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TOPIC 10 - Credit risk and Counterparty credit risk

## INTRODUCTION AND OBJECTIVE

This article attempts to discuss **some considerations** on **credit risk of a body corporate** and **counter party credit risk of a body corporate**, applicable to a national electricity body such as Tenaga National Berhad (TNB) and Perusahaan Listrik Negara (PLN). Also, I hope to **distinguish in this article the difference between credit rating of a body corporation and counterparty credit risk**. This article will discuss the use of credit ratings to evaluate both credit rating of a corporation and its counterpart credit risk. I shall use the credit ratings issued by the international rating agencies in this article. A national electricity body in most instances, may very likely to structure debt financing in **foreign denominations**, to finance its capex (power plants) and such debts instruments are rated international rating agencies. Likely, the **top three rating houses** are used, such as Moody, S&P and Fitch rating agencies. These are **paid research generally by the issuer of the debt instruments**, and there is academic discussion on this subject that discusses the "true independence" as this research houses conduct for a fee arrangement but it is not the intention of this article to deliberate of this but merely serve to provide educational information to the reader of this article.

## CREDIT RATINGS

These credit rating **measures** the **probability of default** and generally ratings could be classified into **two broad categories**, namely, as **investment grade** (**lower probability of default**) and **speculative grade** (**higher probability of default**) with more sub-categories within each grade. Appended below is a summary of the general conventions used by the rating houses, but note that there is **some slight variants in the manner of naming classification** between the rating houses but one thing is that **we could always Google from public domain to see the rating definitions** if we come across any reports issued by one of the three bodies. The rating results shall **translate to borrowing cost by body corporates or country**, as it is a form of pricing of risk. **Lower probability of default** shall translate to **smaller credit spreads** and conversely, **higher probability of default** shall translate to **larger credit spreads**.

	S&P and Fitch	Moody
Investment Grade	BBB and above (e.g. <b>BBB, A, AA, AAA</b> etc)	Baa3 and above (e.g. <b>Baa, A, Aa, Aaa</b> etc )
Speculative Grade	BB and below (e.g. <b>BB, B, CCC,</b> etc )	Ba and below (e.g. <b>Ba, B, Caa, Ca, C</b> etc )

### DIFFERENCE BETWEEN CREDIT RATINGS FOR A BODY CORPORATION AND SOVEREIGN CREDIT RATINGS

The top three international firms issues credit ratings for body corporates and countries / sovereign. Generally, the **measurement criteria for credit ratings for body corporates are more simplified than sovereign credit ratings** as criteria from **sovereign credit ratings** includes measurements of **macroeconomic criteria** as well, to evaluate the **ability to repay foreign debt obligations**. The measurement criteria that are used by body corporation to measure the ability to pay a loan instrument is substantially driven by the **Debt Serving Coverage Ratio, Leverage Ratio, Collateral Values, etc** while the credit ratings for sovereign debts, include assessment of **country risk** amongst others which were discussed in **Issue 7, dated 21 July 2015**.

**Q1** Do all these three bodies of rating houses issue **similar type** of rating for particular bond issued by a body corporate or country under evaluation?

Based on observation, with respect to **sovereign ratings** issued by the agencies **ratings are similar** (See response to Q2, point 3 on Commentary-Observation below (Case 1) ) **in the investment grade categories**, but **less so in the below investment-grade area**. (See response to Q3, point 3 on Commentary-Observation below (Case 2) )

## COUNTERPARTY CREDIT RISK

Counterparty risk is the risk that the potential receivables to an institution shall default. This is generally used in the evaluation of derivative instruments where the party who is in the money will bear the counterparty credit risk of non-payment by its counterpart. Credit risk is the risk that is experienced by a lender / financial institution that a borrower will default its payment.

Example:

Institutions	Types of risk	Explanation
TNB	Credit risk	This is the risk <u>experienced by the lenders of TNB</u> , that TNB may default its debt obligations.
	Counterparty risk	Counterparty risk is the risk <u>experienced by TNB</u> when its customers of TNB will default its payment. This is a bit difficult to measure as it is a large pool.
PLN	Credit risk	This is the risk <u>experienced by the lenders of PLN</u> , that PLN may default its debt obligations.  As PLN is a government owned entity, we shall expect that the credit rating of PLN is marginally lower or the same as credit rating of Indonesia as a country. This is especially so, if PLN's debt obligations are <u>guaranteed by the government of Indonesia</u> .
	Counterparty risk	Counterparty risk is the experienced by PLN that customers of PLN will default its payment. This is a bit difficult to measure as it is a large pool.

