European Economic Letters
ISSN 2323-5233
Vol 15, Issue 1 (2025)
http://eelet.org.uk

The Marketing of Credit Ratings: How Financial Literacy Impacts Investment Decisions

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ABSTRACT

The study broadly investigates the impact of changes in credit ratings of companies on the share prices of small-cap, midcap and large cap Indian companies, using event study methodology for a period of 30 days. This study specifically looks into whether investors react significantly to changes in the companies' ratings and examines whether there is a meaningful difference in the share price value before and after credit rating announcement dates. In order to look into the aforementioned issue, the study takes into consideration a sample of ten small-cap, ten mid-cap, and ten large-cap businesses listed on the National Stock Exchange for the year 2019–2023. According to the study's findings, ratings upgrades and downgrades have a big influence on stock performance. The effects of these announcements are more noticeable both close to the announcement date and further in the future. As a result, the study notes that rating releases significantly affect company share prices both immediately and over time. It has been noted that downgrade statements have a greater effect on a company's share price than upgrading ones.

Keywords: Credit rating, Share price, stock market, Small-cap, mid-cap and large-cap stocks etc.

INTRODUCTION

The requirement for the financing has grown as a result of the industrial sector's remarkable rise in India. Companies must list a variety of financial instruments on the stock market in order to raise funds. The interconnectedness of various economies has made it possible for Indian businesses to raise finance from anywhere in the world. In the current market, investors purchase both domestically and internationally issued instruments. The introduction of new financial products, such as asset-backed securities and financial derivatives, has made investing more complex for investors, making it more difficult for them to grasp and analyse technical terms in order to make investment decisions. Therefore, accurate information regarding the issuer's trustworthiness from a reputable and well-regulated source is vital. By evaluating borrowers' credit standing, credit rating organisations have emerged to help these investors make informed investment selections. Credit rating agencies offer essential data regarding the company's financial stability. When evaluating a client's creditworthiness, credit rating organisations take a wide range of commercial and financial criteria into account. Thus, the process of credit rating involves a thorough analysis of significant factors that could have a positive or negative impact on the company's financial condition in the future. In a semi-strong version of market efficiency, the stock prices reflect the market's extensive knowledge of information that is readily available to the public. Therefore, the goal of this study is to determine if stock prices take investors' reactions to credit rating changes into account. The purpose of the article is to determine whether rating upgrades and downgrades have an effect on stock returns. Additionally, it looks at investor behaviour in the event of credit rating upgrades and downgrades.

Credit ratings are evaluations made by credit rating agencies that assess the creditworthiness of a borrower, such as a government, company, or financial instrument. A credit rating is essentially an opinion issued by a credit rating agency like Moody's, Standard & Poor's, or Fitch about the ability

and willingness of an entity (government, company, etc.) to repay its debt obligations on time. Ratings agencies assign letter grades or scores to indicate the level of credit risk associated with a borrower or debt instrument. For example:
- AAA/Aaa is considered the highest/best credit rating, indicating extremely low risk of default.
- Ratings at the BBB/Baa level or above are considered "investment grade."
- Ratings below BBB/Baa are considered "speculative grade" or "junk," indicating higher default risk. The rating takes into account factors like the borrower's financial condition, management quality, economic conditions, industry risks, etc. Higher ratings signal lower credit risk and vice versa. Credit ratings serve as benchmarks that investors and lenders use to gauge risk and expected returns on debt instruments. Entities with higher ratings can usually borrow at lower interest rates than lower-rated borrowers. The ratings also impact regulatory requirements, institutional investment policies, pricing of debt securities, and overall investor sentiment towards a borrower in capital markets.

