

# Rating Research Services

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## Archive: Understanding Taiwan Ratings' Rating Definitions

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# Archive: Understanding Taiwan Ratings' Rating Definitions

(**Editor's Note:** The criteria article is no longer current. It has been superseded by the article also titled "Understanding Taiwan Ratings' Rating Definitions," published on Oct. 29, 2013.)

## SCOPE OF THE CRITERIA

1. Taiwan Ratings Corp. (TRC) is refining the criteria it uses in ratings assignment, primarily to promote greater understanding of TRC's rating definitions.

## IMPACT ON OUTSTANDING RATINGS

2. This criteria refinement will not result in rating actions of current outstanding ratings.

## EFFECTIVE DATE AND TRANSITION

3. The criteria are effective immediately.

## METHODOLOGY

4. This publication intends to promote greater understanding of TRC's rating definitions and help local investors attribute clearer meanings to different rating categories.

## Key Attributes Of TRC's Credit Ratings

### Rank ordering of creditworthiness

5. TRC's credit ratings express forward-looking opinions about the creditworthiness of issuers and obligations on a nationwide basis. More specifically, TRC's credit ratings express a relative ranking of creditworthiness. Issuers and obligations with higher ratings are judged by us to be more creditworthy than issuers and obligations with lower credit ratings. (See Appendix I for a relevant excerpt from the rating definitions.)
6. Creditworthiness is a multi-faceted phenomenon. Although there is no "formula" for combining the various facets, our credit ratings attempt to condense their combined effects into rating symbols along a simple, one-dimensional scale. Indeed, as discussed below, the relative importance of the various factors may change in different situations.
7. The term creditworthiness refers to the question of whether a bond or other financial instrument will be paid according to its contractual terms. At first thought, the idea of creditworthiness seems entirely straightforward. However, delving beneath the outward simplicity reveals the true multi-dimensional nature.

## Primary factor -- likelihood of default

8. In our view, the likelihood of default is the centerpiece of creditworthiness. That means the likelihood of default--encompassing both capacity and willingness to pay--is the single most important factor in our assessment of the creditworthiness of an issuer or an obligation. Therefore, consistent with our goal of achieving a rank ordering of creditworthiness, higher ratings on issuers and obligations reflect our expectation that the rated issuer or obligation should default less frequently than issuers and obligations with lower ratings, all other things being equal.
9. Although we emphasize the rank ordering of default likelihood, we do not view the rating categories solely in relative terms. We associate each successively higher rating category with the ability to withstand successively more stressful economic environments, which we view as less likely to occur. Conversely, we associate issuers and obligations rated in lower categories with vulnerability to mild or modest stress.
10. Looking to stress levels is part of how we try to achieve comparability of ratings across different types of securities, different times, and different sectors. That is, we strive to make our rating symbols correspond to the same approximate level of creditworthiness wherever they appear. Thus, when we use a given rating symbol, we intend to connote roughly the same level of creditworthiness to the widely disparate issuers on a nation-wide basis.
11. Still, we do not attach specific probabilities to particular types of potential economic environments. Therefore, we do not ascribe a specific "default probability" to each rating category. On the contrary, we recognize that the observed default rates for all rating categories rise and fall as the economic environment progresses through periods of expansion and contraction (see note 1). Moreover, any given economic cycle generally does not produce the same degree of stress in all sectors and regions. Accordingly, only over the very long term (e.g., covering multiple economic cycles), would we expect to be able to observe whether similarly rated issuers from different market segments actually experience similar long-term default frequencies. These observations inform future changes to our criteria and analytics.

## Secondary credit factors

12. Beyond likelihood of default, there are other factors that may be relevant. For example, one such factor is the payment priority of an obligation following default. Our ratings reflect the impact of payment priority in a very visible way: When a corporation issues both senior and subordinated debt, we usually assign a lower rating to the subordinate debt. For most issuers, the likelihood of default is exactly the same for both senior and subordinated debt because both default at the same time when an issuer goes into bankruptcy. A further example is the "structural subordination" of a holding company's debt to the debt of its operating subsidiaries.
13. Another secondary factor is the projected recovery that an investor would expect to receive if an obligation defaults. For example, our ratings on certain financial institution obligations and on lower

rated corporate obligations reflect adjustments for the expected recovery following default. (See note 2.)

