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# Estimating the DRP: Review of the Powerlink Draft Decision

A Report for TransGrid

20 February 2012

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# Contents

# 1. Introduction

This report has been prepared by NERA Economic Consulting (NERA) on behalf of TransGrid. Its subject is that of the draft decision[1] made by the Australian Energy Regulator (AER) on a particular element of the weighted average cost of capital (WACC) to be applied to Powerlink. In particular, we have been asked to consider whether the approach to estimating the debt risk premium (DRP) set out in the AER's draft decision is likely to produce a robust estimate of:

> the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a BBB+ credit rating from Standard and Poor's and a maturity equal to that used to derive the nominal risk free rate.

The above criterion reflects the requirements of clause 6A.6.2(e) of the National Electricity Rules (NER) and the AER's associated *Statement of the revised WACC parameters* (transmission), published in May 2009 (the WACC statement).

The remainder of this report is structured as follows:

- section two summarises the approach to estimating the DRP in the AER's draft decision on the WACC to be applied to Powerlink;
- section three details what we conclude to be a number of inadequacies with the AER's proposed approach to estimating the DRP for Powerlink; and
- section four concludes.

[1] Australian Energy Regulator, *Draft decision, Powerlink transmission determination, 2012-13 – 2016-17*, November 2011 (hereafter: 'draft decision').

# 2. Draft Decision on the DRP

In its revenue proposal submitted to the AER, Powerlink calculated a DRP of 4.34 per cent based on a benchmark term to maturity of 10 years and a credit rating of BBB+.[2] The AER's draft decision is to reject Powerlink's estimate of the DRP in favour of a DRP of 3.19 per cent, which it calculated using a different method from that used by Powerlink.[3]

This section of our report describes the different approaches used by Powerlink and the AER, and the AER's reasoning for rejecting Powerlink's methodology.

## 2.1. Powerlink's proposed DRP

Given a benchmark term to maturity of 10 years and a credit rating of BBB+ (as prescribed by the AER in its WACC statement), Powerlink proposed to estimate the DRP by taking the average of two Bloomberg BBB rated fair value curves (FVCs) – namely, the seven year FVC and the five year FVC, both extrapolated to a term of maturity of 10 years.[4]

The extrapolation of the two Bloomberg BBB rated FVCs was achieved by:

- adding the rise in the last recorded 10 year Bloomberg AAA DRP (from 7 to 10 years) to the 7 year Bloomberg BBB DRP; and
- adding the rise in the last recorded 10 year Bloomberg AAA DRP (from 5 to 10 years) to the 5 year Bloomberg BBB DRP.

This resulted in a DRP estimate of 4.34 per cent, representing the average of:

- an upper value of 4.56 per cent based on the extrapolation of the 7 year Bloomberg BBB DRP; and
- a lower value of 4.11 per cent based on the extrapolation of the 5 year Bloomberg BBB DRP.

The central estimate of 4.34 per cent was then checked against broader bond information as well as alternative approaches to estimating the DRP.

## 2.2. Rejection of Powerlink's proposed DRP

In its draft decision, the AER rejected Powerlink's proposed DRP of 4.34 per cent on the basis that it was not satisfied that the method used by Powerlink was appropriate. The AER also rejected Powerlink's reasonableness checks of its DRP estimate. We provide a detailed explanation of the AER's reasoning behind these rejections below.

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2 Draft decision, page 221.

3 Draft decision, pages 220-221.

4 Draft decision, page 213.

### 2.2.1. Rejection of DRP approach

The AER took the view that Powerlink's reliance on the Bloomberg BBB rated FVC to calculate the DRP was a second-best alternative to using available market data.[5] The AER states that the Bloomberg FVC is not a predictive source of information and, as such, it should only be used where market data is unavailable.[6]

The Bloomberg FVC is derived from market estimates that are reconciled with observed yield data, with the methods used to determine these yield estimates unable to be established by third parties. The AER states that since the method and data used to determine the Bloomberg FVC is not transparent, it is not possible to "to gauge the efficiency of the underlying estimates, or to what extent they reflect the available market observed data".[7]

