

Submission to the AER on the Debt Risk Premium

Orion Economic Services

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1.0 AER Questions for stakeholders

A brief outline of Orion's position is given below in response to the questions raised by the AER with more detail provided in the later texts giving my position in more detail.

1. Given the paucity of available data, the fact that CBASpectrum recently ceased publication of its fair yield curve, the characteristics of the recently issued APT bond and the Tribunal's recent decision on the DRP issue, the AER intends to examine the yields from the recently issued APT bond and those derived from Bloomberg in terms of their appropriateness in estimating the DRP for the Victorian DNSPs' distribution determinations. Please provide comments on the AER's intended process.

Orion does not object to the use of actual bonds being used providing such bonds are true and fair representatives of their credit ranking. However we do not support the use of the Bloomberg rates at all for regulatory purposes as the data is biased. (see discussion below in Section 3).

2. Given the uncertainty in determining whether yields from Bloomberg or from the APT bond are more appropriate in setting the DRP, the AER intends to take an average of the two. Please provide comments on the AER's intended methodology.
3. Do stakeholders agree with the AER's conclusions regarding information from other sources?
4. Are there other sources of relevant information the AER has not considered above?
5. Do stakeholders consider it necessary to use an alternative method for estimating the DRP during days in averaging periods where APT data are not available?

Orion proposes a different model for regulatory decisions based on an average of relevant corporate bond and swap rates recognising that a change in the NER may be necessary to implement the new approach. However, given the use of such swap interest rates by many distributors it is more theoretical acceptable to use an average of the two markets used by Distributors, Such rates should be based on as wide a selection of both BBB+ bonds and actual bank swap rates as possible. Such an approach could also use Reserve Bank data on bond spreads to check the above estimates although this data are for shorter terms than 10 years.

6. Do stakeholders consider there is justification for making adjustments to the APT bond data to generate information during days where bond data are not independently available?

Orion proposes to utilise the bond data with relevant swap rates used by Distributors for similar capital raisings as an average of the two when information on bonds is available and useful and if not available the AER can rely on the swap rates with checks by averaging different banks and checking rates estimated by use of the Reserve Bank data on bond spreads.

Such an approach may require an amendment of the NER which could be achieved by amending Clause 6.5.2 (e) to state after the words "*and the annualised Australian benchmark corporate bond rate for corporate bonds*" add the words "*and/or Australian bank swap interest rates*".....)

2.0 The Law on the Issue of the Debt Margin

There are numerous parts of the NER which impinge on the issue of the Debt Margin.

For example, clause 6.5.2(e) of the NER defines the DRP as:

...the premium determined for that regulatory control period by the AER as the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk free rate and a credit rating from a recognised credit rating agency.

Regarding the credit rating, during the WACC review the AER applied a best comparator approach and adopted a credit rating of is BBB+ for determining the DRP. The SORI also determined that the nominal risk free rate would be determined on a security with a 10 year maturity.

The cost of capital is also described under clause 6.5.2(b) as

“the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the distribution business of the provider”.

In addition, the AER must take into account the revenue and pricing principles when exercising a discretion in making those parts of a distribution determination relating to direct control services.

The revenue and pricing principles are set out in section 7A of the NEL. Those principles relevant to the current situation include:

- (2) A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in —
 - (a) providing direct control network services...
- (3) A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to direct control network services the operator provides. The economic efficiency that should be promoted includes—
 - (a) efficient investment in a distribution system or transmission system with which the operator provides direct control network services; and
 - (b) the efficient provision of electricity network services; and
 - (c) the efficient use of the distribution system or transmission system with which the operator provides direct control network

The AER also notes that the Australian Competition Tribunal’s (ACT) recent decision highlighted the need to take account of a wider variety of information sources when scrutinising alternative methods to estimate yields on long dated benchmark corporate bonds.

3.0 The Evidence on Bloomberg Rates as a Biased Estimator

Bloomberg and CBASpectrum are the only data services that produce ‘fair value’ estimates for debt with a specific credit ratings and maturities for Australian corporate bonds. A ‘fair value’ estimate is an estimate of some form of ‘average’ or ‘representative’ yield for a bond of a specific credit rating and yield to maturity. In this sense an accurate or unbiased ‘fair value’ estimate can be equated with the concept of a ‘benchmark rate. Such an estimate is therefore useful for regulatory purposes although both rates setting agencies and were not established for such purposes. With the

elimination of the CBA Spectrum index the issue of using only the Bloomberg index is subject to some doubt. Indeed the AER itself is critical of the Bloomberg index:

Similarly, the lack of transparency in Bloomberg's estimates does not allow one to conclude whether it is reflective of the benchmark corporate bond. It is further noted that there is a clear divergence in yields from both sources, which is not readily explained by other information on long dated bonds

In a major review of the two benchmarks a paper by CEG was extremely critical of the Bloomberg approach such that if accurate it would imply that it should not be used for regulatory purposes.¹

- Bloomberg uses discretion and a proprietary approach in arriving at its pricing for individual bonds. The effect of the exercise of this discretion on its estimated pricing for individual bonds is unknown;
- Bloomberg appears to limit the construction of its fair value curves to rely solely on information contained in bond prices within that credit rating. This can be advantageous where that bond pricing data is plentiful. However, in the current market circumstances when bond pricing data is scarce it can be problematic.
- Bloomberg uses discretion in determining which of these bonds it will use to determine the fair value curves. The basis for this discretion is unknown. The effect of this discretion in the current environment appears to be to reduce estimated fair value curves.
- To the extent that this reflects a Bloomberg policy of estimating fair value curves for liquid corporate bonds then it is likely to make the Bloomberg fair value curves an inappropriate proxy for the benchmark rate in a market where most corporate bonds are illiquid in that it will fail to replicate major changes to market demand and supply conditions.
- Bloomberg uses discretion in the construction of the fair value curves (both within periods it has data and beyond the periods for which it has data). The effect of this discretion is to reduce the estimated fair value spread to CGS for long dated bonds. It is unclear what basis Bloomberg might have for assuming that this is appropriate.

Discretion in the Choice of Bonds Included by Bloomberg

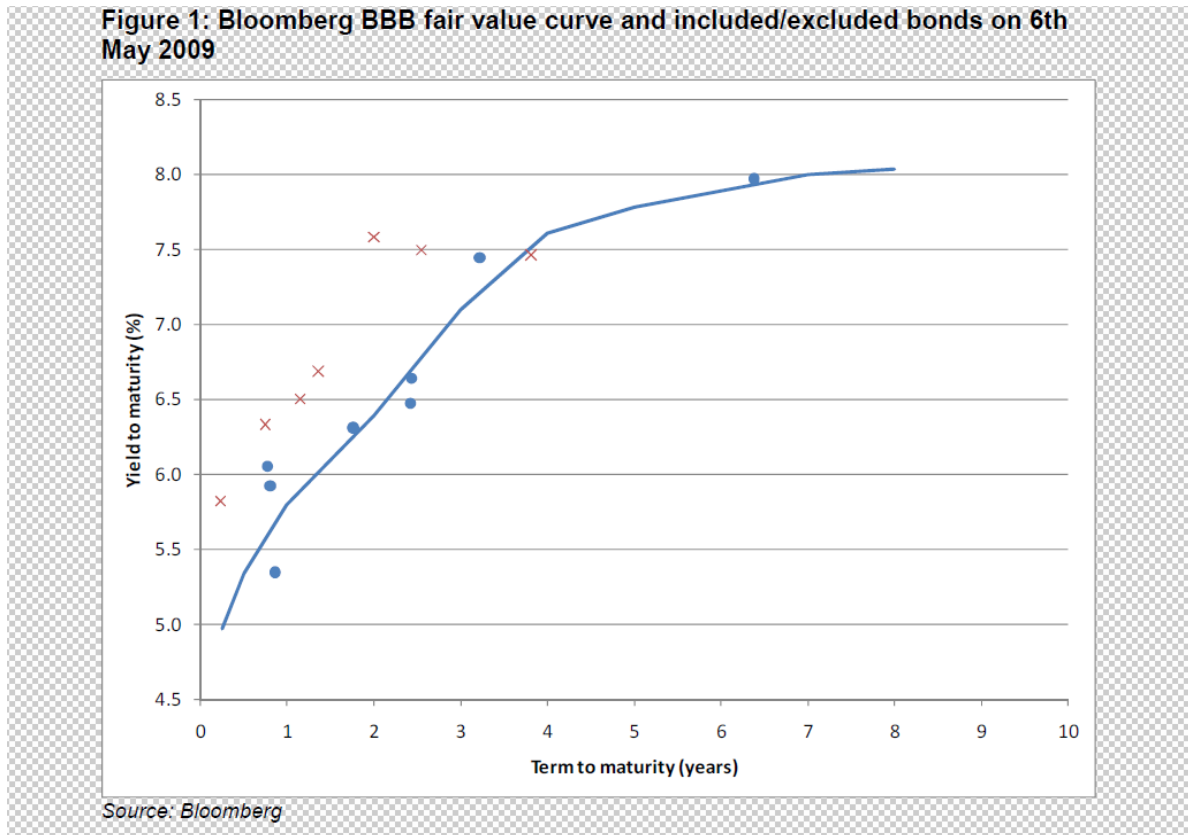
The graph below is presented by CEG (for 6 May 2009) to show that Bloomberg uses some discretion in the choice of which bonds are included in the benchmark. Only the blue dots represent the bonds that Bloomberg used to determine the fair value curve. The orange crosses represent bonds that were excluded by Bloomberg from the generation of that curve. CEG notes that the reasons for rejecting certain bonds are that they are in some sense termed "illiquid".