14. A third secondary factor is credit stability. Some types of issuers and obligations are prone to displaying a period of gradual decay before they default. Others may be more vulnerable to sudden deterioration or default. In essence, some types of credits tend to give a warning before they default, while others do not. In addition, the likelihood of default for some types of credits may suddenly change because of changes in key aspects of the economic or business environment. For other credits, the likelihood of default may be less sensitive to changing conditions.
15. Creditworthiness is complex and while there is no formula for combining the different factors into an overall assessment, the criteria does provide a guide in considering these factors. Payment priority and recovery apply more often in the context of rating specific obligations than in rating issuers. Also, payment priority and recovery have increasing significance as likelihood of default increases (i.e., at lower rating levels). In contrast, credit stability has increasing significance as likelihood of default decreases (i.e., at higher rating levels). In addition, the relative importance of the several factors may wax or wane with changes in market conditions and the economic environment. The rating criteria for different types of credits detail the specifics of how payment priority, recovery, and stability factor into our analysis.
16. TRC's credit ratings are forward looking. That is, they express opinions about the future. Indeed, the issue that they address -- credit quality -- is at its core future oriented. Ratings at the lower end of the rating scale reflect our view as to the rated entity's vulnerability to cyclical fluctuations and, accordingly, generally address shorter time horizons and may reflect specific economic forecasts and projections. Conversely, ratings at the higher end of the rating scale generally address longer time horizons and are usually less reflective of forecasts or projections of what is likely to occur in the near term. Instead, they reflect greater emphasis of our view as to what might occur in unlikely (or highly unlikely) future scenarios.
17. Given the movement in economic and credit cycles, we expect ratings to change over time as the creditworthiness of rated issuers and obligations rises and falls. To address the inherent variability of creditworthiness, we maintain surveillance on our ratings. Our approach to changes in creditworthiness is to take prompt rating actions when we believe, based on our surveillance, that an upgrade, downgrade, or an affirmation is appropriate. Along with the ratings themselves, we strive to explain the basis for our analysis by publishing a clear rationale for the ratings we issue. In many cases, we not only describe our reason for assigning a particular rating, but also discuss future developments that could cause us to change it.

## Linking TRC's Scale to S&P's Global Scale

18. TRC's scale ratings provide a finer demarcation of credit risk among local obligors than is possible with Standard & Poor's global scale. Therefore, 'tw' symbols as a prefix are used to highlight TRC's rating scale.

19. TRC's scale credit ratings provide a forward-looking opinion of an obligor's creditworthiness (that is, issuer, corporate, or counterparty credit ratings) or overall capacity to meet specific financial obligations (that is, issue credit ratings), relative to that of other entities and specific obligations in Taiwan. In contrast to Standard & Poor's global scale ratings, TRC's scale rating opinions focus on a comparative credit risk analysis of active obligors within Taiwan.
20. TRC's scale credit ratings have the following major attributes:
- TRC generally adopts, on a mutatis mutandis basis, the Ratings Criteria used by Standard & Poor's notwithstanding that TRC may not republish such Criteria. TRC acknowledges, however, that some circumstances may exist or arise where the applicability of S&P criteria may not be appropriate, in its entirety, either because of TRC's range of credit rating services or the operating or legal environment in Taiwan. Where TRC deems that the circumstances are sufficiently material to warrant it, TRC will publish separate Criteria articles to clarify its position.
  - TRC's scale ratings highlight the relative creditworthiness of obligors and obligations in Taiwan, and focus on a comparative analysis of Taiwan's active obligors (this is in contrast to the all-encompassing international comparative context of S&P's global scale ratings).
21. We have developed a broad mapping guideline between the rating categories of TRC's scale and the rating categories of Standard & Poor's global scale. (See Appendix II for the mapping of two scales.) The mapping guideline has two major objectives, including to ensure ranking consistency between the ratings on the two scales, while allowing TRC's scale the scope to provide meaningful differentiation of credit risk among obligors active in the local financial markets; and to anchor TRC's scale to Standard & Poor's global scale measure of relative creditworthiness.
22. Reflecting the increased scope for differentiation of credit risk, TRC's scale ratings are more sensitive to changes in credit risk and, in turn, are likely to change more frequently and to a larger degree than S&P's global scale ratings. That is, a given change in the business or financial profile may affect an issuer's TRC's scale rating but not its S&P's global scale rating. Accordingly, ratings stability of TRC's scale ratings such as 'twAAA' would not be comparable with that of Standard & Poor's 'AAA'.

