

Debt Raising and Hedging Costs

Version: Final
Dated: 21 December 2021



Table of Contents

1	Executive Summary	2
1.1	Benchmark Models.....	2
1.2	Summary - Debt Raising and Debt Hedging Costs	2
1.3	Key Findings and Proposed Changes - Debt Raising Cost Components.....	3
1.4	Key Findings and Proposed Changes - Debt Hedging Cost Model.....	6
2	Scope of Work.....	8
2.1	Background	8
2.2	Our Approach.....	9
3	ERA Guidelines.....	11
3.1	Return on Debt	11
3.2	Risk-free Rate Of Return.....	12
3.3	Debt Risk Premium.....	12
4	Market and Regulatory Developments Since ACG.....	14
4.1	Relevance of ACG.....	14
4.2	Central Bank Intervention - Liquidity.....	14
4.3	Australian Corporate Bond Market.....	15
4.4	US Private Placement Market.....	16
4.5	Dodd-Frank and Basel III	17
4.6	Environmental Social Governance.....	19
5	Debt Raising Costs.....	23
5.1	Current Approach	23
5.2	Current Debt Raising Costs	23
5.3	Market Feedback - Debt Raising Costs.....	23
5.4	Proposed Debt Raising Costs.....	25
6	Debt Hedging Costs	27
6.1	Current Approach	27
6.2	Current Debt Hedging Costs.....	28
6.3	Market Feedback - Debt Hedging Costs	29
6.4	Proposed Debt Hedging Costs	29

I EXECUTIVE SUMMARY

I.1 BENCHMARK MODELS

The Economic Regulation Authority of Western Australia (ERA) approach to the benchmark cost of debt is a hybrid approach, i.e., five years for the risk-free rate and a 10 year trailing average for the Debt Risk Premium (DRP). There are three models that regulators consider each of which has advantages and disadvantages. These models are succinctly outlined by Dr. Martin Lally¹:

“choices examined here are the OTD approach (five years), the TA approach (N years) and the hybrid approach (five years for the risk-free rate and N years for the DRP). The three options differ only on reliability, simplicity, and materiality. Reliability (conformity with the NPV = 0 test) favours the TA and hybrid approaches, simplicity (difficulty of estimating the debt term for the benchmark efficient entity) favours the OTD and hybrid approaches, and materiality (of revenue differences) favours the OTD and hybrid approaches in respect of average revenues and the TA approach in respect of revenue volatility. However, these criteria do not include consideration of the MRP/DRP natural hedge, which favours the OTD approach.”

I.2 SUMMARY - DEBT RAISING AND DEBT HEDGING COSTS

In summary our comments are:

1. There should be alignment of the Benchmark Efficient Entity (BEE) being used to the allowable costs. Specifically, if the DRP contains only fixed rate bonds, then only fixed rate debt raising and debt hedging costs relating to fixed rate bonds should be allowed.
2. If the hedging costs for the cross-currency hedging costs are not included in the credit spread, then an allowance for offshore issuances needs to be included in the debt hedging cost model.
3. The existing model should categorise the cost components into one-off and ongoing costs. See diagram 1.
4. One-off costs should be treated as part of operational expenses.^{2,3}
5. The allowance for debt raising costs should be increased from 0.100 to 0.155 per cent per annum. The increase is due to the higher offshore issuance costs and inclusion of costs for a 2nd credit rating and annual surveillance.
6. The allowance for debt hedging costs should be increased from 0.114 to 0.123 per cent per annum. The proposed change is the addition of an allowance for the costs involved in negotiating an International Swaps Dealers Agreement (ISDA), as part of one-off operational expenses. It excludes swap-clearing costs. Market feedback indicates these are currently covered as part of wider banking relationships. In future, these costs may need to be included in ongoing costs with an offset for the upfront costs.
7. Actual cost data should continue to be gathered from the industry so they may be used in benchmarking.

The rationale for these proposed changes is outlined below.

¹ Dr Martin Lally, The Appropriate Term for the Allowed Cost of Capital, 9 April 2021

² AER, Rate of Return Instrument Explanatory Statement December 2018, Pages 302-303

³ Chairmont, Debt Raising Costs Pages 3-4, 29 June 2019

I.3 KEY FINDINGS AND PROPOSED CHANGES - DEBT RAISING COST COMPONENTS

The key findings are:

Debt Risk Premium

Fundamental to the BEE approach is to incentivise regulated entities to either choose to replicate the benchmark, or when they do not (by borrowing in alternative markets) accept the risks which may result in financial benefits or costs. These are borne by the entity.

If this principle is adopted for the DRP, then it should also be applied for debt raising and hedging costs. An allowance is provided to regulated entities for the debt raising costs to compensate for the cost of bond issuance in the same markets as the bonds used to estimate the DRP.

In 2004 when Allen Consulting Group (ACG) first established the benchmark principle⁴, the small size of the AUD corporate debt market and that some regulated entities may form part of a conglomerate required a BEE model that included non-AUD issuances. In 2020, there was nearly AUD16 billion in Australian domestic corporate issuances.⁵

Aligning the credit spread with the allowable debt raising and debt hedging costs for bond issuances for consistency is important. Whichever approach is used, then the components of the debt raising and hedging costs should replicate it.

The ERA assumes a credit rating of BBB+ based on a sample of comparator businesses.

Central Bank Market Intervention - Liquidity

Central banks, including the Reserve Bank of Australia (RBA) as part of their overall monetary policy strategy have been very active in the debt markets. In addition to controlling the yield curve they have been ensuring liquidity through supporting the repo market and by their Quantitative Easing (QE) programs. In support of the USD and as part of its global debt market liquidity strategy the US Federal Reserve established USD swap facilities with central banks of 13 nations, including Australia.

The US Federal Reserve is now a buyer of first, as well as last resort, although this will likely change with Quantitative Tightening (QT). As part of its response to the Global Financial Crisis (GFC) it purchased US Treasuries and Residential Mortgage-Backed Securities (RMBS). Its activities as part of the Covid-19 response go beyond this to also include buying corporate rated and non-rated debt, as well as Exchanged Traded Funds (ETFs) bonds.