There are three main types of credit rating agencies:
1. National Credit Rating Agencies: These agencies operate within a specific country and provide credit ratings primarily for entities within that country. Examples include CRISIL and ICRA in India.
2. Global Credit Rating Agencies: These agencies operate internationally and provide credit ratings for entities around the world. The three largest global credit rating agencies are Standard & Poor's (S&P), Moody's Investors Service, and Fitch Ratings.
3. Regional Credit Rating Agencies: These agencies operate within a specific region, such as Asia or Europe, and provide credit ratings for entities within that region. Examples include CARE Ratings in India and ARC Ratings in Europe.
Each type of credit rating agency has its own methodology and criteria for assigning credit ratings, and they play a crucial role in the financial markets by providing investors with independent assessments of credit risk.

How Credit Ratings Work: Credit ratings are expressed as letter grades, such as AAA, AA, A, BBB, BB, B, CCC, CC, C, and D, with AAA being the highest and D being the lowest. Each letter grade may have a plus (+) or minus (-) sign to indicate the relative position within the category. For example, AA+ is better than AA, but worse than AAA. The higher the credit rating, the lower the risk of default, and the lower the interest rate that the borrower
has to pay. Conversely, the lower the credit rating, the higher the risk of default, and the higher the interest rate that the borrower has to pay. Credit ratings are not static, but can change over time as the borrower's financial situation and outlook change. Credit rating agencies monitor the borrower's performance and update their ratings accordingly. Credit ratings are also subject to revisions, upgrades, downgrades, and outlooks, which indicate the direction and likelihood of future changes in the ratings

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	Credit Rating	Credit Score
Issuer	Typically provided by independent credit rating agencies	Computed by credit bureaus or other businesses that specialize in credit scoring
Purpose	Credit ratings are used to evaluate the creditworthiness of institutions like businesses, governments, or other organizations.	Credit scores are used to evaluate an individual's creditworthiness
Range	Typically has an alphabetic range; for example, the highest credit rating is usually AAA, while the lowest is usually D	Credit scores have a numerical range from 300 to 850.

Table 1.

Summary of the Rating Scales

The table shows a summary of the rating scales used by the three big rating agencies, namely, Standard & Poor's, Moody's and Fitch

Moody's		S & P		Fitch		
Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	
AAA	P-1	AAA	A-1+	AAA	F1+	Prime
AA1		AA+		AA+		High grade
AA2		AA		AA		
AA3		AA-		AA-		
A1		A+	A-1	A+	F1	Upper medium grade
A2		A		A		
A3	P-2	A-	A-2	A-	F2	
BAA1		BBB+		BBB+		Lower Medium Grade
BAA2	P-3	BBB	A-3	BBB	F3	
BAA3		BBB-		BBB-		
BA1		BB+	B	BB+	B	Non-investment grade speculative
BA2		BB		BB		
BA3		BB-		BB-		
B1		B+		B+		Highly speculative
B2		B		B		
B3		B-		B-		
CAA1		CCC+	C	CCC	C	Substantial risks
CAA2		CCC				Extremely speculative
CAA3		CCC-				In Default with little prospect for recovery
CA		CC				
		C				
C		D	/	DDD	/	In Default
/				DD		
/				D		

IMPORTANCE OF CREDIT RATINGS

1. **It provides unbiased opinion to investors.** Opinion of good credit rating agency is unbiased because it has no vested interest in the rated company.

2. **Provide quality and dependable information.** Credit rating agencies employ highly qualified, trained and experienced staff to assess risks and they have access to vital and important information and therefore can provide accurate information about creditworthiness of the borrowing company.
3. **Provide information in easy-to-understand language.** Credit rating agencies gather information, analyses and interpret it and present their findings in easy-to-understand language that is in symbols like AAA, BB, C and not in technical language or in the form of lengthy reports.
4. **Provide information free of cost or at nominal cost.** Credit ratings of instruments are published in financial newspapers and advertisements of the rated companies. The public has not to pay for them. Even otherwise, anybody can get them from credit rating agency on payment of nominal fee. It is beyond the capacity of individual investors to gather such information at their own cost.
5. **Helps investors in taking investment decisions**. Credit ratings help investors in assessing risks and taking investment decision.
6. **Disciplines corporate borrowers.** When a borrower gets higher credit rating, it increases its goodwill and other companies also do not want to lag behind in ratings and inculcate financial discipline in their working and follow ethical practice to become eligible for good ratings, this tendency promotes healthy discipline among companies.

