CONSISTENCY IN THE CREDIT RATING METHODOLOGY – A STUDY OF INDIAN CREDIT RATING AGENCIES IN HYDERABAD- A CAPITAL MARKET ANALYSIS

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Abstract

Purpose: The effective allocation of money in the financial sector is greatly aided by credit rating agencies (CRAs). A number of scholars, however, definitely stand out to the way that CRAs contain flaws that contributed to disastrous outcomes like the financial crisis of 2008. One of the main causes of the problems affecting the credit rating business is the rivalry among credit reporting agencies (CRAs), which is the main topic of this article. This article examines how competition affects a company's credit rating using quantitative and regression methods. Design/Methodology/Approach: In this study, we use dual ratings to see whether rating inflation and shopping are effects of industry competitiveness. Findings from the study indicate that CRAs artificially boost a company's credit rating in order to stay competitive. Competition among credit reporting agencies (CRAs) for new customers fuels rating shopping in the credit rating sector as well. In this analysis, we look at the scores given by CRISIL, CARE, ICRA, and INDIA RATINGS India, the four main credit rating agencies recognised by SEBI. Originality/Value: We use descriptive statistics, analysis of variance, and various appropriate ratios with companies to determine their credibility. Data from different sources shows that CRISIL primarily considers business risk, financial risk, management risk, and project risk when evaluating issuers and instruments. We also found that Crisil had lower default rates and the BBB rating grade had the highest stability. Findings: Regulatory agencies and financial institutions should pay close attention to the consequences of the paper's conclusions. Previous attempts by authorities to fix the credit rating industry's problems have included opening up the market to additional competitors. In 2006, the Credit Rating Agency Reform Act was established by President Bush and the United States Congress.

Keywords: Credit Rating, Performance Evaluation, Rating Stability.

JEL Codes: G30, G31, G32, G33, G34.

1. INTRODUCTION

The four major credit reporting agencies in India are CRIF High Mark, Equifax, Equifax India, and TransUnion CIBIL. A credit score is a three-digit figure that goes from 300 to 900. Lenders often look favourably upon scores that are closer to 900. A company's or individual's credit rating is an indication of their capacity to repay a loan. The major players in India's credit rating market are SMERA, CRISIL, ICRA, FITCH, CARE, and ONICRA. Credit rating firms' methodology were criticised a few years ago by Economic Survey. The article has provided a concise overview of popular credit rating. Any person, business, government agency, or state or provincial body looking to take out a loan might be designated as the assignee. Rating an instrument's creditworthiness is not as simple as plugging numbers into a calculator; it requires qualitative and quantitative evaluations. In the latter part of the 1980s, credit rating companies first emerged in India.

The Protections and Trade Leading body of India Act, 1992, as changed by the SEBI (Credit Rating Agencies)Guidelines, 1999, administers CRAs in India.

Every facet of a company's operations is very sensitive to the state of the economy. In recent years, economic development has been pivotal in hastening the expansion of both the economy and the financial markets. A new age has begun in the Indian economy and financial system since the 1980s (Siddiah, 2011).

A highly competitive and demanding environment emerged as a result of the new era's many potential and hazards linked to issuer instruments. With the promises of the closed economy gone, issuers were understandably anxious about maintaining a profit in this cutthroat market.

The industry's rising demands were disproportionately met by emerging countries like India's, who had a hard time raising the necessary capital. Another notable change is the dramatic growth in the number of businesses that have come to depend on the stock market.

An entity's or an instrument's creditworthiness and security are evaluated using a numerical rating, which is represented by an alpha symbol. By factoring in historical performance, ongoing initiatives, and anticipated outcomes, it paints a complete picture of the issuer's or financial instrument's risk.

In their evaluations of borrowers' creditworthiness, credit rating organisations employ quantitative and qualitative data. It is challenging to measure and analyse qualitative aspects like corporate management, company age and size, business profile, goodwill, brand strength, core competencies, and similar things.

With this background, the research use credit rating agencies' quantitative aspects (ratios) as the primary criteria for evaluating the inward and outer consistency of bond rating methodologies.

SEBI's Detection for CRAs:

- Credit rating firms in India are now required to provide more information when evaluating businesses and their financial instruments, according to new regulations imposed by the country's Securities and Exchange Board.
- Rating agencies are now required by regulators to reveal a company's liquidity condition.
- The agencies would have to be transparent about where the money is coming from if the rating is based on that assumption.
- Rating agencies are required to provide their rating history as well as the methodology used to transfer ratings across different categories.
- In addition to looking for asset liability mismatches, credit rating agencies will need to assess the decline in liquidity.
- The six credit rating organizations that are overseen by SEBI are CRISIL, ICRA, CARE, SMERA, Fitch India, and Brickwork Ratings.

CRISIL: (Credit Rating Information Services of India Limited)

- The majority of India's credit ratings come from this full-service organisation, which controls over 60% of the market.
- The company is advertising its services to the SME, manufacturing, financial, and service industries.
- > CRISIL is headquartered in Mumbai.
- The biggest rating agency in the world, Standard & Poor's, owned the majority of CRISIL.