Similarly, the RBA has taken steps to support financial markets by broadening the range of corporate debt securities that are eligible as collateral for domestic money market activities to include investment grade non-financial corporate bonds rated BBB- or better.⁶

The outcomes of all this central bank activity are:

1. Maintenance of liquidity across global debt markets.
2. Interest rates along the yield curve are being determined by central banks and not by the marketplace.
3. There does not appear to be any direct impact on debt raising or hedging costs because of the central bank intervention.

⁴ The Allen Consulting Group, Debt and equity raising transaction costs: Final report, December 2004

⁵ Kanga News, January 2021

⁶ AFMA, letter House Standing Committee on Tax and Revenue, Page 7 16 June 2020

4. There has been a shrinkage of credit spreads as they do not reflect the credit risk of the entity. This is an investor risk.
5. Central bank intervention has stabilised pricing and execution certainty in Australia for corporate borrowers.

In the context of debt raising and hedging costs there does not appear to be any impact of central bank market intervention. If there had not been intervention there would have been an impact on both.

Environmental Social and Governance

Environmental Social and Governance (ESG) rating and investor requirements are starting to impact on debt issuances. In time, unless regulated entities adopt these requirements, they may find their debt raising and hedging costs increase. In a worst-case scenario, they may find that they are unable to access both the international debt capital markets and Australian debt markets.

Conversely, regulated entities may be able to benefit from cost reductions relative to their peers and benchmark if they are able to meet agreed ESG benchmarks in debt and hedging agreements.

At this point in time there does not appear to be any material impact of ESG on debt raising and hedging costs.

With ESG changes quickly spreading across the world the ERA should closely monitor ESG developments, in particular reporting standards and the potential impact on regulated entities' Weighted Average Cost of Capital (WACC). Regulated entities may find their reporting costs increase as part of their ESG compliance programs.

Debt Raising Cost Model Components Summary

Diagram I below shows the debt raising costs incorporating our findings. ERA does not explicitly categorise the costs into one-off and ongoing; however, we believe that categorising them helps all parties better understand debt raising costs. As can be seen in diagram I, the rating agency consultancy fee is shown as a one-off cost where previously it was excluded as an allowable item. This cost is reasonably significant at around \$200k, as shown in table I (See section 5).

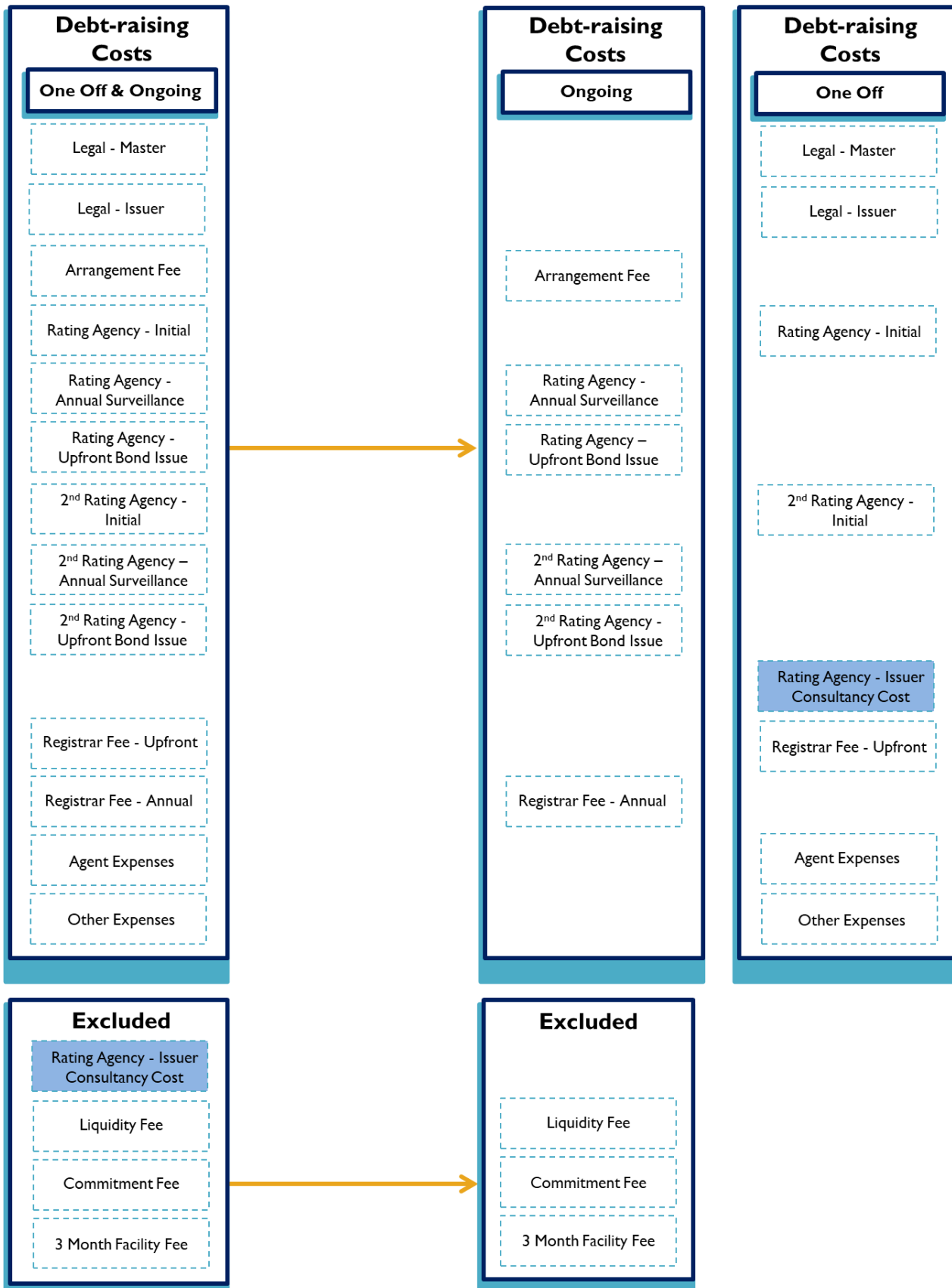


Diagram 1: Debt Raising Costs

Historically, the liquidity fee, commitment fee and 3 month facility fee are excluded from the debt raising cost allowance.⁷ Their exclusion should continue.