## Measuring Ratings Performance

23. As noted earlier, the key objective of TRC's ratings is rank ordering the relative creditworthiness of issuers and obligations. Accordingly, a key measure that we use for assessing the performance of our ratings is how well they have rank-ordered observed default frequencies during a given test period. That is, when our ratings perform as intended, securities with higher ratings should display lower observed default frequencies than securities with lower ratings during a given test period.
24. Our issuer performance studies have shown mostly strong rank ordering of default frequencies. (See Appendix III for TRC's ratings performance.) However, as noted above, economic cycles do not produce the same degree of stress in all market segments at any point in time. Accordingly, although we strive

for comparability in our ratings, we expect to observe less consistency in rank ordering of observed default frequencies among market segments. Only over very long periods -- covering multiple economic cycles -- would we expect to be able to observe whether similarly rated credits from different market segments actually experience similar long-term default frequencies.

25. Small sample sizes also sometimes affect measurements of actual default frequencies. Comparisons of default rates between sub-sectors that contain small numbers of credits can be distorted by small sample sizes and by idiosyncratic factors.
26. Beyond the primary measure of rank ordering, we secondarily consider whether ratings have effectively incorporated other aspects of creditworthiness. In that vein, we examine whether the observed default rate for each rating category during a given test period is higher or lower than has been historically observed during past periods of similar economic and financial conditions. We examine rating transitions and sudden defaults to consider the degree to which ratings have captured credit stability.

## Conclusion

27. TRC's ratings express forward-looking opinions about relative creditworthiness of issuers and obligations. Creditworthiness is a multi-dimensional phenomenon. We view likelihood of default as the single most important dimension of creditworthiness. We place the greatest emphasis on rank ordering default likelihood in applying our rating definitions, in developing rating criteria, and in rating specific issuers and obligations.
28. In addition, we place secondary emphasis on likelihoods of default as part of how we strive for comparability of ratings. In an indirect way, our consideration of default likelihood can be viewed as associating "stress tests" or "scenarios" of varying severity with the different rating categories. We do not expect to observe constant default frequencies over time; we expect observed default frequencies for all rating categories to rise and fall with changes in economic conditions.
29. Beyond likelihood of default, we also consider secondary dimensions of creditworthiness: payment priority, recovery, and credit stability. Those can become critical elements of how we apply our rating definitions in developing criteria for particular situations.
30. However, when we conduct studies to measure the performance of our ratings, we return to the touchstone of relative ranking of observed default frequency. We may measure and report on absolute default frequencies or on secondary factors, but our primary emphasis for performance measurement always remains the relative ranking of default frequency during any given study period.

## Notes

31. (1) We generally apply longer time horizons for our analysis of issuers/issues at higher rating levels. Even

so, this does not fully neutralize the effect of economic cycles.

32. (2) Although, as set forth in our published criteria, recoveries can be a factor in some of our ratings, our credit ratings are not intended to be indicators of expected loss.

## Appendix

### Appendix I- Excerpts from TRC's Ratings Definitions

#### Issuer Credit Ratings

A TRC issuer credit rating is a forward-looking opinion about the overall capacity of a debt issuer, guarantor, insurer, or other provider of credit enhancement ("obligor") to meet its financial obligations relative to other obligors active in the Taiwanese domestic financial markets ("obligors"). Such obligors may include corporates, government enterprises, financial institutions, and insurance companies, among other types of entities. Counterparty credit ratings are a form of issuer credit ratings.

Issuer credit ratings do not apply to specific obligations, as they do not take into account the nature and provisions of the obligation, its standing in bankruptcy or liquidation, statutory preferences, or the legality and enforceability of the obligation. In addition, it does not take into account the creditworthiness of the guarantors, insurers, or other forms of credit enhancement on the obligation.

#### Long-Term Issuer Credit Ratings

Applying to obligors' capacity to meet financial commitments over a time horizon of one year and over.

##### twAAA

An obligor rated 'twAAA' has an extremely strong capacity to meet its financial commitments relative to other obligors in the Taiwan market.

##### twAA

An obligor rated 'twAA' differs from the highest-rated obligors only to a small degree, and has a very strong capacity to meet its financial commitments relative to other Taiwanese obligors.

##### twA

An obligor rated 'twA' is somewhat more susceptible to adverse effects of changes in circumstances and economic conditions than higher-rated obligors. Still, the obligor has a strong capacity to meet its financial commitments relative to other Taiwanese obligors.

##### twBBB

An obligor rated 'twBBB' has an adequate capacity to meet its financial commitments relative to other Taiwanese obligors. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.