LITERATURE REVIEW

The impact of credit rating upgrades and downgrades on stock returns has been the subject of numerous research employing the event study approach. The significance of credit rating changes for investors in the bond and equities markets was examined by:
Li et al. **(2004)** studied how the Iranian stock market responded to rating adjustments in the market. It was determined to be the only meaningful information that the stock market receives from downgrades using an event analysis and cross-multivariate regression test.
The influence of 299 rating changes on the prices of the Italian stock market was examined by Linciano **(2004)**. It was determined that long-term investors who are more interested in investment growth than small investors can benefit from ratings as a source of information.
The impact of rating modifications on stock prices in Australian markets was examined by Adam et al. **(2007)**. According to the study's findings, stock prices increase following an upgrade and decrease following a downgrade, with a significant announcement effect for small businesses.
The effect of rating modifications on Chinese companies' stock returns was examined by Winnie and Kam **(2008)**. The findings indicated that the market responds effectively to such announcements and that the agency ratings have informative value.
Doron et al. **(2009)** investigated why a highly hazardous firm yields lower returns rather than higher returns by analysing the monthly returns of all the companies listed on the US stock exchanges. It was discovered that the stock of a company with a better credit rating yields a larger return than the stock of a company with a lower rating.
Jones and Marquis **(2013)** examined the correlation between rating changes and stock returns using data from 43 US banks. According to the study's findings, downgrades are strongly correlated with negative abnormal returns, while upgrades and downgrades are correlated with positive abnormal returns within the post-announcement period.
Sachdeva et al. **(2013)** examined the movement of stock returns in relation to rating changes by analysing 12 Indian banks. It was discovered that upgrades had a greater effect on stock returns than downgrades. Additionally, it was discovered that when banks are upgraded, those with larger market capitalization exhibit higher returns than those with smaller market capitalization.
Afik et al. (2014). According to the study, both markets only react to downgrades and do not react to announcements of favourable ratings. Emawtee and Robert **(2014)** studied the correlation between credit risk and stock performance in the Australian and Japanese capital markets. The analysis found a direct correlation between upgrades and stock return.

OBJECTIVES

The following are the main goals of the research on how credit ratings affect stock market investment decisions:

1. Examine the effects of upgrade in credit ratings on stock returns and prices.
2. Examine the effects of downgrades in credit ratings on stock returns and prices.

SCOPE OF THE STUDY

Give investors and portfolio managers useful information about corporate credit ratings to incorporate into their risk management and investment strategies.

Determine whether there are any possible overreactions or mispricing in the market to help you make wise investment decisions.

Participate in the continuing discussion about credit rating agencies' functions and effects on the financial system.

Educate policymakers and regulatory frameworks on the use and supervision of credit ratings in investment decisions.

Through tackling these goals, scholars and industry players can acquire a thorough comprehension of the ways in which credit ratings impact stock market dynamics, investor conduct, and capital allocation choices. This, in turn, can lead to the development of more effective and knowledgeable investment plans and regulatory structures

DATA AND METHODOLOGY

The event research approach is used to examine if a company's share prices vary beyond expectations before and after rating announcement, as well as the impact of credit rating upgrades and downgrades on stock returns.

The steps followed in event study technique are as follow:

1. **Defining the Event:** The day of the credit rating release was chosen to be the event day for the event research. The only ratings that were considered were those related to long-term debt ratings, both upgrades and downgrades. For the purposes of the study, only the ratings released by the top three Indian credit rating agencies—ICRA Ltd., CRISIL Ltd., and CARE Ltd.—were used for the purpose of the study.