The ERA has a fixed weighting of 35% for non-AUD debt issuance for debt hedging costs, Chairmont has assumed this weighting for the calculation of debt raising costs.

Proposed Allowance per annum

The allowance rate of 0.100 per cent per annum for debt raising costs should be amended to 0.155 per cent per annum with additional one-off costs included as part of operational expense.

This new allowance assumes the ERA's current benchmark debt strategy, including a benchmark issuance of \$250m for 10 year BBB+ corporate debt and offshore 10 year BBB+ corporate debt.

1.4 KEY FINDINGS AND PROPOSED CHANGES - DEBT HEDGING COST MODEL

The key findings are:

Cross Currency Swaps

ERA's current approach for offshore issuances is to be included in the benchmark sample. The credit spread for offshore issuances is to be converted to Australian dollar terms by accounting for hedging costs.⁸

If the hedging cost for cross currency swaps is not included in the credit spread, then an additional allowance for offshore issuance needs to be included in the debt hedging cost model.

ERA has a weighting of 35% for non-AUD debt issuance which is used for calculating the allowance for cross currency swaps.

Hedging Cost Allowance

The hedge allowance be increased from 0.114 basis points per annum to 0.123 basis points per annum with additional one-off costs included as part of operational expense. The 10 year fixed/float AUD swap weighting be increased from 41% to 65%.

International Swap Dealers Agreement

Regulated entities need to have an up-to-date ISDA in place. ISDAs are generally negotiated on a case-by-case basis and it can take up to 1-3 months to execute a new ISDA. Market feedback was that banks may not charge for these costs as they may be viewed as part of a wider corporate banking arrangement.

The current approach does not include any allowance for legal costs borne by regulated entities to negotiate and document ISDA agreements. ERA may consider providing an allowance for this cost as part of operational expenses.

⁷ Chairmont, AER Debt Raising Costs Section 4.2 2019

⁸ ERA, 2018 Final Gas Rate of Return Guidelines Explanatory Statement, Page 117

Debt Hedging Cost Model Summary

The ERA debt model includes non-AUD bonds, non-AUD cross currency swaps and the associated debt raising and hedging costs. The cost for non-AUD issuance is included in debt raising costs and the conversion to AUD in the benchmark sample methodology.

Diagram 2 below shows the proposed debt hedging costs considering the findings. The current debt-hedging strategy assumes 10 year AUD fixed/floating rate swaps. This represents 41% of the debt issuances and it also assumes 24% is floating rate bank debt.

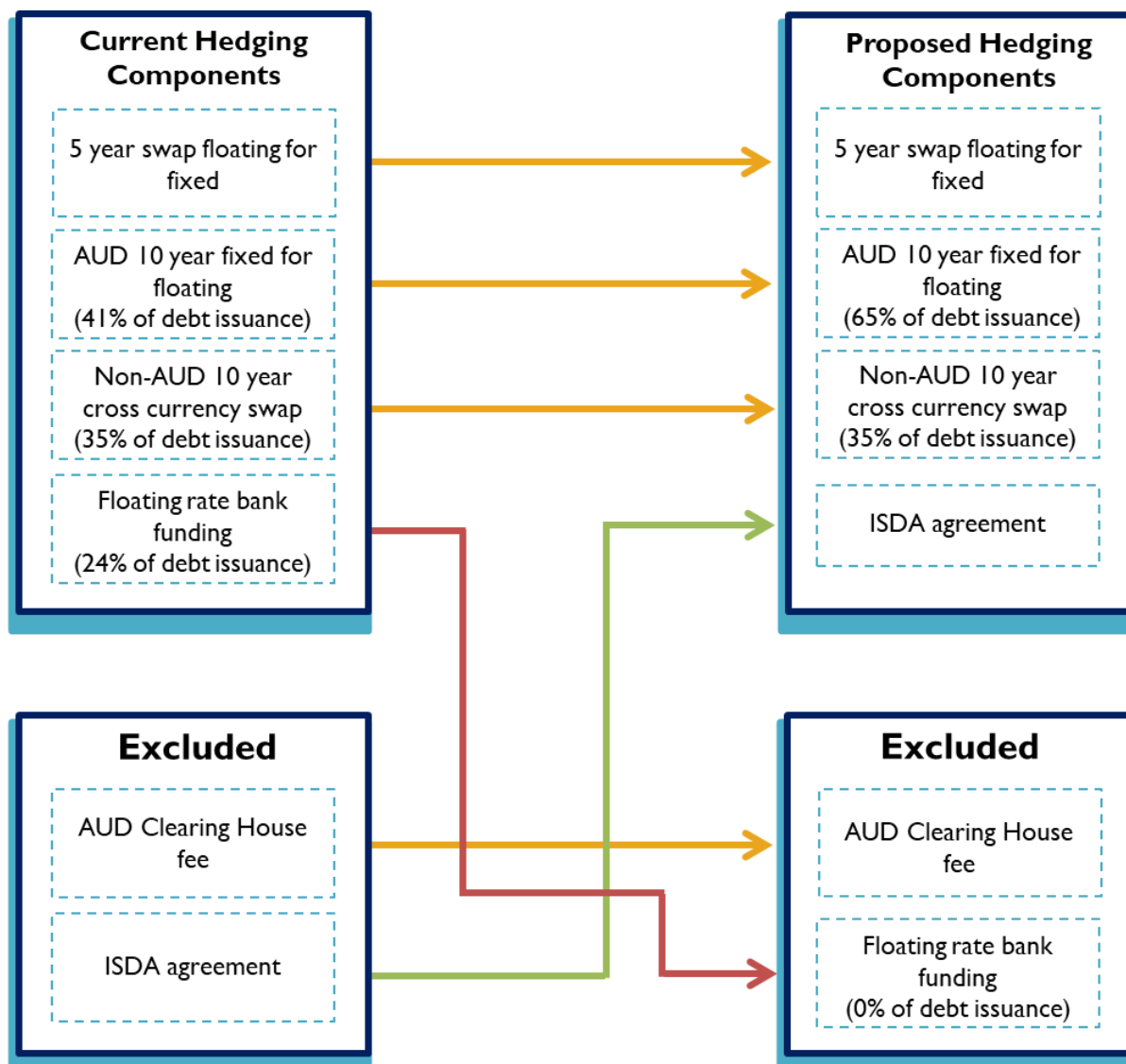


Diagram 2: Debt Hedging Costs

The revised components to the model includes an increased allowance for swaps. This is split 35/65 non-AUD and AUD fixed/floating 10 year swaps. Floating Rate Notes are excluded because they are not in the benchmark.