As a result of this analysis CEG states that:

In the current circumstances I consider that this would make the Bloomberg fair value curve a biased estimate of the 'average' or 'typical' cost of debt for BBB bonds. Bloomberg appears to only use bonds with Bloomberg Generic Pricing (BGN) to determine its fair value curve. However, the above quote implies that its BBB fair value curve is, in reality, a fair value curve for liquid BBB bonds. In ordinary circumstances where there is a relatively small liquidity premium then this may be less problematic. But in the current circumstance of a large number of illiquid corporate bonds, by focussing only on the most

¹ CEG. Estimating the cost of 10 year BBB+ debt A report for Country Energy by Tom Hird, June 2009. Sourced from the AER website.

liquid bonds the Bloomberg methodology would give rise to a biased estimate of the true average cost of debt for bonds of any given credit rating.



Discretion used in fitting curves

CEG also argues that the Bloomberg approach also uses discretion on setting the shape of the yield curve in that once Bloomberg has settled on a set of bonds used to generate its fair value curves Bloomberg uses further discretion to generate a 'best fit' to that data and that this discretion leads to other biases in the index.²

4.0 Does Bloomberg's Index Respond to Changes in Demand and Supply?

A relevant test of the appropriateness of the fair value estimates produced by Bloomberg and CBASpectrum is to compare the effect that the global financial crisis has had on these estimates. As discussed previously, it is widely agreed by market participants and commentators that the financial crisis has caused the yields and the premia on corporate bonds to increase. For example, the RBA noted in its November Statement of Monetary Policy that:

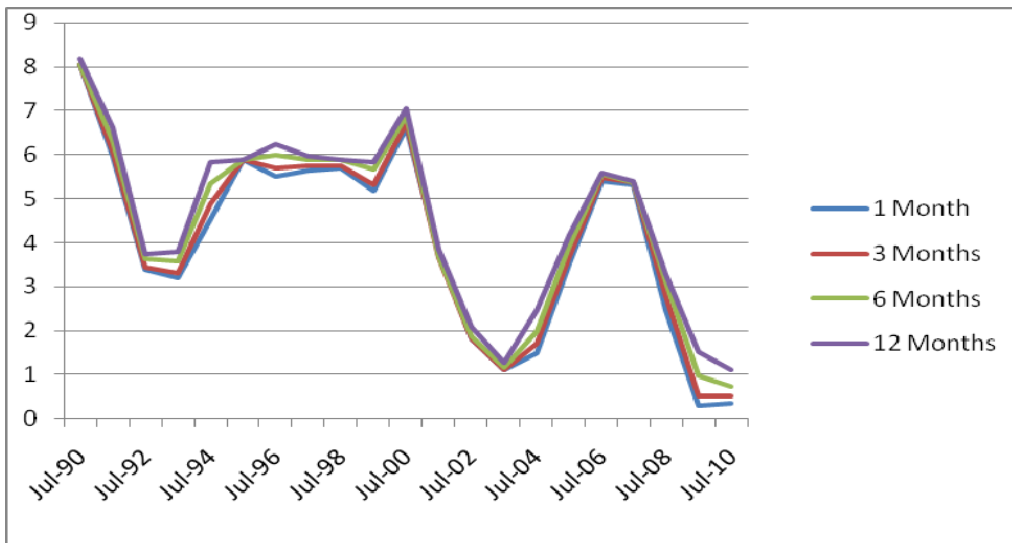
The deterioration of credit market conditions and the failure of several large financial institutions saw corporate debt yields increase significantly through September and October as default risk concerns escalated. Spreads on corporate debt surpassed their mid-March highs and 2000 peaks. One would therefore expect fair value BBB+ bond yields to increase over the period September and October 2008.

² CEG op cit, p 16.

The following two figures allow one to compare the movements in both estimates of 10 year BBB+ fair value yields and the associated spreads to CGS yields.