Given this stated concern, the AER has undertaken an analysis of the BBB rated five and seven year spreads over the period January 2002 to July 2010, as derived by the Bloomberg FVC.[8] The implied DRP (in basis points) for each of these FVCs increased notably over the period 2007 to 2009 and remained at this level until July 2010 – the end of the AER's period of analysis. The AER states that while these FVCs have remained at historical highs, economic commentary would suggest that there has been an improvement in Australian debt market conditions – which, it implies, are not reflected in the Bloomberg FVCs.[9]

Finally, the AER expresses concern at the date of publication of the FVC spread data. Powerlink used the last recorded 7-10 year AAA FVC spread to extrapolate the seven year BBB FVC.[10] However, Bloomberg ceased publishing the seven and 10 year AAA FVCs in June 2010, implying that this data source will be approximately two years old at the time the AER releases its final decision. By using these data, Powerlink is assuming that the spreads between the FVCs of different credit ratings have not changed since June 2010, yet the AER states that "Powerlink has not provided any assessment to support the reliability of this assumption in its revenue proposal".[11]

### 2.2.2. Rejection of reasonableness checks

Powerlink engaged PricewaterhouseCoopers (PwC) to estimate its DRP and also to undertake reasonableness checks on the extrapolation of the Bloomberg BBB rated FVC. PwC undertook the reasonableness analysis by conducting three tests:[12]

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5 Draft decision, page 222.

6 Draft decision, page 226.

7 Draft decision, pages 225-226.

8 Draft decision, page 227.

9 Draft decision, page 227.

10 Draft decision, page 230.

11 Draft decision, pages 229-230.

12 Draft decision, pages 234-237.

- straight-line extrapolation – the seven year Bloomberg BBB rated FVC was extrapolated using a straight-line approach, ie, the spread between the five and seven year BBB rated FVCs was extended out to 10 years. The AER rejected this analysis on the basis that it considered it to be flawed.
- linear regressions – a series of linear regressions were performed to test the reasonableness of the extrapolation methodology. However, the AER contends that this analysis does not support the reasonableness of Powerlink's proposed DRP.
- paired bonds analysis – PwC used a sample of 18 bonds from nine issuers and, for each pair, the DRP of the shorter term bond was subtracted from the DRP of the longer term bond. This spread is then divided by the difference in term to give an increase in the DRP per year. The five and seven year Bloomberg BBB rated FVCs were then extrapolated by the observed average annual increase in the DRP. However, the AER rejected PwC's analysis on the basis that – amongst other things – it "relies on assumptions about the linearity of yields that are contradicted by the data it used".

## 2.3. Alternative DRP methodology adopted by the AER

The AER proposes to estimate the DRP using a different approach from that of Powerlink. Applying the same benchmarks used by Powerlink – a term to maturity of 10 years and a credit rating of BBB+ – the AER estimated the DRP by reference to the reported yields on a sample of bonds. [13]

### 2.3.1. Selection of bond sample

The AER selected a sample of bonds that it contends are representative of a benchmark 10 year, BBB+ rated Australian corporate bond. Specifically, the AER's sample consisted of those bonds that met all of the following conditions: [14]

- Australian domestic corporate issuances;
- received a rating of either BBB, BBB+ or A- by Standard and Poor's;
- have between seven and 13 years remaining term to maturity; and
- for which yield data are available from Bloomberg or UBS.

Further, in developing its bond sample, the AER *excluded* the following financial products:[15]

- callable bonds[16] – such bonds have non-standard features and so their yields require adjustments to determine the fixed rate equivalents. However, the AER does not consider that "sufficiently reliable adjustments are feasible", and so it excluded callable bonds from the sample; or

[13] Draft decision, page 215.

[14] Draft decision, page 215.

[15] Draft decision, pages 217-219.

[16] Callable bonds are bonds that are able to be redeemed prior to maturity by the issuer. It is typical for a premium to be paid to the bond owner if the bond is redeemed early.