The cost of negotiating an ISDA is one-off cost, assuming they would have a standard agreement which would be accepted by most counterparties. An allowance for this cost component should be included. No clearing house fee is required as market feedback is that corporates are not required to clear; however, in time this may not be the case.

2 SCOPE OF WORK

2.1 BACKGROUND

The ERA regulates gas and electricity network businesses and determines what they can recover from customers for the use of their networks. A key component of this allowed revenue is the rate of return.

The ERA is reviewing its 2018 gas rate of return guidelines, which includes an allowance for debt raising and hedging costs. These costs are used to calculate the total return on debt. The ERA current method uses:

- Debt raising costs for the benchmark efficient entity of 0.100 per cent per annum.
- A swap allowance of 0.114 per cent per annum.

The ERA is seeking expert advice on the reasonableness of the ERA's approach to setting:

- debt raising costs
- debt hedging costs.

This advice would include (though not all inclusive):

- Review the current method of estimating debt issuing costs for a regulated benchmark gas and electricity network that is operating efficiently consistent with the ERA's debt approach. This would include:
 - Consider the relevance of the ACG method
 - Make suggestions on areas for improvement.
- Provision of an updated estimate of current debt issuing costs (what a current annual rate would be).
- Review the current hedging cost estimation method for a regulated benchmark gas and electricity network that is operating efficiently consistent with the ERA's debt approach. This would include suggesting any areas for improvement.
- Provision of an updated estimate of current hedging costs (what a current annual rate would be).

2.2 OUR APPROACH

Diagram 3 below illustrates our approach to this exercise.

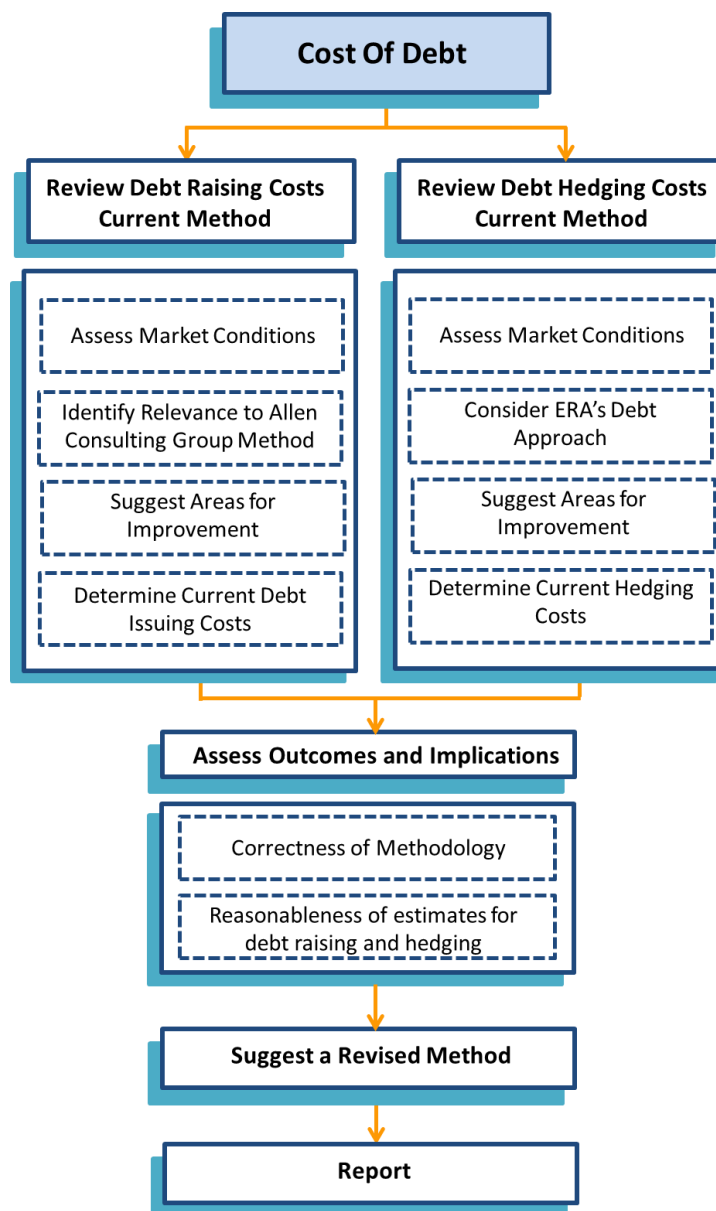


Diagram 3: Our Approach

The work plan as depicted in diagram 3 is:

1. Develop template letter and spreadsheet for collection of data from industry.
2. Obtain data from industry providers and other sources.
3. Examine data obtained from industry participants and stakeholders.
4. Conduct Critical Review of ACG: Debt and equity raising transaction costs, December 2004 report.
5. Consider materials obtained in Step 2, Critical Review and data collected.
6. Address questions outlined in the RFQ.
7. Revise or confirm Debt Raising and Hedging Costs.

8. Review Debt Raising Cost Model and report with ERA.
9. Finalise report.

The ERA regulates gas and electricity network businesses and determines what can be recovered from customers for the use of their networks. A key component of this allowed revenue is the rate of return.

Diagram 4 shows the two key components that make up the Return on Capital.

