

## ASSESSING CREDIT RATING AGENCIES RATING METHODOLOGIES: EVIDENCE FROM INDIA

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### ABSTRACT

The present paper tries to analyze the uniformity in rating approaches of Credit-Rating-Agencies (CRA) in the existing financial market by evaluating two SEBI recognized former Indian credit rating agencies. This paper examines the financial ratios of various companies graded similar class of ratings by two different rating agencies. Credit rating basically specifies the credit-worthiness of debtors and the likelihood that debtors will pay back the principal and interest in respective due period. While performing estimation of investors a rated security is set higher than the usual unrated security independent of superior monetary stand or notoriety of Issuer or promoter Company. The risk level is incorporated in the regular payback of interest and principal amount that is provided to the prospective investors through indicative guidance by CRA. While these rating agencies are expected to have risk of lending assurance to the credit recommendations, they have in fact disintegrated the certainty of investors by granting undeservedly bloated evaluations to junk protections. So, it is essential to have transparent and frequently monitored rating practice to be applied in different industries.

**Keyword: - Credit Rating Agencies, Financial markets, Investor, rating practice, rated security, Unrated security**

### 1. INTRODUCTION

Credit rating agencies (CRA) is an organization that rates indebted individuals dependent on their capacity to pay back their interests and loan amount in particular schedule and the probability of them defaulting the installment. Credit rating organizations in India don't have an inaccessible past. They started their appearance from 1980s. As of today; there are six credit rating agencies that are registered under SEBI which are as follows: CRISIL, ICRA, CARE, SMERA, Brickwork Ratings and Fitch India. Evaluations given by these organizations decide the nature and integrals of the loan. Higher credit rating will lead to lower rate of interest offered to the organization.

These agencies may likewise examine the creditworthiness of liability issuers and gives credit ratings to only corporations and not individuals customers. The assessed entities may be companies, state governments, non-profit organizations, special purpose entities, local governmental bodies and countries. Individual customers are rated by particular organizations known as credit bureaus that give a credit grade to every customer based on their past financial descriptions.

Credit rating agencies (CRAs) can play a vital role in many national and cross border deals. CRA evaluate the credit risk of government or corporate indebted individuals and issuers of fixed-pay securities. Advantages of CRA are:

- For Money creditors: It becomes viable investment decision that led to better creditworthiness of an individual or consortium. Also, assured safety of the money that needs to pay back with interest.
- For Debtors: Created better likelihood for Money lending from banks and higher creditworthiness aids in getting Considerable rate of interest.

With the above view, CRA endeavor to comprehend the huge measure of data accessible in regards to an issuer or borrower, its market and financial conditions so as to provide investors and moneylenders a superior comprehension of the risks they hold when lending to a specific borrower or when acquiring an issuer's fixed income securities. Typically Credit Rating Agency's outlook of how likely an issuer is to repay, in a timely manner, a specific debt amount or money related obligations or its debts for the most part. Credit Rating business is a major contributor to financial market efficiency.

### **1.1 CARE**

Credit Analysis and Research limited was founded in the year 1993 and from there onwards it has proceeded to turn into India's 2nd biggest CRA. It was advanced by Unit Trust of India (UTI) Bank, Industrial Development Bank of India (IDBI), and various other banking foundations. CARE has an essential capacity to accomplish rating of debt instruments, credit investigation rating, credit rating analysis, corporate governance rating, loan rating, and so forth. An evaluation catered by CARE incorporates Banking Foundations, State Governments, Public Utilities, City Bodies, and Specific Purpose Vehicles (SPV).

### **1.2 ICRA**

Initially titled as Investment Information and Credit Rating Agency, this union was instituted in 1991: A joint endeavor of Moody's and Indian financial and banking administration associations. ICRA allots corporate administration rating, execution evaluations, reviewing and gives positioning to common assets, hospitals and many real estate enterprises. This agency creates revenue - INR 2.28 Billion. It has a noteworthy spotlight on the major MSME area. To take into account its customers, the devoted group of experts has built up a direct scale for the concerned sector. It causes the organization to standardized nobles effectively.