- subordinated debt[17] – the yields on subordinated debt are higher than yields on senior debt to account for the greater risk to principal repayment. The AER contends that such debt should be not included in the sample given that it would "introduce an upward bias to the DRP estimate"; or
- Bloomberg BBB rated FVC – the FVC is not a predictive source of price information and so does not meet the AER's condition of using observed bond data. Further, the AER contends that the Bloomberg seven year BBB rated FVC "does not currently reflect the available market evidence for long dated bonds, or the stated views of other independent market commentators" and that it "does not reflect the prevailing cost of debt for the benchmark Australian corporate bond".

### 2.3.2. Calculation of Powerlink's DRP

Given the sample of bonds that meet all of its conditions, the AER calculated the DRP for each bond based on its annualised spread.[18] The DRP to apply to Powerlink was then determined as the simple arithmetic average of the DRPs of the sample bonds.[19] In explaining the use of using a simple arithmetic average as opposed to a weighted average, the AER states that:[20]

> The AER has applied a simple average on the basis that credit ratings and terms to maturity are imprecise indicators of expected yield. A simple average will equally reflect the DRPs of bonds deemed comparable to the benchmark. In comparison, a weighted average approach would require certain assumptions about the distribution of bond terms or credit ratings.

Table 2.1 below reproduces Table 5.4 of the AER's draft decision and sets out the sample of bonds – and their corresponding DRP's – used in determining the DRP to apply to Powerlink.

[17] Claims on assets of subordinated debt are ranked below that of other non-subordinated debt.

[18] Draft decision, page 216.

[19] Draft decision, page 216.

[20] Draft decision, page 216.

**Table 2.1**
**Sample of Bonds Used by the AER to Calculate the DRP**

| Bond Issuance | Term to Maturity (years) | S&P Credit Rating | DRP (%) |
|---|---|---|---|
| APA Group | 8.8 | BBB | 3.09 |
| Brisbane Airport | 7.7 | BBB | 2.67 |
| Sydney Airport | 10.1 | BBB | 3.81 |
| Sydney Airport | 11.0 | BBB | 3.90 |
| Dalrymple Bay Coal Terminal | 9.7 | BBB+ | 4.30 |
| Dalrymple Bay Coal Terminal | 11.2 | BBB+ | 3.83 |
| Coca Cola Amatil | 10.0 | A- | 1.59 |
| SPI Electricity and Gas | 9.5 | A- | 2.63 |
| Stockland Trust | 9.1 | A- | 2.91 |
| **Average** | **9.7** | | **3.19** |

*Draft decision, Table 5.4, page 224.*

The AER contends that using observed yield data to estimate the DRP provides the best insight into the prevailing market perception of investors and, by taking the average, any differences between the sample bonds and the benchmark assumptions will be alleviated to an extent.[21] The AER therefore concludes that the sample based approach it adopts provides an appropriate estimate of Powerlink's DRP.

### 2.3.3. Sensitivity analysis

The AER undertakes a sensitivity analysis on some of the conditions it places on the bonds to be used in the sample. In particular, it assesses the inclusion of: BBB, BBB+ and A- rated bonds; bonds with between seven and 13 years remaining term to maturity; and floating rate bonds (in addition to fixed rate bonds). Details of the sensitivity analysis for each of these parameters are set out below.

#### 2.3.3.1. BBB, BBB+ and A- rated bonds

Only two bonds in the averaging period[22] that meet the AER's sample conditions (as set out in section 2.3.1 above) were rated BBB+. The AER deems that a sample of two is insufficient to form a robust estimate of the DRP and so extends the sample to include BBB and A- rated bonds.[23]

[21] Draft decision, page 221.

[22] The AER used the 40 days moving average for observed bond yields for the period ending 14 October 2011 (see Draft decision, page 221).

[23] Draft decision, page 232.

#### 2.3.3.2. Seven and 13 years remaining term to maturity

The AER undertakes its DRP analysis using three different ranges of bond maturity, each symmetric around the benchmark maturity of 10 years. In particular, the AER selected samples based on bonds falling into the following maturity ranges:[24]

- 9 to 11 years;
- 7 to 13 years; and
- 5 to 15 years.