##### twBB, twB, twCCC, and twCC

Obligors rated 'twBB', 'twB', 'twCCC', or 'twCC' on the TRC rating scale are regarded as having high risk relative to other Taiwanese obligors. While such obligors will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposure to adverse conditions relative to other Taiwanese obligors.

##### twBB

An obligor rated 'twBB' has a somewhat weak capacity to meet its financial commitments relative to other

Taiwanese obligors. The obligor faces ongoing uncertainties or exposure to adverse business, financial, or economic conditions that could result in an inadequate capacity on the part of the obligor to meet its financial commitments.

#### twB

An obligor rated 'twB' has a weak capacity to meet its financial commitments relative to other Taiwanese obligors. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.

#### twCCC

An obligor rated 'twCCC' is currently vulnerable and is dependent upon favorable business and financial conditions to meet its financial commitments.

#### Plus (+) or minus (-)

The ratings from 'twAA' to 'twCCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative strength within the rating category.

#### twCC

An obligor rated 'twCC' is currently highly vulnerable to defaulting on its financial commitments.

#### twR

An obligor rated 'twR' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision, the regulators may have the power to favor one class of obligations over others or pay some obligations and not others.

#### SD and D

An obligor rated 'SD' (selective default) or 'D' has failed to pay one or more of its financial obligations (rated or unrated) when it came due. A 'D' rating is assigned when TRC believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due. An 'SD' rating is assigned when TRC believes that the obligor has selectively defaulted on a specific issue or class of obligations, but will continue to meet its payment obligations on other issues or classes of obligations in a timely manner.

## Appendix II- Mapping of TRC's Issuer Ratings Scale To S&P's Global Scale

Taiwan Ratings Corp. scale rating		Standard & Poor's global scale rating
Short-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

## Appendix III- TRC's Ratings Performance

Taiwan Average Cumulative Default Rates 1999-2009										
	--Time horizon (years)--									
(%)	1	2	3	4	5	6	7	8	9	10
twAAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
twAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
twA	0.29	0.61	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
twBBB	1.22	2.98	3.92	4.92	4.92	5.55	7.14	9.35	11.09	11.09
twBB	2.87	5.20	6.99	8.22	10.16	12.22	13.94	16.14	17.93	17.93
twB	3.13	9.81	13.28	13.28	16.89	21.26	31.76	48.82	61.62	N/A
twCCC/C	0.00	0.00	10.00	40.00	70.00	90.00	100.00	N/A	N/A	N/A
All rating scales	0.83	1.85	2.69	3.54	4.56	5.83	7.50	9.59	11.25	11.25

N/A--Not applicable. Source: Standard & Poor's Ratings Services Global Fixed Income Research; Standard & Poor's CreditPro® 7.72; Taiwan Ratings Corp.'s database.

Taiwan Average One-Year Transition Rates (1999-2009)										
From/to (%)	twAAA	twAA	twA	twBBB	twBB	twB	twCCC/CC	D	NR	
twAAA	83.78	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.05
twAA	2.49	92.83	1.56	0.00	0.00	0.00	0.00	0.00	0.00	3.12
twA	0.00	8.02	83.38	2.87	0.29	0.00	0.00	0.29	0.00	5.16
twBBB	0.00	0.41	12.20	72.76	2.03	0.00	0.00	1.22	0.00	11.38
twBB	0.00	0.00	1.15	14.37	58.05	1.15	0.57	2.87	0.00	21.84
twB	0.00	0.00	0.00	0.00	12.50	40.63	9.38	3.13	0.00	34.38
twCCC/CC	0.00	0.00	0.00	0.00	40.00	0.00	60.00	0.00	0.00	0.00

NR--Not rated. Source: Standard & Poor's Ratings Services Global Fixed Income Research; Standard & Poor's CreditPro® 7.72; Taiwan Ratings Corp.'s database.

## RELATED CRITERIA AND RESEARCH

- **Taiwan Ratings' Rating Definitions**, [www.taiwanratings.com](http://www.taiwanratings.com), Aug. 6, 2010
- The "Standard & Poor's Taiwan National Scale Rating Definitions" section of **Standard & Poor's Ratings Definition**, [www.standardandpoors.com](http://www.standardandpoors.com), May 3, 2010
- **Understanding Standard & Poor's Ratings Definitions**, [www.standardandpoors.com](http://www.standardandpoors.com), June 3, 2009
- **Understanding National Scale Ratings**, [www.standardandpoors.com](http://www.standardandpoors.com), April 14, 2005

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