CARE: Credit Analysis and Research Limited Ratings

- > It was in 1993 when Credit Analysis and Research Limited Ratings was created.
- A number of lending and financial organisations, including Canara Bank, UTI, and IDBI, are contributing to it.
- As far as credit rating agencies in India are concerned, this one is in second place.
- Ratings agency Credit Analysis and Research Limited has its headquarters in Mumbai.

SMERA: Small and Medium Enterprises Rating Agency

- The only purpose of this rating organisation is to provide ratings to small and medium-sized businesses.
- It is a partnership between SIDBI, D&B (Dun & Bradstreet Information Services India Private Limited), and a number of India's leading banks.
- > Mumbai serves as the headquarters of SMERA.
- > The product has achieved 7,000 ratings.

ONICRA Credit Rating Agency

- > Mr. Sonu Mirchandani incorporated it in the year 1993.
- For individuals and small and medium-sized businesses, it searches data and sets up potential rating solutions.
- Gurgaon is home to the ONICRA Credit Rating Agency headquarters.
- Accounting, Finance, Back-end Management, Analytics, and Customer Relations are just a few of the many areas in which it has extensive expertise. To far, it has evaluated over 2,500 SMEs.

Fitch (India Ratings & Research)

- To provide the credit markets throughout the globe with objective and forwardlooking credit views, research, and data, Fitch Ratings operates on a worldwide scale.
- > Mumbai is the location of Fitch Ratings' headquarters.

ICRA: Investment Information and Credit Rating Agency

- Renowned Indian financial institutions and commercial banks put together a dedicated group of experts in the micro, small, and medium business (MSME) sector to develop it in 1991.
- The majority of shares are held by Moody's, an international credit rating organisation.

2. REVIEW OF LITERATURE

- Anuradha N. (2022): This study shows the modest impact of commitment, that is, the impact of spouses on return on investment. Investors should consult financial advisors to formulate framework investment strategies. Investment decisions are affected by psychological prejudice, prevalent influence, and investment commitment levels.
- Fayaz Ahmad Dar (2022): This study examined "the role of demographic factors in the relationship between emotional influence and investment decisions" Raw data was collected using a questionnaire composed of 27 questions in various towns Tamil Nadu. The study found that investors who cannot control their emotions will make the wrong investment decisions. Investors must devise strategies to eliminate the impact of emotions and obtain better returns. Investors should always eliminate future uncertainties through fundamental analysis and consulting investment experts and strive to create long-term wealth creation opportunities.
- Himashu (2021): This paper explained that pointed out that the existence of credit rating agencies (CRA) is mainly to assess the creditworthiness of loan companies that seek funds directly from the public without having to visit banks. Report on the latest global financial crisis.
- Rinku Sanjeev (2021): This paper explain about primary and secondary data are used to collect sufficient research information. The conclusion is that credit rating helps attract more investment, translating into higher production of goods and services. Therefore, the country's GDP shows positive growth, which indicates the country's development. The credit rating specified in each sector will attract more investment, translating into the country's overall action.
- Rawat's (2020): This study of "Investor Credit Rating Service" analyzes in Ahmadabad whether investors use FICO scores to go with venture choices. It is a pleasure to analyze the sources of information used by investors for investment rating tools. The field research method survives selected for research. Used survey methods to obtain necessary information through questionnaire surveys. It pointed out that most investors do not use reputation assessments to make investment decisions. They mainly prefer information collected from market sources rather than rating agencies.
- Michelle H.W. (2020): This study discussed About credit crisis, which negatively impacts financial markets and the global economy. Although the problem (correctly) can exist attributed to all relevant parties (transaction structure, banks, investors, a large part of the credit crisis survive attributed to the credit rating agency (CRA). Play an essential role in the world, Stock exchanges, and banking markets.

- Sudhakar, A. (2019): This study explained in his research that rating is an essential factor for individual investors due to individual investors' security and confidence in bond yields. The rating agency grants a rating indicating the credibility of the issuing company. In this study, CRISIL, ICRA, CARE, Fitch Ratings, Brickwork Ratings India Private Limited Financial Indicators subsist taken, Such as earnings, earnings before taxes, earnings per share, equity, and dividends, market value, several employees and earnings per employee. The results show that there are significant differences between dividend payment rates.
- Younes Taheri (2019): The impact of FICO assessments on the evaluating of starting public offerings is the subject of this inquiry. The author uses the financial statistics of 52 listed companies released on January 20, 2003, by the Tehran Stock Exchange. The author uses cross-section and panel regression to analyze the volatility of stock prices action. In order to determine whether the firm was solvent, the research looked at a number of metrics, including net profit margin, ROIC, market esteem, income per share proportion, book worth of resources, obligation proportion, obligation/capital, and cost of merchandise sold.
- Yalmaz Bayar (2018): Regarding the dependability and accuracy of credit ratings, this investigated the part played by FICO assessment organizations during the 2008 monetary emergency. The blasting of speculative air pockets set off the subprime contract emergency in the US. The real estate market bubble that started in the US in 1997 and went on until 2006 was a major contributor to the 2008 financial crisis. Credit ratings have been impacted by the U.S. subprime mortgage crisis.
- Yimaz (2018): This research paper explained that credit rating activities appeared in the United States in 1900 and have become part of the world's financial system since the globalization of financial markets in the mid-1970s. Institutional laws and regulations Credit rating agencies may increase credit rating agencies' transparency and accountability and reduce excessive dependence on credit rating agencies.
- SuzanaBaresa's (2018): This study on "The Role, Benefits, and Criticism of Credit Rating Agencies" examines the function and value of these organisations in an unbiased and critical manner. Credit rating agencies' primary role is to measure credit lines, governments' creditworthiness, and commercial entities.