ICRA ratings are used for analyzing credit risk in India. ICRA allocates interim ratings to debt instrument with codes starting from [ICRA]-A1 through [ICRA]-D for one year of original maturity. ICRA's interim ratings assess the likelihood of non-payment on the debt securities (rated) over their complete contract. To showcase short-term ratings, modifiers {"+" (plus)} are used with rating codes for the groups from [ICRA]-A1 to [ICRA]-A4. The modifier reveals the relative standing within the groups. While the interim rating of [ICRA]-A1 shows that the instruments with the same rating are assess to have strong degree of security related to timely payment of financial responsibilities and many such instruments takes the lower credit risk, the short-rating of [ICRA]-D reveals that instruments with the same rating are in the default stage or are likely to be in default once matured. ICRA allocates short-term ratings to instruments likewise deposit certificates, commercial paper, short-term debentures, and other financial market allied instruments

that are maturing in a year from the date of issuance and bank credits with promised maturity of up to one year.

## 2. LITERATURE REVIEW

Credit rating is an emblematic indicator of current opinion over rating agencies about their relative competency of issuer of debt instruments, to examine the debt compulsions as per the contract. The organizations with particular functions, analysis of the likelihood of the appropriate (well-timed) payments by an issuer on few financial compulsions that is known as Credit Rating Agencies. [1](Frank Packer & Nichola Tarashev, 2011).

[2]Darren J. Kisgen, 2019 highlighted that important corporate behavior has been directly impacted by various practices of credit rating agencies. He discussed explicitly on Moody's alteration to leverage prepared by rating agencies that influence investment decisions and firm capital structure that were greater revealed to alteration in methodology.

Rationalization of resources from less prolific to more prolific firms drives the productivity growth of various firms. Further assessment has been done over various manufacturing entities and their corporate ratings were evaluated. And findings resulted in typical outcome that all those investment entities were either medium scaled and high prolific or extremely large and comparatively unproductive. [3](Sasan Bakthiari, 2017)

[4]Dr. Ekta Rokade, 2018 mentioned that there are certain important determinants such as ratings are so planned that they provide investors an indicator that can be easily comprehended with the essential credit class and the risk allied with an instrument of debt. As mentioned by [5] de Meijer, Carlo R. W.; Saaf, Michelle H. W.(2015) credit ratings plays a fundamental role in global securities and banking markets, however equally impacting the financial market and becomes the reason credit crisis.

The primary objective of the paper is to evaluate the steadiness in rating practice of each specific rating agency by including companies fitting to equivalent rating groups (within group) counting -AAA, -AA, -A and -BBB as an experiment. It is evaluated that all the rating agencies uses regular practice while allocating a specific rating score since there is no noteworthy variation in the standards of all the ratios that belongs to distinctive sets of similar rated institutions in most of the cases. [6](Kuljeet kaur & Dr.Rajender kaur, 2011).

Several studies have provided an insight of using financial ratios for comparison of company's performance, credit worthiness, future profit estimation and competitor analysis. Further studies shows that these ratios can be used to compare different sectors based industries which are explicitly oriented towards sales and revenue based model. However one can find limitation in using these ratios for banking industry as it is not possible for commercial bank to justify based on sales of goods.[7](Brian Stanko, Thomas Zeller, 1996).

A rating is an assessment on the reliability of a debtor as for a specific debt. Further the rating aids to evaluate debtor's default risk on a debt that has been availed in a particular time period. In general there are certain factors that are considered for assigning rating – Industrial risk, size of company (used for diversification), management skills, profitability, competitor analysis and financial ratios. Hence, there can be multiple variable rating methodologies or it can be performed over single parameter that would help rating agencies in ascribing rating to companies. [8](Koresh Galil, 2002)

Credit ratings were not particularly positive in noticing the build-up of extensive exposures in the financial system or in classifying which organizations were most revealed to them.

