

Rating Research Services

Archive: Fixed-Income Funds: Methodology And Assumptions: Fund Credit Quality Rating Criteria

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Archive: Fixed-Income Funds: Methodology And Assumptions : Fund Credit Quality Rating Criteria

(Editor's notes: The criteria article is no longer current. It has been superseded by the criteria article also titled, "Fixed-Income Funds: Methodology And Assumptions: Fund Credit Quality Rating Criteria," published on Oct. 29, 2013.)

1. Taiwan Ratings Corp. is refining and adapting its methodologies and assumptions for rating fixed-income funds. We are publishing this article to help participants better understand our approach to reviewing key credit factors when assigning fixed-income fund ratings in Taiwan.

SCOPE OF THE CRITERIA

2. Taiwan Ratings is updating its criteria for analyzing fixed-income fund key credit factors with the goal of bringing greater transparency and clarity to its analytic process. To this end, key credit factors, which is an important component of fund rating analytics, is being divided into five categories. The five refined key credit factors are: credit quality, liquidity, maturity, diversification of the fixed-income fund portfolio, and fund management.

SUMMARY OF CRITERIA UPDATE

Criteria Source:

3. This article supersedes "Taiwan Fixed-Income Fund Credit Quality Rating Methodology," published March 29, 2007 and "Taiwan Fixed-Income Fund Credit Quality Rating Definitions," published July 1, 2008, and incorporates material found in "Criteria | Financial Institutions | Fixed-Income Funds: Fund Credit Quality Rating Criteria," published on www.standardandpoors.com on Feb. 2, 2007.

Key Difference Compared With Criteria Source:

4. Taiwan Ratings is refining the definition of its fixed-income fund rating to be more in line with Standard & Poor's Ratings Services' fixed-income funds credit quality rating definition.
5. This article will illustrate each rating factor in detail and explain how the rating was achieved. In addition, a correlation table provides participants with a comparison between Taiwan Ratings' rating scale and Standard & Poor's global rating scale.

IMPACT ON OUTSTANDING RATINGS

6. We do not expect the implementation of these criteria to cause rating changes.

EFFECTIVE DATE AND TRANSITION

7. These criteria are effective immediately.

DEFINITIONS

8. Taiwan Ratings' fixed-income fund credit quality ratings, identified by the 'f' subscript, are assigned to funds that exhibit variable net asset values. The 'tw' prefix indicates that the funds are rated according to Taiwan Ratings' rating scale. A fixed-income fund rating is not directly comparable to a debt rating because of differences in rating criteria.
9. A fixed-income fund rating reflects the level of protection the fund's portfolio provides against losses from credit defaults. It does not assess a fund's total net return and net asset value sensitivity. In evaluating a fixed-income fund, we examine the credit quality of the assets that comprise the portfolio of the fund, liquidity, maturity, diversification, and the way the fund is managed. Management assessment considers a fund's investment guidelines, experience, investment strategies, operational policies and internal controls, as well as the fund's legal structure.
10. We evaluate the legal structure of the fund to determine that the following requirements are met in full:
 - The assets of the fund are for the benefit of investors and segregated from any claims by creditors or other parties, the assets of other funds and the manager's assets.
 - An appropriate and approved trust agreement governs the fund.
 - The fund has been established in accordance with regulations and requirements.

Fund Credit Quality Rating Definitions

twAAAf	Funds rated 'twAAAf' provide extremely strong protection against losses from credit defaults on the 'tw' scale.
twAAf	Funds rated 'twAAf' provide very strong protection against losses from credit defaults on the 'tw' scale.
twAf	Funds rated 'twAf' provide strong protection against losses from credit defaults on the 'tw' scale.
twBBBf	Funds rated 'twBBBf' provide adequate protection against losses from credit defaults on the 'tw' scale.
twBBf	Funds rated 'twBBf' exhibit uncertain protection against losses from credit defaults on the 'tw' scale.
twBf	Funds rated 'twBf' exhibit vulnerability to losses from credit defaults on the 'tw' scale.
twCCCf	Funds rated 'twCCCf' exhibit extremely vulnerability to losses from credit defaults on the 'tw' scale.
+ or -	The ratings from 'twAAf' to 'twCCCf' may be modified by adding a plus (+) or minus (-) sign to show relative standing within the major rating categories.

11. Rated funds are reviewed at least monthly to ensure the rating remains appropriate. The fund rating maybe changed, suspended or withdrawn. Where the fund management companies do not provide information as required the rating maybe suspended or withdrawn.