3. RESEARCH GAP

Many researchers are done with their studies in this area but not includes rating with companies According to the conditions on which they invested; investors use the credit rating to indicate the likelihood of receiving the money invested by them.

Opinions expressed by credit rating agencies are based on all information currently known to them, including data that is publicly accessible, data that is not publicly available, and data that is given by the issuer and other organisations. Credit rating is useful to protect investors' interests by orienting them in the right direction. Much research couldn't be found towards Pre and Post ratings and their impact of financial performance of the companies. Therefore, this survey attempts to determine the activities carried out by credit rating agencies in various parameters and gets to know investors' opinions towards credit rating agencies.

4. OBJECTIVES OF THE STUDY

- In order to investigate how credit rating agencies' ratings affect investors' choices.
- To study the impact of pre and post ratings by credit rating agencies on companies' financial performance.

5. HYPOTHESES OF THE STUDY

- **H0:** There is No impact of ratings by credit rating agencies on the investor's decision making.
- **H1:** There is a impact of ratings by credit rating agencies on the investor's decision making.
- **H0:** There is No impact of pre and post ratings by credit rating agencies on companies' financial performance.
- **H0:** There is a impact of pre and post ratings by credit rating agencies on companies' financial performance.

6. RESEARCH METHODOLOGY

Data Collection:

Collected data from Various sources from select districts like Hyderabad, Secundarabad, Ranga Reddy and Medchal districts of Telangana state. Each district sample size is 30 and total is 120.

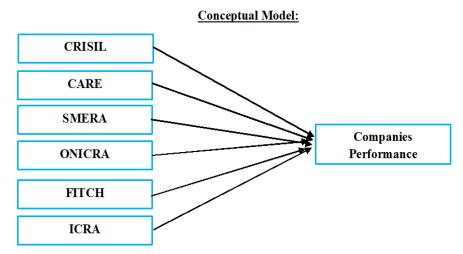
Study Period:

The period of the study is between the financial year 2022-23. And the data collected from various sources like website and Few journals.

Stalactitical Tools to be Used:

- Descriptive Statastics
- ANOVA Model
- Credit Rating Rations.

7. RESULT AND DISCUSSION



| Credit Agencies | General Rating Level | Numerical Value |
|-----------------|----------------------|-----------------|
| | AAA | 1 |
| | AA+ | 2 |
| | AA | 3 |
| | AA- | 4 |
| CRISIL | A+ | 5 |
| | А | 6 |
| CARE | A- | 7 |
| | BBB+ | 8 |
| SMERA | BBB | 9 |
| | BBB- | 10 |
| ONICRA | BB+ | 11 |
| | BB | 12 |
| FITCH | BB- | 13 |
| | B+ | 14 |
| ICRA | В | 15 |
| | B- | 16 |
| | С | 17 |
| | D | 18 |

Table No: 1 Rating Scale conversion to Numerical Scale

| Table No: 2 Comparison o | f AAA-Rated Businesses |
|--------------------------|------------------------|
|--------------------------|------------------------|

| Sl | Financial | CR | ISIL | CA | RE | SMI | ERA | ONI | CRA | FIT | СН | IC | RA |
|----|-----------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| No | Variable | F | Sig | F | Sig | F | Sig | F | Sig | F | Sig | F | Sig |
| | | Values | | Values | | Values | | Values | | Values | | Values | |
| 1 | CR | 0.1241 | 0.8939 | 0.5081 | 0.6254 | 1.3688 | 0.3238 | 0.7105 | 0.559 | 0.7105 | 0.559 | 0.7064 | 0.5081 |
| 2 | QR | 0.7783 | 0.4629 | 0.6311 | 0.564 | 2.2831 | 0.1831 | 0.712 | 0.5584 | 0.712 | 0.5584 | 1.4058 | 0.6311 |
| 3 | DER | 1.1505 | 0.4063 | 0.5475 | 0.6048 | 1.3025 | 0.339 | 0.2941 | 0.7645 | 0.2941 | 0.7645 | 0.336 | 0.5475 |
| 4 | ICR | 29.937 | 0.0009* | 1.4436 | 0.3077 | 1.958 | 0.2215 | 0.6565 | 0.5801 | 0.6565 | 0.5801 | 0.6565 | 1.4436 |
| 5 | OPM | 0.6619 | 0.5499 | 0.3082 | 0.7458 | 0.6732 | 0.5448 | 0.916 | 0.4892 | 0.916 | 0.4892 | 0.916 | 0.7105 |
| б | RCE | 1.2090 | 0.3621 | 2.7751 | 0.1402 | 1.2195 | 0.3594 | 0.7064 | 0.5606 | 0.7064 | 0.5606 | 0.7064 | 0.712 |
| 7 | RNW | 0.9322 | 0.444 | 2.2815 | 0.1833 | 1.6573 | 0.2673 | 1.4058 | 0.3709 | 1.4058 | 0.3709 | 1.4058 | 0.2941 |
| 8 | EBIT | 0.7404 | 0.5158 | 0.2389 | 0.7946 | 0.9859 | 0.4264 | 0.336 | 0.7385 | 0.336 | 0.7385 | 0.336 | 0.6565 |