2. Choosing the Companies to Perform the Study: The study's time frame is from 2010 to 2014. The Bloomberg data source was used to get the credit rating announcement data. Twelve of the twenty-four businesses that were chosen were included in the BSE mid-size index, while the other twelve were included in the BSE small cap index. The selection of the firms was based on two criteria:

(a) a higher market capitalization inside the particular index; and

(b) a minimum of one upgrade and one downgrade for each company.

3. Outlining the Event window, and:

(a) 30-day estimate window before the event window was selected in order to calculate the two parameters: the intercept and beta, which is a measure of market risk.

(b)There is a 30-day buffer before the event day for the event.

(c)There is a 30-day post-event time frame following the event day.

The estimation window was confined to a mere 60 days, as very little influence was seen beyond 20 days before and after the announcement dates.

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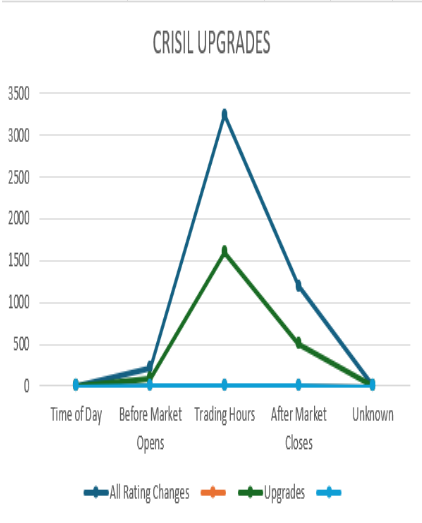
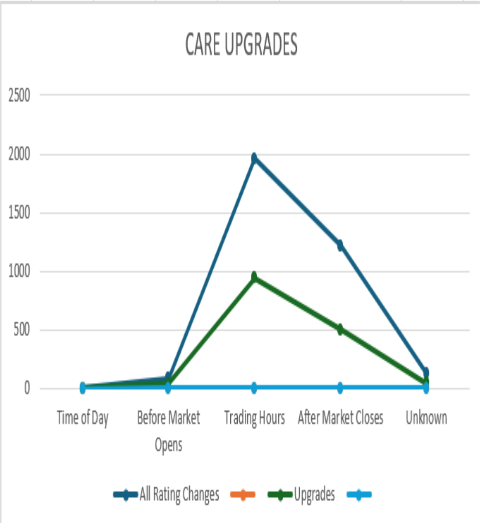
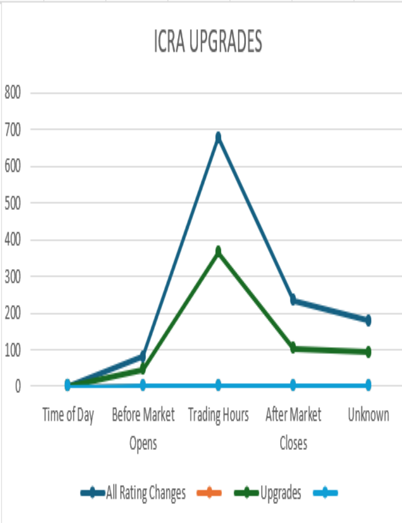
DATA ANALYSIS

Intraday distribution of credit rating changes							
		All Rating Changes		Upgrades		Downgrades	
	Time of Day	N	%	N	%	N	%
CRISIL	Before Market Opens	215	4.60%	93	4.56%	124	4.35%
	Trading Hours	3245	69.20%	1597	72.40%	1669	66.30%
	After Market Closes	1199	25.30%	510	23.40%	725	27.70%
	Unknown	0	0.00%	0	0.00%	0	0.00%
CARE	Before Market Opens	84	2.50%	37	2.40%	47	2.50%
	Trading Hours	1957	57.80%	942	62.00%	1015	54.30%
	After Market Closes	1218	36.00%	497	32.70%	721	38.60%
	Unknown	129	3.80%	44	2.90%	85	4.60%
ICRA	Before Market Opens	80	8.25%	45	7.30%	41	7.90%
	Trading Hours	677	68.20%	365	60.50%	312	54.80%
	After Market Closes	234	23.60%	103	17.10%	131	23.00%
	Unknown	179	15.30%	92	15.30%	87	15.30%

