

ERA

Hedging Costs

in the

Cost of Debt

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1. INTRODUCTION

The Economic Regulation Authority (ERA) is currently finalising the 2014-2019 Access Arrangements (AA) for ATCO. Submissions made by ATCO include an allowance for hedging costs.

2. SCOPE

ERA commissioned Chairmont to provide advice on the reasonableness of ERA's deliberations of a hedging cost allowance in the cost of debt.

The scope excluded consideration of any matters outside hedging costs.

3. SUMMARY OF OVERALL COST OF DEBT CALCULATION

3.1 FRAMEWORK

Chairmont understands ERA's new approach to the cost of debt calculation for ATCO to be as follows:

- Applies to the period 1 July 2014 - 31 December 2019.
- A hybrid approach adding four components:
 - an on-the-day fixed base rate
 - measured as the 5-year swap mid-rate as published on Bloomberg (Last Price),
 - over a 20 day window in the first half of 2015, and
 - converted to an annualised rate.
 - A 10-year trailing average historical Debt Risk Premium (DRP) for a 10-year term.
 - For the 2015 regulatory year the applied DRP is measured using equal weights of end-of-month observations for the first 9 ¼ years, plus the 20-day average daily observation in the first half of 2015 with a weighting of 3/40, i.e. 9 months of 10 years.
 - The monthly historical observations are taken from the Reserve Bank of Australia (RBA) broad BBB data series, then extrapolated to a true 10-year maturity and annualised.
 - Starting with the 20 day 2016 period, ERA will fully rely on their own DRP for the 2016 contribution to the DRP trailing average using a selection of AUD and foreign currency bonds, where the spread for foreign denominated bonds is converted to an AUD equivalent using a Bloomberg calculator on the day.
 - The ERA DRP calculation uses an average of three different statistical techniques for estimating a true 10-year maturity.
 - From January 2016 an annual update of the trailing average DRP will apply, with 20-day observations being made each year sometime between 1 July and 31 October of each prior year.
 - A debt raising cost allowance of 12.5bppa to cover factors such as underwriting costs and obtaining and maintaining a credit rating (already agreed with ATCO).
 - A hedging cost of 12bppa is proposed to cover the cost of swaps. These costs are intended to cover the:
 - 5-year swap for the whole portfolio near the start of the AA to align with the ERA base rate.

- 10-year swaps required to convert fixed rate and foreign currency debt into AUD-equivalent floating rate debt as it is issued across time.
- Gas tariffs are changed annually to allow ATCO to pass on to consumers the updated trailing average DRP.
- No transition is planned for any component. The new calculation method will begin fully from the start of ATCO's new AA.

3.2 ERA'S KEY BACKGROUND ASSUMPTIONS

- Going forward, as well as in the past, Network Service Providers (NSPs) issue 10 year bonds in both foreign and domestic currency.
- The starting portfolio in 2015 is a smoothly staggered debt portfolio of 10-year bonds.
- There are no size problems for hedging 5-year swaps within 20 days.
- The 20-day window is indicative of DRP costs for that year and provides the best forward looking estimator for the DRP for the near term.

4 HEDGING COSTS

4.1 HIGH-LEVEL FINDINGS

- Conceptually it is correct to include hedging costs into the total cost of debt as it encourages sound risk management and supports efficient financing practices.
- The proposed level of 12bppa allowance is a reasonable estimate of the cost and is likely to fall within the current range of cost.
- The rationale for the 12bppa is not consistent with the overall cost of debt approach.
- The rationale supporting the inclusion and level of hedging costs should be explained differently in order for it to align with market practice.

4.2 EXPLANATION OF FINDINGS

4.2.1 Conceptually correct

Conceptually ERA's approach to include hedging costs is correct. All companies active in the economy need to raise debt, however it is not essential for all companies to undertake interest rate swaps. NSPs subject to ERA's cost of debt allowance guidelines do need to undertake interest rate swaps to align the fixed rates relevant to their liabilities with the fixed rates embedded in the gas tariffs they can charge via the cost of debt allowance. Accordingly, NSP's will incur hedging costs in addition to standard debt funding expense.

4.2.2 Reasonable hedge cost allowance

Based on Chairmont's recent high-level assessment of the hedge markets and the submissions ERA provided, ERA's proposed 12bppa allowance level for hedging costs is in the current range of likely hedging costs incurred by NSPs.¹

4.2.3 Rationale inconsistent

The rationale used by ERA to arrive at the 12bppa hedging costs result is not internally consistent and needs to be re-worked even though it may lead to only a slightly different numerical result. In our view the basis underpinning the outcome needs to follow a logical construction and be more robust.