Note: *Significant at 5% level

Table No: 3 Comparison of Companies with an AA Rating

| Sl | Financial | CRI | SIL | CAL | RE | SME | RA | ONIC | CRA | FIT | СН | ICF | RA |
|----|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| No | Variable | F | Sig | F | Sig |
| | | Values | | Values | | Values | | Values | | Values | | Values | |
| 1 | CR | 0.2898 | 0.444 | 0.8811 | 0.1833 | 0.2898 | 0.2673 | 0.8811 | 0.3709 | 1.4058 | 0.8811 | 1.4058 | 1.657 |
| 2 | QR | 0.1377 | 0.5158 | 0.9663 | 0.7946 | 0.1377 | 0.4264 | 0.9663 | 0.7385 | 0.336 | 0.9663 | 0.336 | 0.985 |
| 3 | DER | 0.2941 | 0.7645 | 2.2815 | 0.1833 | 1.3025 | 0.339 | 0.2941 | 0.7645 | 0.2941 | 0.7645 | 0.2941 | 0.604 |
| 4 | ICR | 0.6565 | 0.5801 | 0.2389 | 0.7946 | 1.958 | 0.2215 | 0.6565 | 0.5801 | 0.6565 | 0.5801 | 0.6565 | 0.307 |
| 5 | OPM | 0.916 | 0.6732 | 0.5448 | 0.7458 | 0.6732 | 0.5448 | 0.916 | 0.4892 | 0.916 | 0.4892 | 0.916 | 0.489 |
| б | RCE | 0.7064 | 1.2195 | 0.3594 | 0.1402 | 1.2195 | 0.3594 | 0.7064 | 0.5606 | 0.7064 | 0.5448 | 0.7064 | 0.560 |
| 7 | RNW | 1.4058 | 1.6573 | 0.2673 | 0.1833 | 1.6573 | 0.2673 | 1.4058 | 0.3709 | 1.4058 | 0.3594 | 1.4058 | 0.370 |
| 8 | EBIT | 0.336 | 0.9859 | 0.4264 | 0.7946 | 0.985 | 0.4264 | 0.336 | 0.7385 | 0.336 | 0.2673 | 0.336 | 0.738 |

Note: *Significant at 5% level

| Sl | Financial | CRI | SIL | CA | RE | SME | RA | ONI | CRA | FIT | СН | ICF | RA |
|----|-----------|----------|---------|--------|--------|----------|--------|--------|--------|--------|--------|--------|-------|
| No | Variable | F Values | Sig | F | Sig | F Values | Sig | F | Sig | F | Sig | F | Sig |
| | | | | Values | | | | Values | | Values | | Values | |
| 1 | CR | 0.5932 | 0.8939 | 0.6715 | 0.6254 | 0.5932 | 0.3238 | 0.6715 | 0.559 | 0.7105 | 0.6715 | 0.7105 | 1.368 |
| 2 | QR | 0.102 | 0.4629 | 0.9805 | 0.564 | 0.102 | 0.1831 | 0.9805 | 0.5584 | 0.712 | 0.9805 | 0.712 | 2.283 |
| 3 | DER | 0.5749 | 0.4063 | 0.6840 | 0.6048 | 0.5749 | 0.339 | 0.6840 | 0.7645 | 0.2941 | 0.6840 | 0.2941 | 1.302 |
| 4 | ICR | 0.9437 | 0.0008* | 0.4592 | 0.3077 | 0.943733 | 0.2215 | 0.4592 | 0.5801 | 0.6565 | 0.4592 | 0.6565 | 0.580 |
| 5 | OPM | 0.1067 | 0.5499 | 0.9787 | 0.7458 | 0.1067 | 0.5448 | 0.9787 | 0.4892 | 0.916 | 0.9787 | 0.916 | 0.489 |
| б | RCE | 0.8971 | 0.3621 | 0.4840 | 0.1402 | 0.8972 | 0.3594 | 0.4840 | 0.5606 | 0.7064 | 0.4840 | 0.7064 | 1.219 |
| 7 | RNW | 0.2898 | 0.444 | 0.8811 | 0.1833 | 0.2898 | 0.2673 | 0.8811 | 0.3709 | 1.4058 | 0.8811 | 1.4058 | 1.657 |
| 8 | EBIT | 0.137751 | 0.5158 | 0.9666 | 0.7946 | 0.1371 | 0.4264 | 0.9663 | 0.7385 | 0.336 | 0.9663 | 0.336 | 0.985 |