METHODOLOGY AND ASSUMPTIONS

I. Asset Quality

12. A fund rating assessment is based on the credit quality of the investment held by the fund, as well as the credit quality of the counterparties with which the fund engages in repurchase agreements. Our ratings mainly reflect the fund's credit quality. If the individual fund investment or fund counterparty is not rated by Taiwan Ratings or Standard & Poor's, we will, based on publicly available information, provide our credit opinion on such unrated entities as necessary. To evaluate a fund's overall level of protection against losses associated with its credit risk, we apply factors and scores using Standard & Poor's fund credit quality matrix and scoring table to the fund's portfolio holdings (see tables 1 and 2). The matrix is essentially a set of credit factors for each rating category (e.g. 'AAA', 'AA', 'BBB') and a set of credit scores for each of the 'f' fund credit quality ratings categories.

Table 1

Standard & Poor's Fund Credit Quality Rating Matrix	
Standard & Poor's Ratings On The Underlying Investment And Counterparties	Factor
'AAA'	0
'AA'	20
'A'	50
'BBB'	250
'BB'	1000
'B'	4000
'CCC'	20000

Note: The credit factor for each of the long-term rating categories (e.g. 'AAA', 'AA', 'BBB') were derived from singular, discrete, worst-case one-year default rates from 1981 through 2006.

13. The combined credit quality of a fund is determined by the credit ratings of the individual securities held weighted by the percentage of the portfolio they represent, as well as the credit quality of the fund counterparties. The respective credit rating levels are scored based on credit factors derived from Standard & Poor's historical default and ratings transition rates. These factors are weighted by the allocation in the fund to securities at the various levels of credit quality, which generates Standard & Poor's score for the fund's level of credit quality (see table 2).

Table 2

Standard & Poor's Scoring Table

Score	Standard & Poor's fund rating
0-7	'AAAf'
8-10	'AA+f'
11-20	'AAf'
21-25	'AA-f'
26-35	'A+f'
36-50	'Af'
51-90	'A-f'
91-150	'BBB+f'
151-250	'BBBf'
251-450	'BBB-f'
451-775	'BB+f'
776-1000	'BBf'
1001-1850	'BB-f'
1851-2520	'B+f'
2521-4000	'Bf'
4001-7800	'B-f'
7801-14700	'CCC+f'
14700+	'CCCF'

14. A correlation table assists in determining the respective issuer rating level on Taiwan Rating's 'tw' rating scale at every rating level on Standard & Poor's global rating scale (see table 3).

Table 3

Mapping Of Taiwan Ratings' Issuer Rating Scale To Standard & Poor's Global Scale

Taiwan Ratings' issuer scale rating		Standard & Poor's global scale rating
Short-term rating	Long-term rating	Long-term rating
'twA-1+'	'twAAA'	'A' & above
'twA-1+'	'twAA+'	'A-' to 'A'
'twA-1+'	'twAA'	'BBB+' to 'A-'
'twA-1' to 'twA-1+'	'twAA-'	'BBB' to 'BBB+'
'twA-1'	'twA+'	'BBB-' to 'BBB'
'twA-2' to 'twA-1'	'twA'	'BB+' to 'BBB-'
'twA-2'	'twA-'	'BB+'
'twA-3' to 'twA-2'	'twBBB+'	'BB' to 'BB+'
'twA-3'	'twBBB'	'BB-' to 'BB'
'twA-3'	'twBBB-'	'B+' to 'BB-'
'twB'	'twBB+'	'B+'
'twB'	'twBB'	'B' to 'B+'
'twB'	'twBB-'	'B'
'twB'	'twB+'	'B-' to 'B'
'twB'	'twB'	'B-'
'twC' to 'twB'	'twB-'	'B-'
'twC'	'twCCC+'	'CCC+'
'twC'	'twCCC'	'CCC'
'twC'	'twCCC-'	'CCC-'
'twC'	'twCC'	'CC'
'twR'	'twR'	'R'
'D'	'D'	'D'

15. Following the conversion it is possible to determine the fund's asset quality score according to Taiwan Rating's asset quality scoring table (see table 4).

Table 4

Taiwan Ratings' Asset Quality Score

Score	Taiwan Ratings' asset quality evaluation	Fixed score
0-43	'twAAA'	1
44-200	'twAA'	2
201-667	'twA'	3
668-2074	'twBBB'	4
2075-3507	'twBB'	5
3508-11250	'twB'	6
11251-14700	'twCCC'	7

II. Liquidity

16. The credit analysis then moves onto an evaluation of a fund's liquidity through its cashflow management and the potential impact cashflow may have on the fund's ability to meet redemptions. Funds that do not maintain sufficient liquidity may be forced to liquidate higher credit quality assets to meet redemptions, which would result in a decline in the fund's overall credit quality. As part of the rating analysis, Taiwan Ratings assesses a fund's investor base and redemption history.
17. To ensure adequate liquidity, the credit analysis looks for a minimum holding of liquid assets. These include repo transactions, non-structured deposits, and commercial papers (see table 5).