To be specific, pre-crisis ratings might have contained valuable information that had been lower for banks that consequently resorted to robust emergency measures, such as asset sales and capital-raising. It has been evaluated from the above assessment that all rating agencies used similar practice while allocating a specific rating score since there are no substantial differences in the values of all the available ratios that belongs to distinctive matrix of likewise rated institutions. Merely exclusion to this is - PAT/TI ratio of quick ratio of AA- rated companies -by CRISIL and AAA rated companies -by CARE, since there are noteworthy differences in these ratios[9](Namita Jain, 2014).

### 3. METHODOLOGY AND DATA ANALYSIS

The companies with specific capacities in particular, assessment of probability of the appropriate re-payments by an issuer on few financial commitments is known as Credit Rating Agencies. The primary purpose of this paper is to evaluate the evenness in rating practice of each specific rating agency by considering companies belonging to similar rating class (within the group) comprising AAA & AA as an experiment. This is performed based on the secondary data analysis for different companies' germane to the same group (as mentioned earlier).

This is an analysis of two recognized & old SEBI renowned rating agencies including ICRA and CARE by using MS Excel 2010. The practice has been analyzed upon six variables, viz. liquidity ratio, profitability ratios and solvency ratios. These listed financial ratios are shortlisted as they are typically used by all the other CRA and some of the earlier findings conducted over similar type of analysis has also supported these ratio.

The data concerning different rating grades is collected from the reports of these rating agencies comprising various matters of, ICRA and CARE rating view, websites of these rating agencies. They are using rating grades F-Values using Analysis of Variance (ANOVA). These rating agencies are preferred due to the fact that almost every rated companies belonging to these rating classes. Companies shortlisted for each rating agency are further divided into four groups' viz. AAA and AA (each two). All calculations are done with the help of Microsoft Excel 2010 version. Consideration of hypothesis is illustrated below:

Hypothesis:

H0- There is no significant consistency in the rating practice used by credit rating companies

H1- There is significant consistency in the rating practice used by credit rating companies

#### 3.1 Data Analysis and Elucidation

The analysis brought the following results:

a) Evaluation of AAA Rated Companies:

'AAA' ratings show the highest credit class. The rated instrument conveys the lowest probability of credit risk. The financial ratios of all companies that were allocated with AAA ratings graded by ICRA and CARE respectively used are presented in table given below. It is understandable from the table that whenever companies rated by CARE are focused on the P-value exhibit significance. Thus, the practice adopted by CARE while allocating AAA rating grade was consistent as same type of ratios were studied while allocating equivalent rating grade. Thus we reject the null hypothesis concluding that there

is consistency in rating practice of CARE used to rate various companies during the period of study. This features that ICRA has used consistent practice while allocating AAA grade to various companies over the period of study.

Table -1: Credit rating in case of AAA – CARE vs ICRA

Care Ratio for AAA companies	Companies under CARE			Companies under ICRA		
	Rural electrification corporation ltd	WIPRO	Power and finance corporation Ltd	Bajaj Finance	Kotak Mahindra	Axis Bank
Current Ratio	4.38	1.37	5.15	1.64	0.05	0.1
Quick Ratio	5.47	1.85	5.9	1.64	19.49	20.02
Debt equity ratio	4.69	0.11	4.98	3.73	0.05	9.48
Dividend pay-out ratio	42.71	5.85	35.16	7.47	0	166.54
Return on capital employed	10.23	22.17	10.71	4.31	9.93	0.03
Return on net worth	13.09	18.27	14.68	16.02	10.89	2.69

Furthermore, the above table features that the P-values of all the listed companies that were allocated with AAA ratings provided by ICRA are not momentous. It means that that there is no remarkable dissimilarity between the equivalent type of ratios of alike AAA rated companies by ICRA. It highlights that the ICRA has NOT used coherent practice while allocating AAA grade to various companies over the period of study.