Table No: 4 A Comparison of Highly Rated Companies

Table No: 5 A Comparison of Businesses with BBB Ratings

| Sl | Financial | CRI | SIL | CA | RE | SME | RA | ONI | CRA | FIT | CH | IC | RA |
|----|-----------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--------|
| No | Variable | F | Sig | F | Sig | F Values | Sig | F | Sig | F | Sig | F | Sig |
| | | Values | | Values | | | | Values | | Values | | Values | |
| 1 | CR | 0.2898 | 0.444 | 0.8811 | 0.1833 | 0.2898 | 0.2673 | 0.8811 | 0.3709 | 1.4058 | 0.8811 | 1.4058 | 1.6573 |
| 2 | QR | 0.1377 | 0.5158 | 0.9663 | 0.7946 | 0.1377 | 0.4264 | 0.9663 | 0.7385 | 0.336 | 0.9663 | 0.336 | 0.9859 |
| 3 | DER | 1.0506 | 0.4063 | 0.5475 | 0.6048 | 1.3025 | 0.339 | 0.2941 | 0.7645 | 0.2941 | 0.7645 | 0.2941 | 0.7645 |
| 4 | ICR | 0.2898 | 0.444 | 0.8811 | 0.1833 | 0.2898 | 0.2673 | 0.8811 | 0.3709 | 1.4058 | 0.8811 | 1.4058 | 1.6573 |
| 5 | OPM | 0.1377 | 0.5158 | 0.9663 | 0.7946 | 0.137751 | 0.4264 | 0.9663 | 0.7385 | 0.336 | 0.9663 | 0.336 | 0.9859 |
| б | RCE | 1.209 | 0.3621 | 2.7751 | 0.1402 | 1.2195 | 0.3594 | 0.7064 | 0.5606 | 0.7064 | 0.5606 | 0.7064 | 0.5606 |
| 7 | RNW | 0.9324 | 0.444 | 2.2815 | 0.1833 | 1.6573 | 0.2673 | 1.4058 | 0.3709 | 1.4058 | 0.3709 | 1.4058 | 0.3709 |
| 8 | EBIT | 0.7407 | 0.5158 | 0.2389 | 0.7946 | 0.9859 | 0.4264 | 0.336 | 0.7385 | 0.336 | 0.7385 | 0.336 | 0.7385 |

Note: *Significant at 5% level

Interpretation:

Eight of the nine financial ratios used to rate companies by CRISIL were quite close to one another, with the exception of the interest coverage ratio, where the F value is statistically significant; this suggests that even companies with AAA ratings from CRISIL might have greatly different interest coverage ratios. The F values of organisations who received an AA rating from Rating's are shown in Table 4. The chart clearly shows that the firms graded by CRISIL had comparable values for all nine financial measures; this is because their F values are not noteworthy. This gets us to the point that CRISIL always gives the same AA rating.

Table No: 6 Examining the Average CR for Various Rating Categories

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|-----------------|---------------|-------------|---------|----------|----------|
| AAA | 1.36 | 1.7022 | 1.48 | 2.736 | 1.36 | 1.7022 |
| AA | 1.1878 | 3.2289 | 1.1722 | 1.615 | 1.1878 | 3.2289 |
| A | 0.93 | 1.2367 | 0.94 | 1.453 | 0.93 | 1.2367 |
| BBB | 0.9289 | 1.4467 | 1.1644 | 1.19 | 0.9289 | 1.4467 |
| F Value | 2.145275 | 0.823072 | 1.520523 | 1.10417 | 2.145275 | 0.823072 |
| Combination | Tukey HSD - Sig | gnificance of | Mean Differ | rence | | |
| AAA Vs AA | 1.1959 | 1.5325 | 1.7112 | 1.7295 | 1.1959 | 1.5325 |
| AAA Vs A | 2.9859 | 0.4673 | 3.0023 | 1.9787 | 2.9859 | 0.4673 |
| AAA Vs BBB | 2.9936 | 0.2565 | 1.7544 | 2.3848 | 2.9936 | 0.2565 |
| AA Vs A | 1.79 | 1.9998 | 1.2911 | 0.2493 | 1.79 | 1.9998 |
| AA Vs BBB | 1.7977 | 1.789 | 0.0432 | 0.6553 | 1.7977 | 1.789 |
| A Vs BBB | 0.0077 | 0.2108 | 1.2479 | 0.406 | 0.0077 | 0.2108 |

