward, indicating that the stocks did not perform well even after positive rating announcements. This suggests that investors did not attach significant importance to such announcements. On the other hand, cumulative abnormal returns for downgrades were negative both before and after the event, indicating underperformance compared to expectations or normal performance.

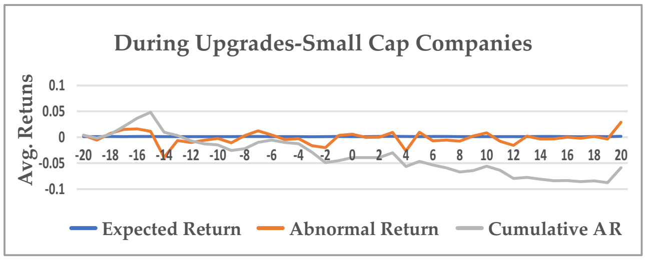
Chart 2: Average Expected Returns, Abnormal Returns and Cumulative AR during Upgrades and Downgrades for Mid Cap Companies

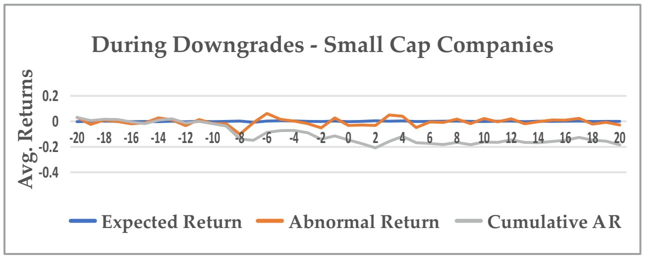


Source: Authors Compilation

Chart 3 presents the average returns, including expected returns, abnormal returns, and cumulative abnormal returns during upgrades and downgrades for small cap businesses. The chart reveals significant negative variations in returns following the event date for cumulative abnormal returns during upgrades. This indicates that investors did not attach much importance to positive rating announcements, as the stocks continued to underperform compared to expectations. However, there were some favorable returns in the days leading up to the event. In contrast, for downgrades, cumulative abnormal returns showed substantial negative fluctuations after the event date, with minimal positive returns in the pre-event period. This indicates that stock performance was severely affected by the negative rating announcement.

Chart 3: Average Expected Returns, Abnormal Returns and Cumulative AR during Upgrades for Small Cap Companies





Source: Authors Compilation

Table 5: P-values for average Abnormal returns using t-test

Market Cap	P- Values	
	During Upgrades	During Downgrades
Small Cap	0.366760968	0.324875769
Mid Cap	0.145667615	0.160025437
Large Cap	0.25384263	0.008447624*

***10 % significance level; ** 5 % significance level;**
***** 1 % significance level**

Objective 1: To study whether the share price value differs significantly before and after the credit rating announcement date.

Ho: There is no significant difference in the share price value after the credit rating announcement date.

H1: There is significant difference in the share price value after the credit rating announcement date.

Interpretation: T-tests on average abnormal returns were computed for upgrades and downgrades separately in order to evaluate the effect of changes in credit ratings on stock returns, and the significance of the t-test was tested by calculating their p-values.

For NSE listed small cap, mid cap, and large cap companies, during upgrades, the p-values were higher than 0.01, 0.05, and 0.1 at 1%, 5%, and 10% significance levels, respectively. This led to accepting the null hypothesis and rejecting the alternate hypothesis, indicating that stock prices had not significantly increased with positive ratings after the event day compared to the pre-event window. In other words, there was no significant difference in share prices of the stocks, suggesting that upgrade announcements had a low impact on stock returns for all company categories.

During downgrades, the study observed the p-values for NSE listed small cap, mid cap, and large cap companies. The results indicated that the stock prices did not significantly decrease after the negative rating announcement compared to the pre-event window, with p-values higher than 0.01, 0.05, and 0.1 at 1%, 5%, and 10% significance levels. This suggests that downgrades had a low impact on stock returns for small cap and mid cap companies. For large cap companies, the p-value was less than 0.1 at 10% significance level, indicating a significant decrease in share prices after the event date, thus showing a high impact on stock returns.