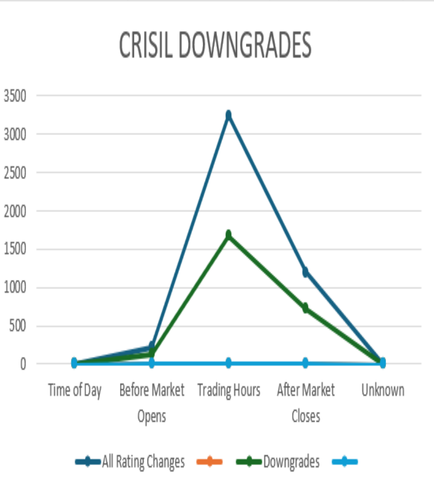
UPGRADES

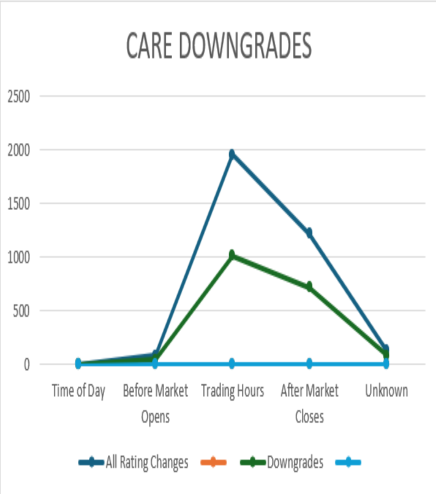


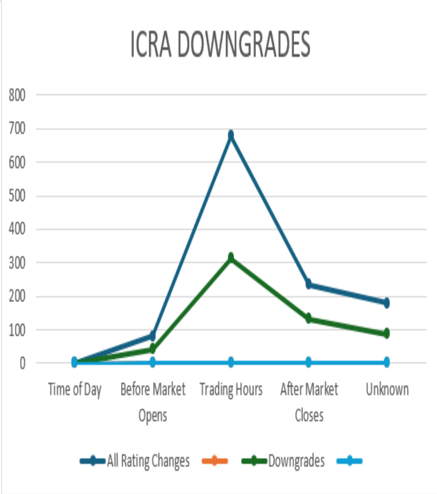




DOWNGRADES







CREDIT RATING AGENCIES IN INDIA

There are 6 credit rating agencies which are registered with SEBI. These are CRISIL, ICRA, CARE, Fitch India, Brickwork Ratings, and SMERA.

1. Credit Rating and Information Services of India Limited (CRISIL)

- It is India's first credit rating agency which was incorporated and promoted by the erstwhile ICICI Ltd, along with UTI and other financial institutions in 1987 and in the year 1988 it commenced its operations.
- It has its head office in Mumbai.
- It is India's foremost provider of ratings, data and research, analytics and solutions, with a strong track record of growth and innovation.
- CRISIL's businesses operate from 8 countries including USA, Argentina, Poland, UK, India, China, Hong Kong and Singapore.
- CRISIL's majority shareholder is Standard & Poor's.
- It also works with governments and policy-makers in India and other emerging markets in the infrastructure domain.

2. Investment Information and Credit rating agency (ICRA)

- The second credit rating agency incorporated in India was ICRA in 1991.
- It was set up by leading financial/investment institutions, commercial banks and financial services companies as an independent and professional investment Information and Credit Rating Agency.
- It is a public limited company.
- It has its head office in New Delhi.
- ICRA's majority shareholder is Moody's.