Table No: 7 Average QR values for several grading categories

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|--------|---------|-----------------|----------------|------------|--------|
| AAA | 1.854 | 1.481 | 11.69 | 0.90 | 4.82 | 0.05 |
| AA | 2.75 | 1.00 | 6.87 | 0.85 | 10.533 | -0.991 |
| А | 0.725 | 1.11 | 1.157 | 1.886 | 8.98 | -0.021 |
| BBB | 0.812 | 1.691 | 2.71 | 0.916 | 5.71 | -1.04 |
| F Value | 6.138 | 5.28 | 22.423 | 4.542 | 4.16 | -0.07 |
| Combination | | Tukey H | ISD - Significa | ance of Mean l | Difference | |
| AAA Vs AA | -0.89 | 0.48 | 4.82 | 0.05 | 2.355 | 3.69 |
| AAA Vs A | 1.129 | 0.371 | 10.533 | -0.991 | 4.125 | 0.77 |
| AAA Vs BBB | 1.042 | -0.21 | 8.98 | -0.021 | 15.17 | 8.69 |
| AA Vs A | 2.02 | -0.11 | 5.71 | -1.04 | 0.80 | 0.52 |
| AA Vs BBB | 1.94 | -0.69 | 4.16 | -0.07 | 7.465 | 14.358 |
| A Vs BBB | -0.087 | -0.581 | -1.553 | 0.97 | 2.355 | 3.69 |

Table No: 8 DER Means for Various Rating Categories

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|---------|---------|-----------------|----------------|------------|--------|
| AAA | 1.943 | 0.94 | -9.22 | 0.805 | 2.355 | 3.69 |
| AA | 1.691 | 0.52 | 1.952 | 1.863 | 4.125 | 0.77 |
| А | 1.742 | 3.79 | 0.104 | 0.614 | 15.17 | 8.69 |
| BBB | 0.50 | 0.52 | 0.532 | 1.596 | 0.80 | 0.52 |
| F Value | -5.531 | 6.027 | 6.247 | 3.149 | 7.465 | 14.358 |
| Combination | | Tukey H | ISD - Significa | ance of Mean I | Difference | |
| AAA Vs AA | 1.00 | 1.17 | -2.05 | -0.02 | 1.00 | 1.17 |
| AAA Vs A | 11.163 | -0.261 | 1.638 | -0.032 | 11.163 | -0.261 |
| AAA Vs BBB | 1.138 | -0.172 | 1.128 | -1.096 | 1.138 | -0.172 |
| AA Vs A | 10.16 | -1.43 | 3.68 | -0.01 | 10.16 | -1.43 |
| AA Vs BBB | 0.14 | -1.34 | 3.17 | -1.08 | 0.14 | -1.34 |
| A Vs BBB | -10.025 | 0.089 | -0.51 | -1.064 | -10.025 | 0.089 |

| | | | • | | | • |
|--------------|--------|---------|-----------------|----------------|------------|----------|
| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
| AAA | 2.355 | 3.69 | 0.412 | 1.01 | 2.355 | 1.7022 |
| AA | 4.125 | 0.77 | 7.498 | 1.961 | 4.125 | 3.2289 |
| А | 15.17 | 8.69 | 1.23 | 2.682 | 15.17 | 1.2367 |
| BBB | 0.80 | 0.52 | 1.934 | 2.422 | 0.80 | 1.4467 |
| F Value | 7.465 | 14.358 | 27.77 | 5.681 | 7.465 | 0.823072 |
| Combination | | Tukey H | ISD - Significa | ance of Mean I | Difference | |
| AAA Vs AA | 2.355 | 3.69 | 0.412 | 1.01 | 1.1959 | 1.5325 |
| AAA Vs A | 4.125 | 0.77 | 7.498 | 1.961 | 2.9859 | 0.4673 |
| AAA Vs BBB | 15.17 | 8.69 | 1.23 | 2.682 | 2.9936 | 0.2565 |
| AA Vs A | 0.80 | 0.52 | 1.934 | 2.422 | 1.7900 | 1.9998 |
| AA Vs BBB | 7.465 | 14.358 | 27.77 | 5.681 | 1.7977 | 1.7890 |
| A Vs BBB | 2.355 | 3.69 | 0.412 | 1.01 | 0.0077 | 0.2108 |

Table No: 9 Displays the Average ICR Values for Each Rating Class

Table No: 10 Average OPM Values for Various Rating Categories

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|--------|---------|-----------------|----------------|------------|--------|
| AAA | 3.085 | 5.62 | 1.766 | 1.115 | 3.085 | 5.62 |
| AA | 11.87 | 2.65 | 1.385 | 1.168 | 11.87 | 2.65 |
| А | 10.94 | 4.82 | 90.63 | 28.48 | 10.94 | 4.82 |
| BBB | 8.554 | 0.52 | 2.727 | 2.164 | 8.554 | 0.52 |
| F Value | 11.583 | 17.075 | 24.865 | 13.966 | 11.583 | 17.075 |
| Combination | | Tukey H | ISD - Significa | ance of Mean l | Difference | |
| AAA Vs AA | -2.53 | 9.22 | 6.13 | 8.03 | -2.53 | 9.22 |
| AAA Vs A | 1.319 | 10.485 | -79.69 | 5.827 | 1.319 | 10.485 |
| AAA Vs BBB | 1.97 | 10.702 | -17.54 | 6.39 | 1.97 | 10.702 |
| AA Vs A | 3.85 | 1.27 | -85.82 | -2.21 | 3.85 | 1.27 |
| AA Vs BBB | 4.50 | 1.48 | -23.67 | -1.64 | 4.50 | 1.48 |
| A Vs BBB | 0.651 | 0.217 | 62.15 | 0.563 | 0.651 | 0.217 |