		However, if the body corporate is an Independent Power Plant (IPP), as all the electricity generated by the IPP is sold to PLN, we can measure the counterparty credit by using the credit rating of PLN as a proxy.
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**Q2.** How is Malaysia's credit rating compared with TNB?

	Malaysia's credit rating Case 1	Interpretation / Comments on country rating by different rating agencies. Case 1	TNB, Long Term Foreign Debt Rating	Interpretation / Comments on comparison between country rating and TNB's long term foreign debt rating
Standard & Poor	A-	Consistent in the lowest category of A rated, in the investment grade	BBB+	Country rating is one notch higher than TNB's long term foreign debt rating
Fitch	A-		Not Available	Not sufficient information to comment.
Moody	A3		A3	Consistent

Source: From Tenaga National Bhd's website (<http://www.tnb.com.my/>) and <http://www.tradingeconomics.com/country-list/rating> dated 2 August 2015

**COMMENTARY - OBSERVATION.**

1. Country rating is one notch higher than TNB's long term foreign debt rating or consistent for both Malaysia and TNB.
2. The author is of the opinion that this is an interesting observation, as logically the influence of country rating of Malaysia should have a lesser influence of credit rating of TNB as the debts of TNB are guaranteed by body corporation itself rather than by Malaysian government. The results seems to indicate that even TNB is a privatised enterprise, the ratings are influenced by credit rating of sovereign Malaysia as a country. The author wishes to emphasize that this is

just an observation and the author did not conduct any further analysis to explore the reasons, as the main aim of this article is educational.

3. The country rating of Malaysia is consistent amongst all the three rating houses which is an observation noted if ratings are in the investment grade.

**Q3.** How is the Indonesia's country credit rating compared with PLN?

	Indonesia's Credit rating Case 2	Interpretation / Comments on country rating by different rating agencies. Case 2	PLN, Long Term Foreign Debt Rating	Interpretation / Comments on comparison between country rating and TNB's long term foreign debt rating
Standard & Poor	BB+	At the highest category in the non investment grade	BB	Country rating is one notch higher than TNB's long term foreign debt rating
Fitch	BBB-	Consistent in the lowest category in the investment grade	Not Available	Not sufficient information to comment.
Moody	Baa3		Baa3	Consistent

Source: <http://www.tradingeconomics.com/country-list/rating> dated 2 August 2015 and annual report of PT PLN (Persero) 2014 page 18.

### COMMENTARY - OBSERVATION.

1. Country rating is one notch higher than PLN's long term foreign debt rating or consistent for both Indonesia and PLN.
2. The author is of the opinion that this is logical as the influence of country rating of Indonesia should have a significance influence of credit rating of PLN as most foreign debts of PLN are guaranteed by government of Indonesia.
3. The country rating of Indonesia is less consistent amongst all the three rating houses which is an observation noted if ratings are in the speculative grade.

### Learning Points.

1. Appreciate the use of **credit ratings** issued by rating agencies as a measurement of ability to repay debt obligations. **Higher rating, eg AAA, means a low risk of default** while a **lower rating, eg. CCC, means a high risk of default**. A low risk of default shall translate to a lower funding cost (lower credit spread) and conversely a high risk of default shall translate to a higher funding cost (higher credit spread).
2. **Naming conventions are different by different the three international rating agencies** and all these agencies issues credit reports for a **fee**. (Normally such ratings are paid research by the issuer of instruments).
3. The credit rating of PLN is **marginally lower or the same as credit rating of Indonesia as a country**. The author is of the opinion that this is logical as the **influence of country rating of Indonesia** should have a significance influence of **credit rating of PLN as the debts of PLN are guaranteed by government of Indonesia**. Meaning, in the event of default of debt instruments issued by PLN, the lenders can enforce a claim against the government of Indonesia and **hence the relationship between between credit rating of PLN and the government of Indonesia**.
4. The importance of credit rating as it is used as a way to price the risk of default. Example:- Higher rating, eg **AA**, means a **low risk of default**, translates to a **lower credit spread**, while a lower rating, eg. **BBB**, means a **higher risk of default** and translates to a **higher credit spread**.
5. **Not all credit rating agencies will issue the same type of credit rating for a body corporate / country**. Generally, the observation of **consistency is observed if the debt is rated in investment grade but less consistent in non-investment grade (speculative grade)**
6. For the assessment of **counter party credit risk of Independent Power Plants**, credit ratings for **PLN** and **TNB** can be used as a source of reference as these two bodies are the buyer of electricity of for IPP in **Indonesia** and **Malaysia** respectively. However, **we could not use apply the same technique** in assessment of counter party credit risk for PLN and TNB in **as the pool of customers are a general pool of large number of accounts** for both PLN and TNB.

THANKS FOR READING.

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