This impact of the deterioration is clearly visible in Graph 1 below of the LIBOR. The important interest rate that applies to international wholesale funds is the London Interbank Offered Rate (LIBOR) which is the rate at which banks offer to lend money to one another in wholesale money markets in London. It is also a standard financial index used in U.S capital markets. It is calculated each day by asking a panel of major banks what it would cost them to borrow funds for various periods of time and in various currencies, and then creating an average of the individual bank's figures. The Graph clearly shows the rise in the LIBOR during the Global Financial Crisis during 2008 and 2009.³

Graph 1: LIBOR Interest Rates July 1990 to July 2010. Various Terms

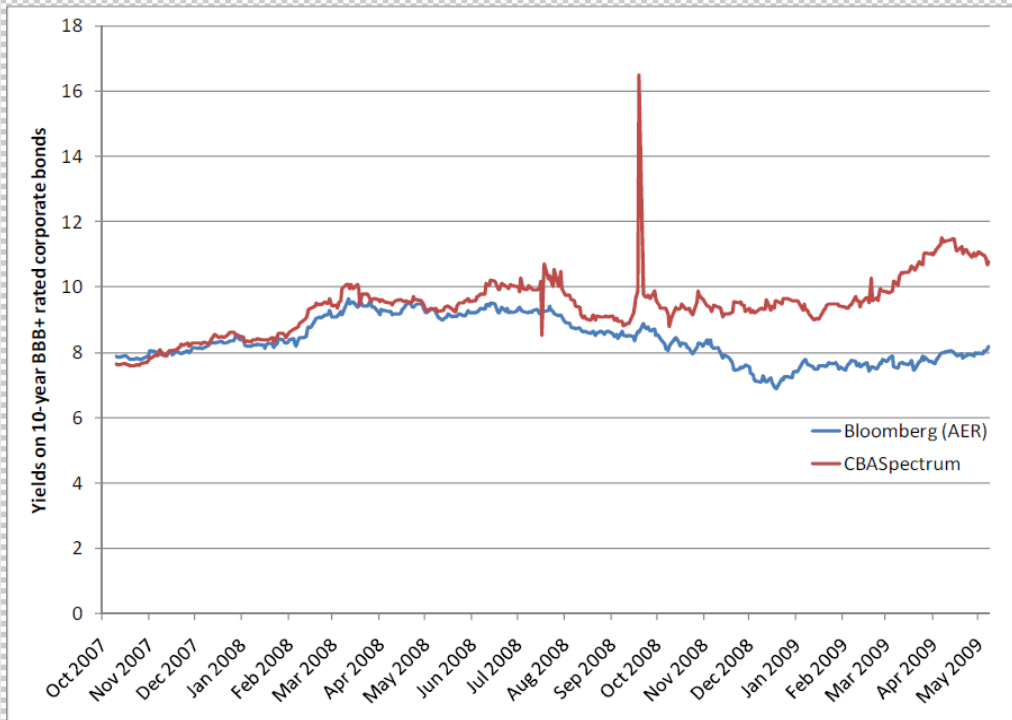


On the basis of CEG's Figures 12 and 13 below, they clearly shows that Bloomberg's estimated yields on 10-year BBB+ debt appear to be falling since the escalation of the crisis in September 2008, with the result that debt premia have been largely unchanged over this period. As one of the major tests of an unbiased estimate is it should rise and fall in tune with changes in demand and supply. The fact that Bloomberg fails this test means it should not be used for regulatory purposes by the AER.⁴

³ Orion Economic Services for the Consumer Action Law Centre Review of the Revised Victorian Distribution Network Service Providers Proposals in Response to the AER Draft Decision for the 2011-2015 Regulatory Period, August 2010, p.10.