Table No: 11 Are the Average RCE values for Each Rating Category

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|----------|----------|-----------------|----------------|------------|----------|
| AAA | 1.36 | 1.7022 | 1.48 | 2.736 | 1.36 | 1.7022 |
| AA | 1.1878 | 3.2289 | 1.1722 | 1.615 | 1.1878 | 3.2289 |
| А | 0.93 | 1.2367 | 0.94 | 1.453 | 0.93 | 1.2367 |
| BBB | 0.9289 | 1.4467 | 1.1644 | 1.19 | 0.9289 | 1.4467 |
| F Value | 2.145275 | 0.823072 | 1.520523 | 1.10417 | 2.145275 | 0.823072 |
| Combination | | Tukey H | ISD - Significa | ance of Mean I | Difference | |
| AAA Vs AA | 1.1959 | 1.5325 | 1.7112 | 1.7295 | 1.1959 | 1.5325 |
| AAA Vs A | 2.9859 | 0.4673 | 3.0023 | 1.9787 | 2.9859 | 0.4673 |
| AAA Vs BBB | 2.9936 | 0.2565 | 1.7544 | 2.3848 | 2.9936 | 0.2565 |
| AA Vs A | 1.7900 | 1.9998 | 1.2911 | 0.2493 | 1.7900 | 1.9998 |
| AA Vs BBB | 1.7977 | 1.7890 | 0.0432 | 0.6553 | 1.7977 | 1.7890 |
| A Vs BBB | 0.0077 | 0.2108 | 1.2479 | 0.4060 | 0.0077 | 0.2108 |

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA | | | | |
|--------------|--------|---|--------|--------|--------|--------|--|--|--|--|
| AAA | 16.81 | 14.84 | 5.177 | 4.856 | 16.81 | 14.84 | | | | |
| AA | 17.61 | 10.35 | 8.918 | 6.427 | 17.61 | 10.35 | | | | |
| А | 9.426 | 20.95 | 11.8 | 7.174 | 9.426 | 20.95 | | | | |
| BBB | 11.88 | 12.56 | 10.47 | 10.07 | 11.88 | 12.56 | | | | |
| F Value | 11.683 | 13.305 | 9.35 | 4.98 | 11.683 | 13.305 | | | | |
| Combination | | Tukey HSD - Significance of Mean Difference | | | | | | | | |
| AAA Vs AA | 1.97 | 7.26 | -11.52 | -0.68 | 1.97 | 7.26 | | | | |
| AAA Vs A | 11.633 | 8.692 | -2.374 | 1.41 | 11.633 | 8.692 | | | | |
| AAA Vs BBB | 11.954 | 11.183 | 2.252 | 1.81 | 11.954 | 11.183 | | | | |
| AA Vs A | 9.66 | 1.43 | 9.15 | 2.09 | 9.66 | 1.43 | | | | |
| AA Vs BBB | 9.98 | 3.92 | 13.78 | 2.49 | 9.98 | 3.92 | | | | |
| A Vs BBB | 0.321 | 2.491 | 4.626 | 0.4 | 0.321 | 2.491 | | | | |

Table No: 12 Displaying the Average RNW for Various Rating Categories

Table No: 13 Displaying the average OPEBIT values for several rating
categories

| Rating Class | CRISIL | CARE | SMERA | ONICRA | FITCH | ICRA |
|--------------|--------|---------|-----------------|----------------|------------|--------|
| AAA | 20.3 | 13.24 | 87.74 | -0.67 | 20.3 | 13.24 |
| AA | 20 | 6.62 | 6.198 | 0.247 | 20 | 6.62 |
| А | 10.07 | 23.65 | 9.59 | 3.603 | 10.07 | 23.65 |
| BBB | 10.04 | 8.34 | 8.478 | 9.472 | 10.04 | 8.34 |
| F Value | 20.3 | 13.24 | 87.74 | -0.67 | 20.3 | 13.24 |
| Combination | | Tukey H | ISD - Significa | ance of Mean I | Difference | |
| AAA Vs AA | 7.06 | 13.38 | -13.58 | 1.70 | 7.06 | 13.38 |
| AAA Vs A | -67.44 | 13.802 | 0.48 | 1.562 | -67.44 | 13.802 |
| AAA Vs BBB | 20.97 | 19.753 | 6.467 | 0.568 | 20.97 | 19.753 |
| AA Vs A | -74.50 | 0.42 | 14.06 | -0.14 | -74.50 | 0.42 |
| AA Vs BBB | 13.91 | 6.37 | 20.05 | -1.13 | 13.91 | 6.37 |
| A Vs BBB | 88.41 | 5.951 | 5.987 | -0.994 | 88.41 | 5.951 |

Interpretation:

All eight of the financial ratios used to rate companies by CRISIL were rather consistent, with the exception of the interest coverage ratio, where the F value is statistically significant; this suggests that even among CRISIL-rated AAA companies, there may be substantial variation in interest coverage values.