Table 5

Liquid Asset Scoring Table

Minimum % liquid assets	Fixed score
60	1
40	2
25	3
20	4
15	5
10	6
5	7

18. Additional emphasis is placed on liquidity requirements for funds, which have a history of above market average movements in net redemptions.

III. Maturity Structure

19. In recognition of the potential impact of interest rate risk on the value of a fund's assets and to ensure that the liquidity profile of a fund corresponds to the score level, the credit analysis considers the maximum of the fund's maturity limits to determine a maturity score.

Table 6

Maturity Score Table

Maximum average maturity	Fixed score
2 years	1
2-3 years	2
3-4 years	3
4-5 years	4
5 years and above	5

IV. Diversification

20. Our analysis then considers the fund's maximum exposure to a single non-governmental entity for respective score levels (see table 7).

Table 7

Diversification Score Table

Maximum % in any single non-governmental entity	Fixed score
20	1
25	2
30	3
35	4
40	5
45	6
50	7

V. Fund Management Company And Fund Manager

21. In establishing a view on the degree of credit risk we consider the expertise and quality of the fund management company and fund manager. The focus of this assessment is on the fund management company's ability to manage the fund, undertake administration of the fund, provide client service and comply with the fund criteria and on-going information requirements.
22. Although we consider the credit rating of the fund management company in our assessment, the rating and assessment are not comparable. A fund management company rating is an opinion of the credit worthiness of the fund management company, whereas the fund management company and fund manager assessment is an evaluation of the fund management company and fund manager's ability to manage and operate the specific fund.
23. In assessing the expertise and quality of the fund management company and fund manager we find it useful to appraise the following:
- The number of years of operation of the fund management company. A minimum of two years is required for a fund to be rated;
 - Group structure and shareholders, and organizational structure;

- Total funds under management and the number of funds managed by the fund management company and the fund manager of the fund being rated;
 - The clarity and consistency of the investment approach;
 - The risk management policy;
 - Evidence of a clear decision making process with adequate controls;
 - The adequacy of compliance systems and infrastructure;
 - The adequacy of controls on the management of the portfolio and fund management company operations;
 - Evidence of a clear segregation of duties within the team and between the investment team, settlement and compliance;
 - The experience of senior management and the investment team;
 - Evidence of a culture of ethical practice;
 - The strength of the security pricing process;
 - The adequacy of the administration and reporting infrastructure.
24. After considering the key factors outlined in paragraph 23 we are able to make a final assessment of the expertise and quality of the fund management company and fund manager, which falls into three categories:
- 'unsatisfactory' -- where the fund management company or fund manager does not meet the minimum requirements in key areas. This finding could result in a lower rating on the fund.
 - 'satisfactory' -- where the key areas have been met, but not exceeded.
 - 'strong' -- where the minimum requirements have been exceeded in the key areas.

Rating Analysis

25. Our rating score after application of the weighted index generally plays a significant role (but not the only one) in our assessment of fund ratings. We generally consider a weighting to the fixed score from our evaluation of the credit quality, liquidity, maturity, and diversification according to the contribution of each component to the rating decision (see table 8), followed by the rating score after the application of the weighted index (see table 9). The assessment on the fund management company and fund manager is generally a discounting factor, i.e, an assessment outcome of 'unsatisfactory' could lead to a lower final rating than the rating derived from the weighted index of criteria components.

Table 8

Weighted Index Of Criteria Components On The Rating Decision

Criteria	Weighting (%)
Credit quality–underlying assets	25
Credit quality–counterparty	25
Liquid assets	20
Maturity	20
Diversification	10
Total	100

Table 9

Rating Score Table	
Score range	Rating
1-1.5	'twAAAf'
1.5-2.5	'twAAf'
2.5-3.5	'twAf'
3.5-4.5	'twBBBf'
4.5-5.5	'twBBf'
5.5-6.5	'twBf'
6.5-7.5	'twCCcf'

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RELATED CRITERIA AND RESEARCH

- **Criteria | Financial Institutions | Fixed-Income Funds: Fund Credit Quality Rating Criteria,** www.standardandpoors.com, Feb. 2, 2007

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