As the term to maturity range is widened, the resulting sample size increases; however, this also causes the average term to maturity of the bonds to fall further from the benchmark of 10 years. The AER considers that a sample that includes bonds with a term to maturity of seven to 13 years provides "sufficiently robust sample size, an average term to maturity that closely matches the benchmark, and a conservative credit rating distribution".[25]

#### 2.3.3.3. Floating rate bonds

The AER includes in its sample bonds with fixed interest rates and those with floating rates that can be reliably converted into a fixed rate.[26] In undertaking a sensitivity analysis that considered both the inclusion and exclusion of floating rate bonds, the AER concluded that the inclusion of floating rate bonds "provides a more robust sample that closely reflects the benchmark term and credit rating".[27]

[24] Draft decision, page 233.

[25] Draft decision, page 233.

[26] Draft decision, page 216.

[27] Draft decision, page 233.

# 3. AER's Proposed Approach

The AER's analysis of the DRP is a significant development on the approach it has previously adopted, where it sought to rely on an average of an extrapolated Bloomberg FVC and the yield on a single BBB rated bond issued by APA Group maturing in July 2010 (the "APA" bond). Notwithstanding these developments, in our opinion the analysis set out in the Powerlink draft decision is not sufficiently robust, either:

- to provide reliable estimates of the prevailing yield on 10 year BBB+ rated Australian corporate debt; or
- to disregard the Bloomberg FVCs.

We elaborate on the reasoning for these conclusions below.

## 3.1. Critique of the AER's proposed approach

The AER's draft decision for Powerlink proposes to adopt a new approach to estimating the DRP, which essentially involves taking the arithmetic average of the DRP of a sample of nine bonds. This is the fifth methodology for estimating the DRP proposed by the AER in the last three years. Its previously proposed approaches include:

- the average of an extrapolated Bloomberg FVC and the yield on the "APA" bond;[28]
- the average of an extrapolated Bloomberg FVC and the CBASpectrum FVC;[29]
- the reported CBASpectrum FVC;[30] and
- the reported Bloomberg FVC.[31]

In our opinion, several aspects of the AER's new methodology warrant further development and/or refinements before it could produce a reliable estimate of the DRP, specifically:

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[28] This was the approach adopted by the AER in:
- *Final Decision Envestra Ltd Access Arrangement proposal for the Qld gas network 1 July 2011 – 30 June 2016*, June 2011, page 50; and
- *Final Decision N.T. Gas Access arrangements proposal for the Amadeus Gas Pipeline 1 August 2011 – 30 June 2016*, July 2011, page 78.

[29] The was the approach advocated by the AER in its Australian Competition Tribunal in the *Application by Jemena Gas Networks (NSW) Ltd (No 5)[2011] ACompT 10*, heard on 28 February 2011.

[30] This was the approach adopted by the AER in:
- *Final Decision Jemena Gas Networks Access arrangements proposal for the NSW gas networks 1 July 2010 – 30 June 2015*, June 2010, page 198; and
- *Final Decision Access arrangements proposal ACT, Queanbeyan and Pelerang gas distribution network 1 July 2010 – 30 June 2015*, March 2010, page 56.

[31] This was the approach adopted by the AER in:
- *Final Decision New South Wales distribution determination 2009-10 to 2013-14*, 28 April 2009, page 232;
- *Final Decision TransGrid transmission determination 2009-10 to 2013-14*, 28 April 2009, page 60; and
- *Final Decision Transend Transmission Determination 2009-10 to 2013-14*, 28 April 2009, page 79.

- the analysis should consider the quality of the data points;
- subordinated debt issues should be included in the sample;
- the use of a simple average necessitates the omission of a large number of bond issuances that could potentially improve the reliability of the estimated DRP if more sophisticated econometric techniques were to be employed; and
- the use of market analyst outlooks is of limited or no relevance and so cannot be relied on to provide a sensible cross check of the estimated DRP.