Table 6: P-values for average cumulative abnormal returns using t-test

Market Cap	P- Values -CAR	
	During Upgrades	During Downgrades
Small Cap	4.188577751	5.994166806
Mid Cap	0.042052279 **	0.448369811
Large Cap	0.286469932	0.059401638

***10 % significance level; ** 5 % significance level;**
***** 1 % significance level**

Objective 2: To determine whether investors react strongly to changes in a company's credit rating.

H0: Investors did not react positively/negatively to upgrades/ downgrades after the event day

H1: Investors reacted positively/negatively to upgrades/ downgrades after event day

Interpretation:

During upgrades for NSE listed companies:

For small cap companies, the p-value was higher than 0.01, 0.05, and 0.1 at significance levels of 1%, 5%, and 10%, respectively. This indicates that investors did not react positively to the positive rating announcement after the event day, and the stock performance remained consistent with its expected or normal performance.

For mid cap companies, the p-value was higher than 0.01 at the 1% significance level, suggesting that investors did not react positively to the positive rating announcement. However, the p-values were less than 0.05 and 0.1 at 5% and 10% significance levels, respectively, indicating that investors reacted positively to the positive announcement after the event date. This shows that mid cap companies performed better than expected, and investors attached greater relevance to the upgrade announcement.

For large cap companies, the p-value was higher than 0.01, 0.05, and 0.1 at significance levels of 1%, 5%, and 10%, respectively, indicating that investors did not react positively to the positive rating announcement after the event day. The stock performance remained in line with its expected or normal performance.

In the case of downgrades, for NSE listed small cap companies, the p-value was higher than 0.01, 0.05, and 0.1 at 1%, 5%, and 10% significance levels. This indicates that investors did not react negatively to the negative rating announcement after the event day. The stocks of small cap companies neither performed significantly well nor worse compared to their expected or normal performance.

Similarly, for NSE listed mid cap companies, the p-value was higher than 0.01, 0.05, and 0.1 at 1%, 5%, and 10% significance levels. This also suggests that investors did not react negatively to the negative rating announcement after the event day. The stocks of mid cap companies neither performed significantly well nor worse compared to their expected or normal performance.

For NSE listed large cap companies, the p-value was higher than 0.01 and 0.05 at 1% and 5% significance levels in the case of downgrades. This implies that investors did not react negatively to the negative rating announcement after the event day. The stocks of large cap companies neither performed significantly well nor worse compared to their expected or normal performance. However, the p-value was less than 0.1 at the 10% significance level, indicating that investors gave relevance to the negative announcement and made their investment decisions accordingly.

6. Conclusion

The study concludes that changes in credit ratings significantly impact the stock returns of NSE listed companies. Credit rating agencies play a crucial role in providing information about companies' creditworthiness, affecting investor sentiment towards them. Upgrades in credit ratings lead to increased stock prices, indicating improved financial health and stronger debt repayment ability. Conversely, downgrades result in decreased stock prices, signaling deteriorating financial health and potential debt repayment difficulties.

Among the chosen NSE-listed companies, 13 upgrades had a positive impact on stock returns, while 14 showed a decline. Specific companies experienced significantly negative results, while others showed no difference following the ratings release. Similar patterns were observed for downgrades, with some having substantial negative influences and others yielding favorable returns for investors. The t-test results indicate that upgrades had a low impact on stock returns for small cap, mid cap, and large cap companies. During downgrades, small cap and mid cap companies' share prices showed no significant difference, but large cap companies experienced a significant decrease, indicating a negative impact on stock returns.

Investors' reactions to credit rating changes varied, with mid cap companies' stocks performing well after positive announcements, while small and large cap companies did not react positively to upgrades. In the case of downgrades, investors of small and mid-cap companies showed no significant negative reaction, but investors of large cap companies reacted negatively to negative announcements. However, it is essential to consider that credit ratings are not the sole determinant of stock returns, as other factors like industry trends, macroeconomic conditions, company performance, and investor sentiment also play a vital role in stock prices. Therefore, a comprehensive approach, considering multiple factors, is crucial for making investment decisions.

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