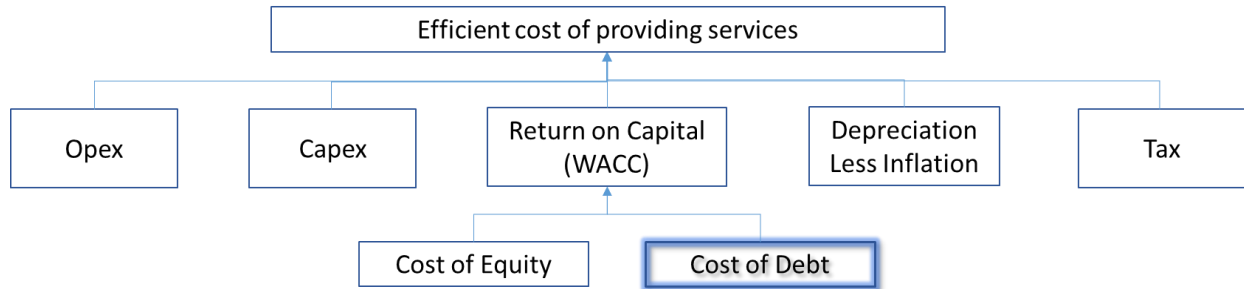


Diagram 4: Components of WACC

3 ERA GUIDELINES

3.1 RETURN ON DEBT

The current version of the National Gas Law (National Gas Access (WA) Act 2009) section 30D is that the ERA must make a rate of return instrument. This states for a rate of return on capital and the manner in which to calculate the rate. For valuing imputation credits the method to be used.

Sub-section 3, says the ERA may make an instrument only if satisfied the instrument will, or is most likely to, contribute to the achievement of the national gas objective to the greatest degree.

Subject to subsection (3), the way to calculate a rate of return on capital must include a weighted average of an allowed return on equity and an allowed return on debt.

In making an instrument, the ERA must have regard to:

- (a) the revenue and pricing principles; and
- (b) other information the ERA considers appropriate.

Current Approach

The estimate of the return on debt is based on a risk premium over and above the risk-free rate, combined with an additional margin for administrative and hedging costs:

Return on debt = risk-free rate + debt risk premium + debt raising costs + hedging costs

The risk-free rate is the rate of return of a hypothetical investment with no risk of financial loss, over a given period of time.

The DRP is the margin above the risk-free rate of return required to compensate holders of debt securities for the risk in providing debt finance. DRP is compensation for investors who tolerate the extra risk, compared to that of a risk-free asset.

Debt raising and hedging costs are direct costs incurred by businesses in raising and hedging debt.

The return on debt estimate is based on the hybrid trailing average approach. This method:

- Adopts a five-year bank bill swap rate, set on the day.
- Uses a 10-year trailing average for the debt risk premium, which is updated annually so that each year a new year's debt risk premium is estimated and the oldest estimate in the 10-year series is removed.

The On-The-Day (OTD) estimate of the risk-free rate will be based on the observed yield of a five-year term Bank Bill Swap (BBSW) Rate, averaged over a 20-day period just prior to the regulatory period (see section 3.2 Risk-free Rate of Return). The 20-day period will be nominated by the service provider in advance of the ERA's final decision. The five-year term reflects the NPV=0 principle that the term of debt should match the length of the regulatory period, which is five years.

The OTD DRP will be derived from the yield of an observed sample of bonds, with a term of 10 years, issued by comparator firms with similar credit ratings as the BEE. The ERA calculates the debt risk premium based on a 10-year trailing average, which will be updated annually.

An annual allowance will be provided for debt raising and hedging costs (see section 5 Debt Raising Costs). The annual allowances for these elements will be set once, at the start of the regulatory period.

The ERA considers that this return on debt approach best approximates the NPV=0 principle while also recognising interest rate risk, refinancing risk and the staggered nature of debt portfolios.

3.2 RISK-FREE RATE OF RETURN

The risk-free rate is the return an investor would expect when investing in an asset with no risk.

The risk-free rate is the rate of return an investor receives from holding an asset with a guaranteed payment stream, i.e., where there is no risk of default. Since there is no likelihood of default, the return on risk-free assets compensates investors for the time value of money.

The risk-free rate of return can be estimated as either a nominal or real risk-free rate. The nominal risk-free rate includes compensation to investors for the reduction in purchasing power caused by inflation. The real risk-free rate of return would prevail if the expected inflation rate was zero during an investment period. The National Gas Rules requires the ERA to use a nominal vanilla rate of return in regulatory decisions, so in this section, the term 'risk-free rate' refers to the nominal risk-free rate.

Current Approach

The ERA will use a five-year term to maturity to estimate the risk-free rate of return for the return on debt.

The ERA will set the risk-free rate of return at the start of a regulatory access arrangement period and it will be fixed for the length of that period.

For the return on debt, the ERA will use estimates of the prevailing interest rate swaps of appropriate terms for estimating the return on debt. The swap rate is referred to as the 'base rate' in the return on debt calculation. It incorporates a spread to the rate on Commonwealth Government Security bonds and is available at specified terms from data providers such as Bloomberg.

An 'averaging period' will be selected to set the rate of return parameters that are calculated using market data (being the risk-free rate used to estimate the return on equity, and the base rate to be used in the estimate of the return on debt for the coming five-year period). The averaging period will:

- have a duration of 20 consecutive trading days
- be as close as possible to the expected access arrangement final decision for regulatory period
- be nominated prior to any of its dates taking place.

In the event that an averaging period is not nominated within 30 business days following an access arrangement draft decision, the ERA will use a default averaging period of the 20 consecutive trading days one month prior to the access arrangement final decision for the regulatory period.

3.3 DEBT RISK PREMIUM

The DRP is the return above the risk-free rate that lenders require to compensate them for the risk of providing debt funding to a benchmark business. DRP compensates holders of debt securities for the possibility of default by the issuer.

Current Approach

Estimating DRP involves the following steps:

Step 1: Determining the benchmark sample by identifying a sample of relevant corporate bonds that reflect the credit rating of the benchmark efficient entity.

Step 2: Collecting data and converting yields to Australian dollar equivalents by converting the bond yields from the sample into hedged Australian dollar equivalent yields inclusive of Australian swap rates.