### 3.1.1. Quality of the data points

The estimated DRP for Powerlink of 3.19 per cent is derived as the arithmetic average of the yield on the nine bonds listed in Table 3.1, below.

**Table 3.1**
**Sample of Bonds Used by the AER to Calculate the DRP**

| Bond Issuance | Term to Maturity (years) | S&P Credit Rating | DRP (%) |
|---|---|---|---|
| APA Group | 8.8 | BBB | 3.09 |
| Brisbane Airport | 7.7 | BBB | 2.67 |
| Sydney Airport | 10.1 | BBB | 3.81 |
| Sydney Airport | 11.0 | BBB | 3.90 |
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| Dalrymple Bay Coal Terminal | 11.2 | BBB+ | 3.83 |
| Coca Cola Amatil | 10.0 | A- | 1.59 |
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| **Average** | **9.7** | | **3.19** |

*Draft decision, Table 5.4, page 224.*

The use of an arithmetic average gives equal weight to each of the nine bonds issuance. However, to ensure that the application of equal weightings results in a robust estimate of the DRP first requires a thorough examination of the characteristics of each bond be undertaken. This principle was advocated by the Competition Tribunal (the Tribunal) in the *Jemena* decision:[32]

[32] *Application by Jemena Gas Networks (NSW) Ltd (No 5) [2011] ACompT 10*, paragraph 62.

> An average is a blunt instrument unless careful thought is given to the individual components and whether each should be given the same consideration, or weight, in the calculation of the average.

No such analysis was carried out by the AER in the Powerlink Draft Decision. In the time available to prepare this report we have not been able conduct a thorough examination of the characteristics of every bond issuance. However, we note that the yield on Coca Cola Amatil appears to be an outlier since:

- the next lowest estimated DRP is SPI Electricity and Gas, which is 65 per cent greater than that observed for Coca Cola Amatil; and
- the average of the yield of the group, excluding Coca Cola Amatil, is 3.39 per cent, which is more than double the reported yield on Coca Cola Amatil.

In our opinion, the analysis of the characteristics of this bond by the Queensland Treasury Corporation (QTC)[33] provides a number of compelling reasons why it should not be given equal weight to the other bonds in the AER sample. Specifically, the Coca Cola Amatil bond yield:

- is estimated using a BVAL function, since there are no observations of the price of this bond and the yield is instead estimated by reference to the observed yield of other, undisclosed, comparable securities;[34]
- has a BVAL quality score that declined from 7 to 1 over the averaging period (in a range of 1 to 10 with 10 being the highest quality), which indicates that Bloomberg does not consider this to be a reliable estimate;[35] and
- the total issuance was $30 million, compared with an average issuance of $286.25 million for the remaining eight bonds in the AER's sample.[36]

These characteristics suggest that little or no weight should be given to the Coca Cola Amatil bond issuance. Setting aside these particular considerations, a detailed review of the other eight bond issuances may also reveal that the AER's proposed approach of giving equal weight to each of the remaining bonds is not appropriate.

### 3.1.2. Subordinated debt

In the event of default, claims by subordinated bond holders are secondary to the claims of senior debt holders. The appropriateness of including subordinated debt into a sample was considered by the Tribunal in the *Envestra* appeal, where it stated that:[37]

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[33] QCT, *Debt Risk Premium Analysis, Draft Determination 2012/13 – 2016/17 - Prepared for Powerlink Queensland*, January 2012.

[34] QCT, *Debt Risk Premium Analysis, Draft Determination 2012/13 – 2016/17 - Prepared for Powerlink Queensland*, January 2012, page 18.

[35] QCT, *Debt Risk Premium Analysis, Draft Determination 2012/13 – 2016/17 - Prepared for Powerlink Queensland*, January 2012, page 46.

[36] QCT, *Debt Risk Premium Analysis, Draft Determination 2012/13 – 2016/17 - Prepared for Powerlink Queensland*, January 2012, page 43.