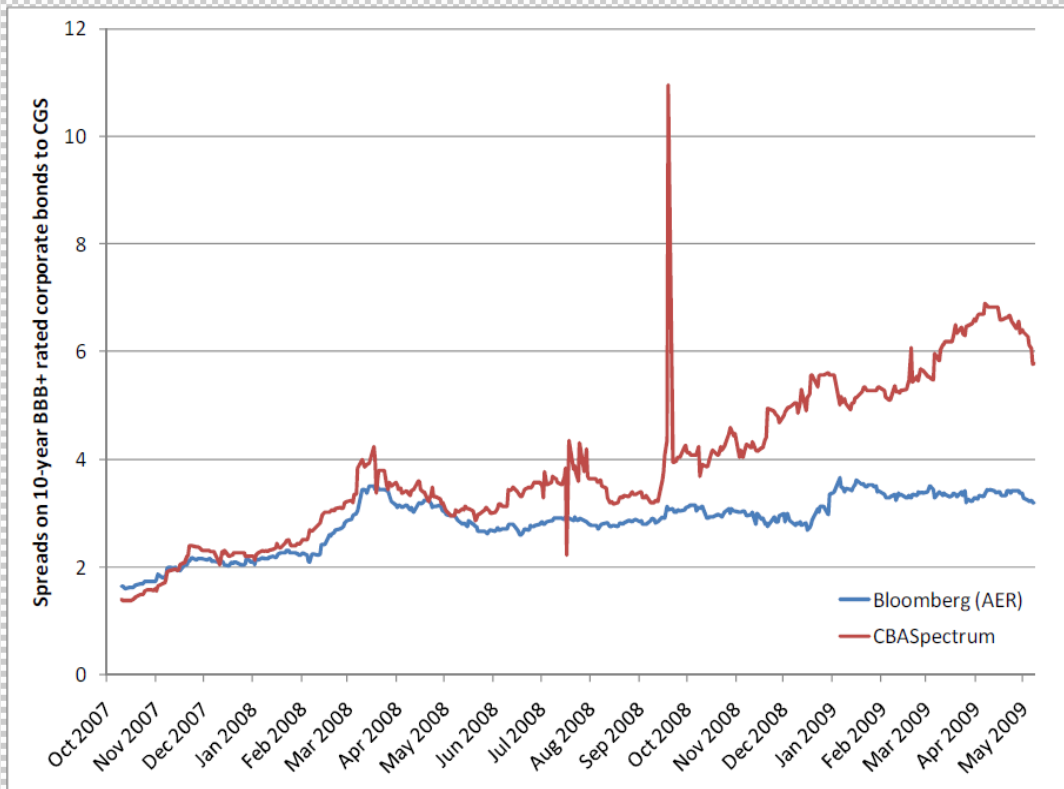
⁴ CEG, op cit p. 47 and 48.

Figure 12: Estimated yields on 10-year BBB+ corporate bonds



Source: Bloomberg, CBASpectrum

Figure 13: Estimated spreads to CGS on 10-year BBB+ corporate bonds



Source: Bloomberg, CBASpectrum

5.0 The Issue of Swap Interest Rates

Table 1 below is from a report to the Energy Users Association of Australia by Bruce Mountain titled Analysis of the Australian Energy Regulator’s assessment of the Debt Risk Premium in its Draft Decision on price controls for the period 2010/11 to 2015/16 for the Victorian electricity distributors, 13 August 2010. It clearly shows that Distributors use swap rates possibly more than they use corporate bonds. The submission by Bruce Mountain strongly argued for using swap rates for regulatory purposes.

Table 1⁶. Actual cost of debt for Victorian distributors

Date	Company	Term (years)	Cost of debt (%)	Implied DRP (basis points)
5-Feb-10	SPN	5.5	5.64	-1
4-Jun-09	SPN	3	5.69	4
7-May-09	SPN	3	5.69	4
29-Apr-09	DBP (DUET)	3	6.28	63
29-Apr-09	DUET	5	6.73	108
25-Mar-09	DUET	3	5.98	33
9-Dec-08	DUET & SPN	5	6.35	70
10-Nov-08	Spark	2/3	5.73	7.5
Average				36

(Data sources: Credit Suisse, 8 February 2010, Equity Research, “SP Ausnet” Table 2; Average monthly 90 day BBSW from www.FIG.com.au, risk free rate from AER Draft Decision).

Given that swap rates are used by regulated energy companies it is doubtful that to ignore such rates for regulatory purposes is inconsistent with the NER especially the revenue and pricing principles in Part 7A of the NEL.

However Orion notes that the terms in the above table are for much less than ten years required by the NER and that either lower terms should be used for swap rates or they would need to be gathered for 10 years. It may be better to survey all energy companies as to how they gather their total debt and use it to vary the NER or the NEL to better reflect reality and to ensure that the 7A pricing principles are complied with.

6.0 The Choice of Markets for Bonds

It is clear that the Bloomberg data is for secondary debt markets as evidenced by a quote from the CEG paper:

This view is supported by Bloomberg staff in a response to Victorian electricity distribution businesses who have asked whether a new domestic corporate BBB+ bond might be issued at a margin over the "BBB" fair market yield. Bloomberg advised that:

“I am afraid that this is a question better asked of a Debt Capital Markets Desk. Bearing in mind that the curves are representative of secondary market prices and trading sizes, new issues have nearly always been issued at a premium to this curve. My experience has been that the premium has increased during this period of market turbulence as both Buy and Sell side clients have demanded a greater risk premium.”⁵

⁵ CEG, op cit, p. 14

While the NER is silent about which market is used it does present problems which need to be clarified as different bond markets imply different industry costs. Orion proposes a change to the NER to clarify this situation of which market that energy companies use for their bond issues as costs vary between different markets.