3. Credit Analysis & Research Ltd. (CARE)

- The next credit rating agency to be set up was CARE in 1993.
- It is the second-largest credit rating agency in India.
- It has its head office in Mumbai.
- CARE Ratings is one of the 5 partners of an international rating agency called ARC Ratings.

BENEFITS OF CREDIT RATING

Credit rating offers many advantages which can be classified into

A. Benefits to investors.
B. Benefits to the rated company.
C. Benefits to intermediaries.
D. Benefits to the business world.

BENEFITS TO INVESTORS

1. **Assessment of risk.** The investor through credit rating can assess risk involved in an investment. A small individual investor does not have the skills, time and resources to undertake detailed risk evaluation himself. Credit rating agencies who have expert knowledge, skills and manpower to study these matters can do this job for him. Moreover, the ratings which are expressed in symbols like AAA, BB etc. can be understood easily by investors.
2. **Information at low cost.** Credit ratings are published in financial newspapers and are available from rating agencies at nominal fees. This way the investors get credit information about borrowers at no or little cost.
3. **Advantage of continuous monitoring.** Credit rating agencies do not normally undertake rating of securities only once. They continuously monitor them and upgrade and downgrade the ratings depending upon changed circumstances.
4. **Provides the investors a choice of Investment.** Credit ratings agencies helps the investors to gather information about creditworthiness of different companies. So, investors have a choice to invest in one company or the other.
5. **Ratings by credit rating agencies is dependable.** A rating agency has no vested interest in a security to be rated and has no business links with the management of the issuer company. Hence ratings by them are unbiased and credible.

BENEFITS TO THE RATED COMPANY

1. **Ease in borrowings.** If a company gets high credit rating for its securities, it can raise funds with more ease in the capital market.
2. **Borrowing at cheaper rates.** A favourably rated company enjoys the confidence of investors and therefore, could borrow at lower rate of interest.
3. **Facilitates growth.** Encouraged by favourable rating, promoters are motivated to go in for plans of expansion, diversification and growth. Moreover, highly rated companies find it easy to raise funds from public through issue of ownership or credit securities in future. They find it easy to borrow from banks.
4. **Recognition of lesser-known companies.** Favourable credit rating of instruments of lesser known or unknown companies provides them credibility and recognition in the eyes of the investing public.
5. **Adds to the goodwill of the rated company.** If a company is rated high by rating agencies it will automatically increase its goodwill in the market.
6. **Imposes financial discipline on borrowers.** Borrowing companies know that they will get high credit rating only when they manage their finances in a disciplined manner i.e., they maintain good operating efficiency, appropriate liquidity, good quality assets etc. This develops a sense of financial discipline among companies who want to borrow.
7. **Greater information disclosure.** To get credit rating from an accredited agency, companies have to disclose a lot of information about their operations to them. It encourages greater information disclosures, better accounting standards and improved financial information which in turn help in the protection of the investors.

BENEFITS TO THE INTERMEDIARIES

1. Merchant bankers' and brokers' job made easy. In the absence of credit rating, merchant bankers or brokers have to convince the investors about financial position of the borrowing company. If a borrowing company's credit rating is done by a reputed credit agency, the task of merchant bankers and brokers becomes much easy.

BENEFITS TO THE BUSINESS WORLD

1. Increase in investor population. If investors get good guidance about investing the money in debt instruments through credit ratings, more and more people are encouraged to invest their savings in corporate debts.

2. Guidance to foreign investors. Foreign collaborators or foreign financial institutions will invest in those companies only whose credit rating is high. Credit rating will enable them to instantly identify the position of the company.

IMPACT OF THE RATING CHANGES ON THE RETURNS OF SMALL-CAP MID-CAP AND LARGE CAP COMPANIES

The impact of rating changes by credit rating agencies on stock returns can vary depending on the market capitalization of the companies. Here's a general overview of how rating changes may affect the returns of small-cap, mid-cap, and large-cap companies:

1. Small-cap companies:

Small-cap companies are typically more sensitive to rating changes because they tend to have higher levels of debt and are more vulnerable to changes in credit conditions. A rating downgrade can make it more difficult and expensive for these companies to access capital, which can negatively impact their growth prospects and stock returns. Additionally, small-cap stocks often have lower liquidity, meaning that rating changes can have a more pronounced impact on their stock prices due to the relatively lower trading volume.