> As Envestra correctly submitted, the nature of the debt, that is subordinated or unsubordinated, and the industry of the industry of the issuer should be taken into account in the determination of the bond's credit rating… If the AER is to continue to use BBB+ rated corporate debt as its benchmark for determining the DRP, it is not reasonable for it to pick and choose which of the BBB+ bonds it deems to be appropriate without considering the significance of the other potentially relevant bonds.

Notwithstanding this finding, the AER has sought to exclude subordinated debt on the basis that banks are reducing the issuance of subordinated debt and that this has resulted in a deterioration of the ratings on these bonds.

While the development identified by the AER could plausibly result in an upward bias in the DRP estimate, the AER does not provide any analysis of the existence or materiality of this bias. In particular, the AER has not identified:

- whether any subordinated debt is issued by non-bank institutions and so not affected by the issue identified by the AER regarding bank debt;
- the extent that banks have reduced their issuances of subordinated debt; or
- the effect that these reductions may have on the yields on bank subordinated debt.

In the absence of evidence of bias (and we note that none has been presented), it is unreasonable for the AER to disregard the information provided by subordinated debt.

### 3.1.3. Adoption of econometric techniques

One consequence of using a simple arithmetic average of observed bond yields (as opposed to more sophisticated techniques) is that the sample group must be defined to include only those bonds that are directly comparable to the benchmark, ie, BBB+ rated and a 10 year term to maturity. As a result, the AER restricts its analysis to bonds with the following characteristics:

- Australian domestic corporate issuances;
- rated as either BBB, BBB+ or A- by Standard and Poor's; and
- between 7 and 13 years remaining term to maturity.

The effect of these conditions is that the AER's DRP estimate is based on only nine bond issuances during the indicative sample period of the 40 business days ending 14 November 2011.

In short, the adoption of econometric techniques would enable a larger sample of bond issuances to be considered. Such techniques allow the influence of specific characteristics of a bond to be estimated, including its term to maturity and credit rating. We note that the

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[37] *Application by Envestra Limited (No 2) [2012] ACompT*, paragraph 98.

practice of applying econometric techniques is widespread in the finance industry and both Bloomberg and CBASpectrum apply these techniques to estimate their respective FVCs.

In its report, PwC presents an econometric model to estimate the 10 year BBB+ yield using all available empirical data.[38] As such, the PwC model amounts to a further advancement on the approach adopted by the AER.

### 3.1.4. Market analyst outlooks

The AER's use of market analyst outlooks is of limited or no relevance and so cannot be relied on to provide a sensible cross check of the estimated DRP. In particular:

- the spreads quoted by such analysts are likely to be by reference to the swap rate rather than the commonwealth government security (CGS) yield – in general, swap rates are above CGS yields and so these estimates of spreads will underestimate the prevailing DRP; and
- critically, the analyst reports to which the AER refers do not appear to indicate the term of these bonds.

The inability to identify the term of the bond issuances to which analysts are referring indicates that they could be speculating on the spread for bonds with a maturity of 1, 3, 5 or 10 years. If the analyst reports relate to shorter term bonds they may be entirely consistent with the DRP proposed by Powerlink and inconsistent with the DRP estimated by the AER – more importantly, it is not possible to know.

## 3.2. Rejection of Bloomberg FVC

The rejection of Bloomberg FVC is a significant departure from the AER's previous approach to estimating the DRP. Its rejection is also inconsistent with the findings of the Tribunal, which has consistently found that the Bloomberg FVC is an appropriate measure of the DRP.[39] In our opinion, the AER's decision to reject any use of the Bloomberg FVC is unwarranted; rather, considerable weight should continue to be placed on these curves.

The AER bases it decision on the contention that the Bloomberg FVC represents a 'second best' source of pricing information for estimating the benchmark DRP. The AER's principal criticism is that the Bloomberg FVC does not currently reflect the available market evidence for long dated bonds, or the stated view of other independent market commentators.

A more plausible explanation of the difference between the Bloomberg FVC and the reported yield on the AER's sample of long dated bonds is that the sample of bonds is not complete or

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[38] PwC, *Debt risk premium and the equity raising costs*, January 2012 attached to Powerlink's revised proposal as appendix B.