Paired Samples Test

| | Paired Differences | | | | | | | |
|-------------------------------|--------------------|--------|--------|--|--------|------|----|---------------------|
| | 2 c · · uuron | | | 99% Confidence Interval of theDifference | | t | df | Sig. (2- tailed) |
| | | | Wittan | Lower | Upper | | | |
| post_ratings - pre_ratings | .910 | 2.4620 | .93058 | -1.3663 | 3.1877 | 13.1 | 6 | .003 |

Interpretation:

The above table depicts the testing of whether the no impact or impact on financial performance AAA-rated companies due to the Pre and Post current ratio ratings conducted by CRISIL. Moreover, the above statistical output clearly shows that the t value (calculated value) 13.193 is higher than the t critical two-tail (table value). With this output, we can accept the alternate hypothesis and says there is an impact on the current ratio of selected sampleAAA-rated companies by CRISIL.

Paired Samples Test

| | Paired Differences | | | | | | | |
|-------------------------------|--------------------|----------|--------|---|---------|--------|----|---------------------|
| | | Dernanon | | 99% Confidence Interval of theDifference Lower Upper | | t | df | Sig. (2- tailed) |
| | | | | Lower | Opper | | | |
| post_ratings - pre_ratings | 1.0666 | 1.70227 | .93058 | -3.1620 | 5.29535 | 13.087 | 7 | . 000 |

Interpretation:

The above table depicts the testing of whether the no impact or impact on financial performance AAA-rated companies due to the Pre and Post quick ratio ratings conducted by CRISIL. Moreover, the above statistical output clearly shows that the t value (calculated value) 14.085is higher than the t critical two- tail (table value). With this output, we can accept the alternate hypothesis and says there is an impact on the quick ratio of selected sample AAA-rated companies by CRISIL.

Paired Samples Test

| | Paired Differences | | | | | | | |
|-------------------------------|--------------------|-------------------|--------------------|--|---------|--------|----|---------------------|
| | | Std. Deviation | Std. Error Mean | 99% Confidence Interval of theDifference | | t | df | Sig. (2- tailed) |
| | | | wean | Lower | Upper | | | |
| post_ratings - pre_ratings | 1.0666 | 1.70227 | .93058 | -3.1620 | 5.29535 | 13.087 | 7 | . 000 |

Interpretation:

The above table depicts the testing of whether the no impact or impact on financial performance AAA-rated companies due to the pre- and post-debt- equity ratio ratings conducted by CRISIL. Moreover, the above statistical output clearly shows that the t value (calculated value) 17.902is higher than the t critical two-tail (table value). With this output, we can accept the alternate hypothesis and says there is an impact on the debt-equity ratio of selected sample AAA-rated companies by CRISIL.

Paired Samples Test

| | Paired Differences | | | | | | | |
|-------------------------------|--------------------|-------------------|--------------------|--|--------|------|---|---------------------|
| | Mean | Std. Deviation | Std. Error Mean | 99% Confidence Interval of theDifference | | t | | Sig. (2- tailed) |
| | | | medan | Lower | Upper | | | |
| post_ratings - pre_ratings | 16.4 | 148.34 | 56.068 | -120.69 | 153.69 | 18.2 | 6 | .004 |

Interpretation:

The above table depicts the testing of whether the no impact or impact on financial performance AAA-rated companies due to the Pre and Post Interest coverage ratio ratings conducted by CRISIL. Moreover, the above statistical output clearly shows that the t value (calculated value18.294is higher than the t critical two-tail (table value). With this output, we can accept the alternate hypothesis and says there is an impact on the Interest coverage ratio of selected sample AAA-rated companies by CRISIL.

Paired Samples Test

| | Paired Differences | | | | | | | |
|-------------------------------|--------------------|--------|--------|--|--------|------|----|---------------------|
| | Doridation | | | 99% Confidence Interval of theDifference | | t | df | Sig. (2- tailed) |
| | | | | Lower | Upper | | | |
| post_ratings - pre_ratings | -3.45 | 11.500 | 4.3466 | -19.571 | 12.658 | 15.7 | 6 | .001 |

Interpretation:

The above table depicts the testing of whether the no impact or impact on financial performance AAA-rated companies due to the pre and post-Return on capital employed ratio ratings conducted by CRISIL. Moreover, the above statistical output clearly shows that the t value (calculated value) 15.795 is higher than the t critical two-tail (table value). With this output, we can accept the alternate hypothesis and says there is an impact on the Return on the capital employed ratio of selected sample AAA-rated companies by CRISIL

8. CONCLUSION

Companies who received AAA, AA, A, or BBB grades from the four CRAs are displayed in the table along with their profit after tax/total income ratios. Unless you look at the CRISIL and ICRA ratings, you can see that the F levels for the other two rating agencies are meaningless. This number differs greatly from the figures given by the other two rating agencies, suggesting that the rating agencies did not give the profit-after-tax ratio a high enough weight to warrant a passing grade. It seems that the rating agencies have not adequately taken the profit after tax/total income ratio into account when determining ratings for the two entities in question. It seems that the rating agencies have not given current ratio the weight it deserves when conferring ratings. The research study more specifically focuses on select rating dimensions of credit ratings. Hence, the study can be improvised through adding the dimensions such as BB, C, Default rating categories for the effective known of credit rating agencies.

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