Step 3: Averaging yields over the averaging period by calculating an average AUD equivalent bond yield for each bond across the averaging period.

Step 4: Estimating curves using this data by applying the Gaussian Kernel, Nelson-Siegel and Nelson-Siegel-Svensson techniques.

Step 5: Estimating cost of debt by calculating the simple average of their three yield curves' 10-year cost of debt to arrive at a market estimate of the 10-year cost of debt.

Step 6: Calculating the DRP by subtracting the 10-year interest rate swap rate from the 10-year cost of debt.

These steps determine the DRP at calculation date. The ERA refers to this method as the 'revised bond yield approach'.

To determine the DRP used to calculate the gas rate of return the ERA constructs a 10-year trailing average DRP. This will consist of a DRP for the current year and a DRP for each of the nine prior years. The 10-year trailing average DRP must be updated each year.

An allowance for DRP estimation costs will be reviewed in the ERA's assessment of efficient operating expenditure for a regulated business' access arrangement and does not form part of the rate of return.

4 MARKET AND REGULATORY DEVELOPMENTS SINCE ACG

4.1 RELEVANCE OF ACG

Key objectives outlined in the ACG report in setting regulated prices were:

1. Use benchmarks for financing structure rather than using actual costs, as it provides business with an incentive to adopt efficient financing arrangements.
2. Customers would also be protected, if regulated entities are inefficient in their financing decisions, as these actual costs would not be passed onto the customer.

Another benefit discussed was that the regulatory process did not include an allowance for complex financing arrangements, or “world class financial engineering”.

ACG outlined several problems with using actual finance related transaction costs, including the trade-off between the margin on that finance and the transaction costs incurred by the regulated entity.

The ACG report included the following observations:

- Debt raising costs are a legitimate expense that should be recovered over a period of time.
- Debt raising costs should be recovered through an addition to estimated average cost of capital, or as a direct allowance to operating expenses.
- Debt raising costs should be capitalised that are incremental to the benchmark debt re-financing in an operating company.
- Debt is raised through corporate bonds; consistency requires that the transaction costs reflect the instrument.
- A benchmark debt margin exclusively with reference to the yield on Australian corporate bonds may overstate the cost of debt finance that could be obtained by an efficient firm.
- The swap margin should be treated as part of the debt risk premium rather than the transaction cost on debt, so excluded from the calculation of transaction costs.
- Method of recovery of debt issuance cost, with an assumption that all the costs are continually re-incurred in respect of the total stock of capital.

4.2 CENTRAL BANK INTERVENTION - LIQUIDITY

Central banks, including the RBA as part of their overall monetary policy strategy have been very active in the debt markets. In addition to controlling the yield curve they have been ensuring liquidity through supporting the repo market and by their QE programs. In support of the USD and as part of its global debt market liquidity strategy the US Federal Reserve established USD swap facilities with central banks of 13 nations, including Australia.

The US Federal Reserve is now a buyer of first, as well as last resort, although this will likely change with QT. As part of its response to the GFC where it purchased US Treasuries and RMBS it expanded its activities as part of the Covid-19 response to include buying corporate rated and non-rated debt, as well as ETFs bonds.

Similarly, the RBA has taken steps to support financial markets by broadening the range of corporate debt securities that are eligible as collateral domestic money market activities to include investment grade non-financial corporate bonds rated BBB- or better.⁹

⁹ AFMA, letter House Standing Committee on Tax and Revenue, Page 7 16 June 2020

The outcomes of all this central bank activity are:

1. Maintenance of liquidity across global debt markets.
2. Interest rates along the yield curve are being determined by central banks and not by the marketplace.
3. There does not appear to be any direct impact on debt raising or hedging costs because of the central bank intervention.
4. There has been a shrinkage in credit spreads as they do not reflect the credit risk of the entity. This is an investor risk.
5. Central bank intervention has stabilised pricing and execution certainty in Australia for corporate borrowers.

In the context of debt raising and hedging costs there does not appear to be any impact of central bank market intervention. If there had not been intervention there would have been an impact on both.

4.3 AUSTRALIAN CORPORATE BOND MARKET

The Australian corporate bond market at the time of ACG report was relatively small. Diagram 5 below shows the Australian Corporate Bond Issuances from 2012, where H1 and H2 means first half and second half of the year respectively.