Table -2: Summary - Data analysis of Companies under CARE

Groups	Count	Sum	Average	Variance		
Current Ratio	3	10.9	3.633333	3.990233		
Quick Ratio	3	13.22	4.406667	4.948633		
Debt equity ratio	3	9.78	3.26	7.4629		
Dividend pay-out ratio	3	83.72	27.90667	379.123		
Return on capital employed	3	43.11	14.37	45.6876		
Return on net worth	3	46.04	15.34667	7.041433		
<b>ANOVA</b>						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	1416.927	5	283.3853	3.7931	0.027154	3.105875
Within Groups	896.5077	12	74.70897			
Total	2313.434	17				

The table 2-3 shows various parameters based on the analysis performed over 2 credit rating agencies which were assigned AAA rating. The result explicitly based on the P-value for both agencies that has been carried out between each financial ratios (parameter) and that highlights that:

- The Null hypothesis is accepted in case of ICRA rating practice that means there is no significant consistency for assigning AAA rating to various companies ;
- However, in case of CARE practice there is uniformity while assigning rating to companies.

**Table -3:** Summary - Data analysis of Companies under ICRA

Groups	Count	Sum	Average	Variance		
Current Ratio	3	1.79	0.596667	0.817033		
Quick Ratio	3	41.15	13.71667	109.4546		
Debt equity ratio	3	13.26	4.42	22.5883		
Dividend payout ratio	3	174.01	58.00333	8849.106		
Return on capital employed	3	14.27	4.756667	24.65213		
Return on net worth	3	29.6	9.866667	45.20763		
<b>ANOVA</b>						
Source of Variation	SS	df	MS	F	P-value	F Crit
Between Groups	6903.884	5	1380.77	0.915248	0.50331	3.1058
Within Groups	18103.65	12	1508.63			
Total	25007.54	17				

b) Comparison of AA Rated Companies:

The financial ratios of various companies that were allocated with AAA ratings graded by ICRA and CARE are used for analyzing the variance and determining the sustainability of constancy in the rating practice. Also, F-Values of all financial ratios of the companies allocated with AA ratings by all the rating agencies were studied. It is reasonable from the table that in case of CARE, it has significant P-value throughout the financial ratio. It means that the rating practice used by CARE is consistent over various companies over the period of study.

**Table -4:** Credit rating in case of AA – CARE vs ICRA

Care Ratio for AA companies	Companies under CARE			Companies under ICRA		
	Edelweiss Housing	Repc home finance	India infoline housing	Cholaman dalam Investment	Edel Weiss Financial Services	Bandhan Bank
Current Ratio	6.17	1.96	3.7	2.26	4.49	0.01
Quick Ratio	6	4.9	3.05	2.26	4.49	42.66
Debt equity ratio	0.43	4.98	0.03	6.19	0	3.64
Dividend pay-out ratio	85.04	7.3	77.92	9.92	82.68	0
Return on capital employed	7.54	12.11	10.65	2.85	4.24	3.03
Return on net worth	4.24	15.51	14.03	18.91	4.24	14.34

The table-4 features that the P-Values of all the financial ratios of various companies that were allocated AA rating by ICRA are not significant. Thus, agreeing the null hypotheses and it infers that there is no significant difference between the values of various ratios of the companies that were allocated AA rating by ICRA, thus there was no constancy in rating practice of ICRA while allocating AA rating grade to various companies over the given period.