¹ See Chairmont, Cost of Debt: Transitional Analysis, April 2015 for AER, p.31

ERA arrives at 12bp by taking the mid-point of the investigation by Evans and Peck in 2013 and the statement by Jemena, also in 2013. Both of these estimates are based on transacting fixed/floating AUD swaps in both 5-year and 10-year maturities for the full volume of debt; however, elsewhere in the cost of debt framework, ERA acknowledges that NSPs will issue some portion of debt in foreign currency. It would be more consistent to determine a cost of hedging allowance directly linked to the assumed transactions required for NSPs rather than simply amalgamating third party hedging cost estimates which are not directly comparable.

4.3 ALTERNATIVE APPROACH

ERA implies throughout the document that it acknowledges at least 35%-50% of debt is raised in foreign currency. It would be consistent to determine a percentage based on relevant market survey data and include this to produce a calculation based on the required transactions. This could occur as follows:

4.3.1 Determine the proportion of foreign currency debt

ERA refer to work by CEG from 2013.² If ERA believes it to be the current relevant estimate of debt issuance for regulated NSPs, they should apply the 35% finding from that work.

4.3.2 Define the required transactions

To achieve the closest match of regulatory allowance to actual incurred efficient cost, it is advisable to base the calculation on all transactions which the NSP is required to undertake. This gives rise to two major components with the second component having sub-components, as follows:

- 5-year floating to fixed AUD swaps at start of AA for the full amount of the debt portfolio.
- Bond issuance as acknowledged by ERA to be made up of three different issue types and hence requiring three different swap considerations. If the NSP issues:
 - foreign currency bonds it will need to do a cross-currency swap into floating AUD, e.g. from CEG considered to be 35% of the debt.
 - fixed-rate AUD bonds it will need to do a fixed-float AUD swap, e.g. 41% of debt.
 - floating-rate AUD, typically loans, no swap will be required, e.g. 24% of debt.³

4.3.3 Estimate costs for each transaction type

Costs for each component can be estimated from the submissions supplied by ERA as well as the result of earlier enquiries made separately by ERA and by Chairmont.

The Evans and Peck 2013 estimate of AUD swap costs of 16bpps, should be excluded from the calculation, as the authors have since superseded that with a 2015 finding of 13bpps.

For each of the components:

- **5-year swaps at the start of the AA.** The different submissions provide a range of estimated costs, i.e. Evans and Peck (2015) 5bp; UBS <5bp; Jemena <5bp (i.e. less than half of the total 8-10bp, as a 5-year swap costs less for capital and credit charges). This suggests approximately 4bpps is appropriate. This is also supported by informal discussions held by Chairmont with two banks in late 2014.

² CEG, Debt Strategies of Utility Businesses, June 2013, p23

³ Using CEG's estimate of loans within NSPs' portfolios, CEG p22. Most loans to Australian corporates with predominantly AUD revenues, such as the NSPs, are floating-rate AUD loans.

- **Cross-currency swaps.** There was only one estimate provided and that was by UBS which reported 18bp. Chairmont's discussions with the banks suggest that this estimate is at the high end of costs and is likely to overstate a swap in relation to a new issuance. It is important to understand that banks tend to be more aggressive on swap pricing when linked to other business. A lower level of 10bp appears to be reasonable, so for further calculation a mid-point of 14bp is used.
- **10-year AUD fixed-floating swaps.** The submissions are Evans and Peck (2015) 8bp; UBS 5bp; Jemena and ERA (implied) 5-7bp. Taking a mid-point such as 6bp appears reasonable for this component.

4.3.4 Calculate a weighted average cost based on transaction requirements

Our revised calculation putting the components together is:

- 5-year swap for full amount of debt = 4bppa \times 100% = 4bppa.
- 10-year cross currency swaps for 35% of debt issuance = 14bppa \times 35% = 4.9bppa.
- 10-year fixed-float AUD swaps for 41% of debt issuance = 6bppa \times 41% = 2.5bppa.
- No initial swap for the floating-rate debt.
- Rounding to the nearest 0.5bp as for new issuance costs.

Based on the above the total hedging cost allowance is 11.5bppa on the full debt portfolio which is very close to the proposed 12bppa.

4.3.5 Consider variability of costs

Hedging costs will vary over time based on a range of factors including:

- Proportion of debt issued in foreign currency and fixed rates.
- Volatility and liquidity in the swap market.
- Credit margins for BBB companies.
- Regulatory capital requirements (still being finalised globally and by Australian Prudential Regulatory Authority (APRA)).

Accordingly, it may be more appropriate to review costs periodically and/or index them in some way.

5 CONCLUSION

The conclusions are:

- The inclusion of hedging costs into the cost of debt calculation will better reflect the actual costs of managing interest rate risk.
- Adoption of the suggestions above should result in a more robust outcome and a format that can be applied over time as the market environment changes.