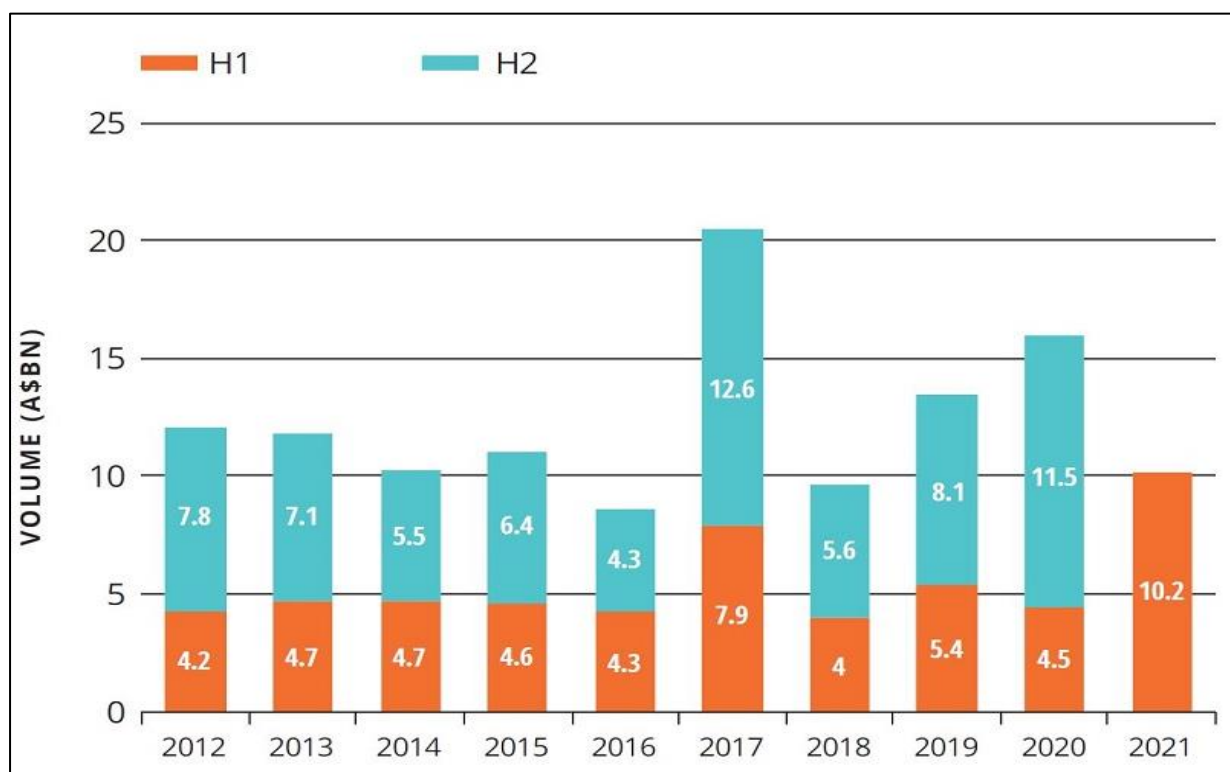


Diagram 5: Australian Domestic True Corporate Issuance¹⁰

As diagram 5 shows there continues to be issuances despite the increased volatility caused by the Covid pandemic and helped by central bank intervention.

¹⁰ Kanga News, 1 July 2021

Diagram 6 below shows an increasing trend in Australian corporate bond issuances with 10 plus year tenors.

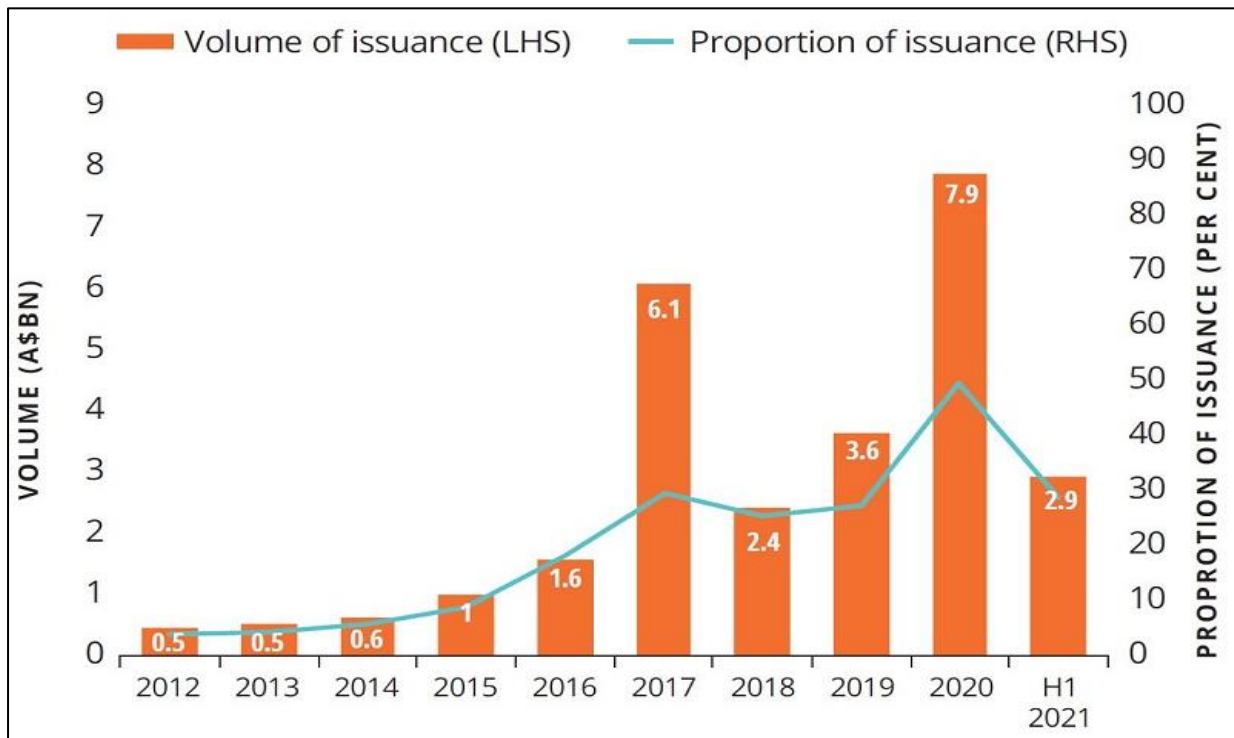


Diagram 6: Australian Domestic True Corporate Issuance at 10-plus Year Tenor¹¹

ACG in 2004 and we suspect because of the small size of the corporate debt market in Australia supported the use of market data for industry benchmarking. Whereas, given the increasing size and greater use of data analytics Chairmont supports the collection of actual cost data for benchmarking.

4.4 US PRIVATE PLACEMENT MARKET

In 2020, there was a total of slightly less than USD5 billion of US Private Placement (USPP) issuance from Australasian issuers, compared with around USD9 billion in 2019. By contrast, and shown in diagram 5, the Australian domestic true corporate issuance increased slightly in 2020 to nearly AUD16 billion from around AUD14 billion the previous year.

Australian issuance in USPP format in 2021 is just over US\$2 billion, compared to AUD 10 billion-plus issued domestically.¹² According to market feedback the greater issuance in the domestic market is because there is an abundance of liquidity because of central bank intervention which improved pricing and execution certainty in Australia for corporate borrowers.

The USPP market continues to be accessed for large or longer dated (10 year plus) bonds as a source of funds. For example, TEC Hedland Pty Ltd (South Hedland Power Station) raised AUD 800m maturing 30 June 2042 issued October 2020 via USPP.¹³

While USPP investors have in recent years been willing to provide unswapped Australian dollar funding, the domestic market has become increasingly reliable for seven and often 10-year tenor

¹¹ Kanga News, 1 July 2021

¹² Kanga News, Feb/March 2021

¹³ TransAlta Renewables Announces Pricing of AUD800 Million Secured Financing of South Hedland Combined Cycle Gas Assets - TransAlta Renewables

issuances, therefore making the local issuance the preferred option for many corporate borrowers over the past year or more.