2. Mid-cap companies:

Mid-cap companies generally fall between small-caps and large-caps in terms of their sensitivity to rating changes. While they may have better access to capital markets than small-caps, they can still be affected by rating changes, especially if the downgrade or upgrade is significant. Mid-cap companies often have a more diversified investor base than small-caps, which can help mitigate the impact of rating changes to some extent.

3. Large-cap companies:

Large-cap companies are typically the least sensitive to rating changes because they often have substantial cash reserves, established credit lines, and easier access to capital markets. These companies are generally seen as more stable and less risky, which can make them less susceptible to rating changes.

However, significant rating downgrades or upgrades can still impact the stock prices of large-cap companies, particularly if the change is unexpected or raises concerns about the company's long-term prospects. It is important to note that the impact of rating changes can also depend on other factors, such as the overall market conditions, the company's specific industry, and the reasons behind the rating change. Additionally, the reaction of investors and the market can sometimes be disproportionate to the actual rating change, leading to larger or smaller stock price movements than expected

LIMITATIONS

There are several limitations to consider when discussing how credit ratings influence market decisions, particularly in the stock market:

Credit ratings are subjective assessments made by analysts at rating agencies. There is a potential for bias or errors in judgement, which can affect the accuracy and reliability of the ratings.

Credit ratings are often considered lagging indicators, reflecting past financial performance and not necessarily future prospects. As a result, they may not always provide timely or forward-looking information to investors.

Investors and market participants may exhibit herd behaviour, blindly following credit rating changes without conducting their own analysis. This can lead to exaggerated market reactions and inefficiencies.

Not all companies or securities are rated by credit rating agencies. This limited coverage can leave investors with less information for making decisions about unrated securities.

Credit rating agencies are sometimes accused of having conflicts of interest, as they are paid by the issuers of the securities they rate. This could potentially influence their ratings and undermine their independence.

Market reactions to credit rating changes can be influenced by a variety of factors, including market sentiment, macroeconomic conditions, and industry trends, which may not always align with the fundamentals driving the credit rating change.

Regulatory requirements and investor mandates may drive demand for securities with specific credit ratings, leading to market distortions and inefficiencies.

CONCLUSION

The influence of credit ratings on market investment decisions is significant and multifaceted. Credit ratings, provided by agencies like Moody's, Standard & Poor's, and Fitch, serve as key indicators of the creditworthiness of companies and governments. Investors often rely on these ratings to assess the risk associated with investing in a particular entity's debt instruments or securities.

One of the primary ways credit ratings influence investment decisions is by affecting the cost of borrowing. Higher credit ratings typically lead to lower borrowing costs, as investors perceive lower risk and are therefore willing to accept lower interest rates. Conversely, lower credit ratings result in higher borrowing costs, which can impact an entity's ability to raise capital and invest in growth opportunities. Credit ratings also influence investment decisions by shaping investor perceptions of risk and return. Investors often use credit ratings as a proxy for risk, with higher-rated securities seen as safer investments and lower-rated securities as riskier. This can impact the prices of securities in the market, as investors demand higher returns for taking on higher levels of risk.

Furthermore, credit ratings can influence market dynamics by affecting investor sentiment and market liquidity. A downgrade in credit rating can lead to a sell-off of securities, as investors adjust their portfolios to reflect the increased risk. This can create market volatility and impact liquidity, making it more difficult for entities to raise capital.

In conclusion, credit ratings play a crucial role in market investment decisions by influencing borrowing costs, shaping investor perceptions of risk and return, and impacting market dynamics.

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