[39] The Tribunal accepted the use of Bloomberg FVC to estimate the DRP in:

- *Application by ActewAGL Distribution [2010] ACompT 4*;
- *Application by Jemena Gas Networks (NSW) Ltd (No 5)[2011] ACompT 10*; and
- *Application by Envestra Limited (No 2) [2012] ACompT.*

representative. For example, we discussed in section 3.1.1 that the erroneous inclusion of Coca Cola Amatil into the AER's sample creates a downward bias that, if removed, would increase the simple average of reported DRPs to 3.39 per cent. Further, it is arguable that the observed yields should be weighted by the size of their respective debt issue, which would further increase the observed yield to 3.50 per cent.[40] These two adjustments would also mean that the 7 year BBB Bloomberg FVC debt risk premium of 3.41 per cent was no longer visibly inconsistent with the reported yields on longer term debt.

Finally, the AER's claim that the BBB Bloomberg FVC has behaved in a manner contrary to what would be expected – in that spreads have not narrowed since the onset of the global financial crisis (GFC) – is not in itself material. This is because the failure of the Bloomberg curve fully to reflect the GFC was in fact due to the scarcity of market trades in the immediate aftermath of the GFC. This finding in relation to the Bloomberg FVC has been well documented by the Tribunal, which concluded that:[41]

> Performance of the Bloomberg curve during and after the GFC alone would not necessarily have warranted its rejection. The unusual circumstances and the market conditions, in particular the restrictions of debt market, that prevailed during the GFC are unlikely to persist for extended periods and might not therefore be viewed as indicative of the likely market conditions that would prevail during the majority of the ten year reference period. At most, the so-called "counterintuitive" performance would warrant investigation of the reliability of the Bloomberg Curve.

The AER also raises a number of other relatively minor concerns with the Bloomberg FVC; however, in our opinion these concerns are insufficient to detract from a conclusion that Bloomberg curves are "widely used and market respected".

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[40] A weighted average based on the size of the bond issue gives an equal weight to the yield earned by each dollar of invested debt. In contrast, a simple average of observed yields gives greater weight to debt invested in small issues.

[41] *Application by Envestra Limited (No 2) [2012] ACompT*, paragraph 81.

# 4. Concluding Remarks

Estimating the yield on BBB+ rated Australian corporate debt with a term to maturity of 10 years continues to involve a considerable degree of uncertainty. In consequence, methods for estimating the DRP have been constantly evolving, and the AER's DRP decisions have frequently been appealed to the Tribunal.

In our opinion, the revised approach proposed by the AER in the Powerlink Draft Decision for estimating the DRP involves serious flaws, which should be corrected in its final decision. In particular, the AER's proposed approach is deficient because it does not:

- adequately examine the circumstances surrounding each of the bond issuances in its sample and so inappropriately assigns equal weight to each observed yield;
- undertake the necessary analysis to justify excluding subordinated debt issues;
- employ any of the econometric tools in widespread use in the finance industry to estimate yields and so is restricted to a very small subset of bond issuances to estimate the DRP; and
- properly scrutinise the market analyst reports on which it relies and so incorrectly concludes that they provide a sensible cross check of the estimated DRP.

These errors highlight the wisdom of the Tribunal's recommendation in the recent Envestra decision that:[42]

> If the AER were to decide that the EBV was an unreliable indicator for the purposes of deciding that DRP, it would be desirable in the longer term to develop an alternative coherent and consistent methodology, in consultation with the relevant regulated entities and other interested parties. Although the DRP must be determined at a particular point in time, the use of a consistent and acceptable methodology would ensure regulatory consistency, and in relation to particular matters would also facilitate efficient decision making and in turn reduce the number of reviews of the DRP decisions by the AER brought to the Tribunal. While such a task would be a complex and lengthy one, it is one the Tribunal commends to the AER.

[42] *Application by Envestra Limited (No 2) [2012] ACompT*, paragraph 98.