**Table -5:** Summary - Data analysis of Companies under CARE

Groups	Count	Sum	Average	Variance		
Current Ratio	3	11.83	3.943333	4.475433		
Quick Ratio	3	13.95	4.65	2.2225		
Debt equity ratio	3	5.44	1.813333	7.560833		
Dividend payout ratio	3	170.26	56.75333	1846.898		
Return on capita						
Employed	3	30.26	10.08667	5.551033		
Return on net worth	3	33.78	11.26	37.5079		
<b>ANOVA</b>						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	6553.075	5	1310.615	4.129622	0.02052 9	3.105875
Within Groups	3808.431	12	317.3692			
Total	10361.51	17				

**Table 6:** Summary - Data analysis of Companies under ICRA

Groups	Count	Sum	Average	Variance		
Current Ratio	3	6.76	2.253333	5.01763		
Quick Ratio	3	49.41	16.47	515.680		
Debt equity ratio	3	9.83	3.276667	9.67803		
Dividend payout ratio	3	92.6	30.86667	2038.06		
Return on capital employed	3	10.12	3.373333	0.57143		
Return on net worth	3	37.49	12.49667	56.3506		
<b>ANOVA</b>						
Source of Variation	SS	df	MS	F	P value	F crit
Between Groups	1859.75	5	371.950	0.850054	0.54051	3.10587
Within Groups	5250.73	12	437.561			
Total	7110.48	17				

#### 4. CONCLUSIONS

The conclusion has been drawn from the above analysis that there is inconsistency in rating practice of credit rating agencies while allocating a particular rating score that belongs to various sets of similarly rated companies. Comparing two old SEBI renowned credit rating agencies such as CARE and ICRA, we could find the difference in rating practice across the different companies. The rating agencies should be made more responsible against their actions as ratings are not just regular views. Therefore, recent rules should certify that a rating agency can be believed apt in case it invades purposely or with gross carelessness, the CRA guidelines, thereby producing harm to an investor.

Credit rating agencies that needs to be more evident remarkably concerning their pricing policy and the fees they obtain, be highly transparent about how they performed their rating process and reaching their decisions, be more autonomous from their shareholder's basis and from other CRAs and that makes it accountable towards investors when rupturing purposely or with gross carelessness of the CRA Regulation.

Credit Ratings should be authentic—the practice used must, in specific, be orderly and subject to particular form of substantiation; this process should be unrestricted from economic pressure and political manipulation; ratings should be evaluated at least once in a year; and overall information regarding practice should be well documented and available overtly. Judgment of ratings should be such that it is plausible and consistent by

users, and should be accessible to all organizations with an appropriate interest in them on the similar terms. Regulators monitored rating performance, concerning high statistical principles. Rating performance comparative to results should be published consistently. By implementing a code of conduct among other things, the actions of CRAs should be supervised.

## 5. REFERENCES

- [1]. Frank Packer., Nikola tarashev. (2011). Rating Methodologies For Banks. BIS-Bank For International Settlements Quarterly Review.
- [2]. Darren J. Kisgen. (2019). The Impact of Credit Ratings on Corporate Behavior: Evidence From Moody's Adjustments. *Journal of Corporate Finance*, p. 567-582
- [3]. Sasan Bakhtiari. (2017). Corporate credit ratings: selection on size or productivity?. *International Review of Economics & Finance*. p. 4
- [4]. Dr. Ekta Rokade. (2018). A Study On Awareness Level of Investors Towards The Methodology of Credit Rating Agencies. *International Journal of Trend In Scientific Research And Development*. p. 2-5.
- [5]. De Meijer., Carlo R. W., Saaf, Michelle H. W. (2015). The credit crunch and credit rating agencies: are they really striving towards more transparency?. *Journal of Securities Law*, p. 332
- [6]. Kuljeet Kaur., Dr. Rajinder Kaur. (2011). Credit Rating In India: A Study of Rating Methodology of Rating Agencies. *Global Journal of Management and Business Research*. p.3
- [7]. Brian Stanko., & Thomas Zeller. (1996). Financial ratios for the commercial banking industry: do they measure what you think? *Journal of Business and Economic Perspective*, p. 4-6
- [8]. Koresh Galil. (2002). The Quality of Corporate Credit Rating: An Empirical Investigation. *Social Science Research Network*. p. 8-13
- [9]. Namita Jain. (2014). Credibility of Credit Ratings In The Present Scenario, *Sai Om Journal of Commerce & Management*. p 2-4