4.5 DODD-FRANK AND BASEL III

Since the ACG report there have been changes to the corporate bond market both here and internationally. The GFC brought about operational change to the corporate bond market in the US through the Dodd-Frank Act 2010 and Basel III while recently the move to ESG investing has gained significant traction.

On an average each day, about USD15 trillion in U.S. dollar-denominated payments settle around the world.¹⁴ The operation behind this massive volume of USD denominated transactions of the financial system is managed by central banks and a relatively small number of large payments, clearing, and settlement (PCS) companies. PCS companies are systemically critical, and regulators consider these institutions “too big to fail”. To address this risk, Title VIII of Dodd-Frank subjects these institutions to a heightened level of regulation by providing them access to emergency liquidity at the discretion of the US Federal Reserve.

Title VII also mandated that most Over-The-Counter (OTC) derivatives be cleared. Prior to the GFC, a derivative contract had been settled between its two counterparties, under Title VII they would now have to be settled through a clearing house. A clearing house “stands” between the two counterparties in a transaction. Clearing houses charge a fee to users of derivatives, e.g., corporate bond issuers that use interest rate and cross currency swaps as a hedge.

No allowance for these fees has been proposed, with market feedback that corporate customers are not required to clear swaps because the intermediaries’ hedging costs are currently included in the transaction costs. Market feedback indicates these costs are covered as part of a wider banking relationship.

There are also standard swaps which are traded on a Swap Exchange Facility (SEF). Regulated entities are transacting non-collateral, non-cleared swaps. The cost is in the spread.

Australian corporate hedging transactions are generally uncleared and non-collateralised, although the cost borne by the market participant for any hedging transactions are included in upfront hedging costs.

In future, if clearing house fees for swap transactions are borne by the regulated entity and not covered by a banking relationship, then they should be included as an ongoing hedge cost. For this to occur the basis point fee would reduce to that of a cleared swap and be offset by the margin call costs. This is similar to other futures / derivative transactions.

The above is consistent with the data received by ERA from regulated entities on actual debt hedging costs.¹⁵

Additional feedback from market participants was that generally, though not always, ISDAs will be facility linked to broader corporate banking relationships.

Outlined below is analysis of cleared v uncleared swaps. Importantly, the analysis was completed using monthly figures so as to coincide with the 20 day trading window that the ERA allows. The key

¹⁴ NYU Stern White Paper – Don’t Forget the Plumbing: Payment, Clearing and Settlement Companies in Dodd Frank and CHOICE Acts by Bruce Tuckman

¹⁵ As part of this exercise ERA requested data from regulated entities.

conclusion from comparing cleared v uncleared swaps as shown in diagrams 7 and 8 is the greater volume of cleared transactions. It is likely this trend will continue.

AUD Cleared - 5 Year Swaps

Diagram 7 below shows the monthly traded notional value for AUD cleared Interest Rate Swaps (IRS) transactions with a 5 year term.

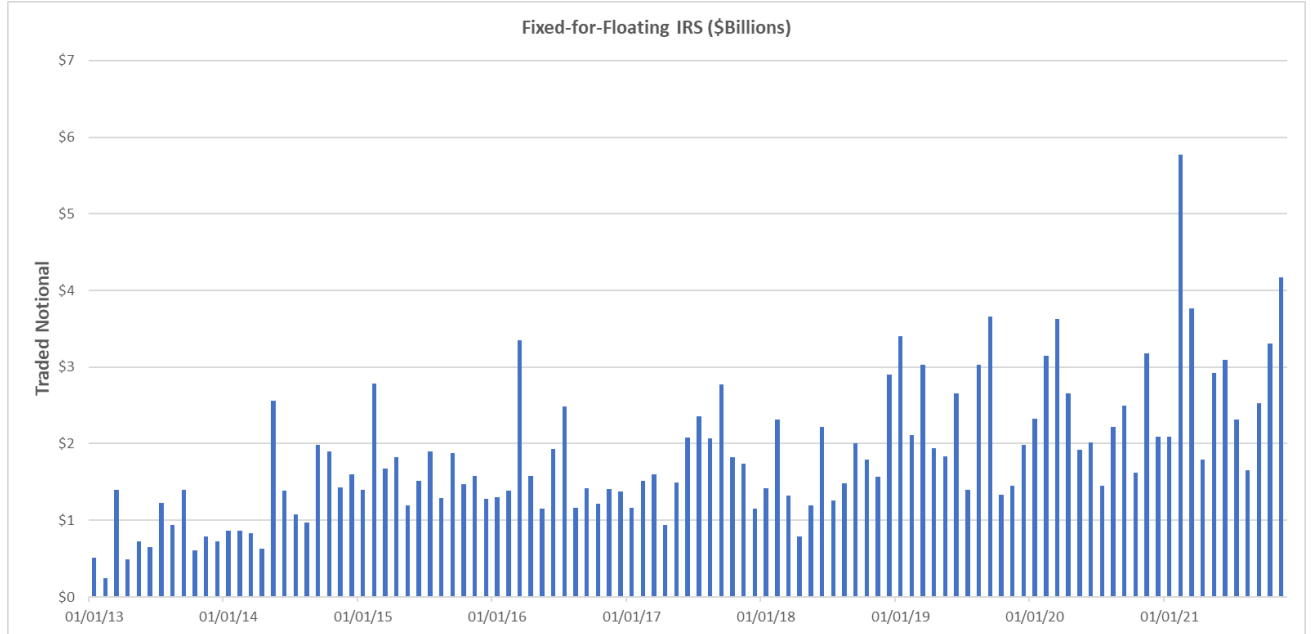


Diagram 7: AUD Cleared 5 Year Term Interest Rate Swaps– Monthly Traded Notional¹⁶

¹⁶ [ISDA website](#)

AUD Uncleared - 5 Year

Diagram 8 below shows the monthly traded notional value for AUD uncleared IRS transactions with a 5 year term.

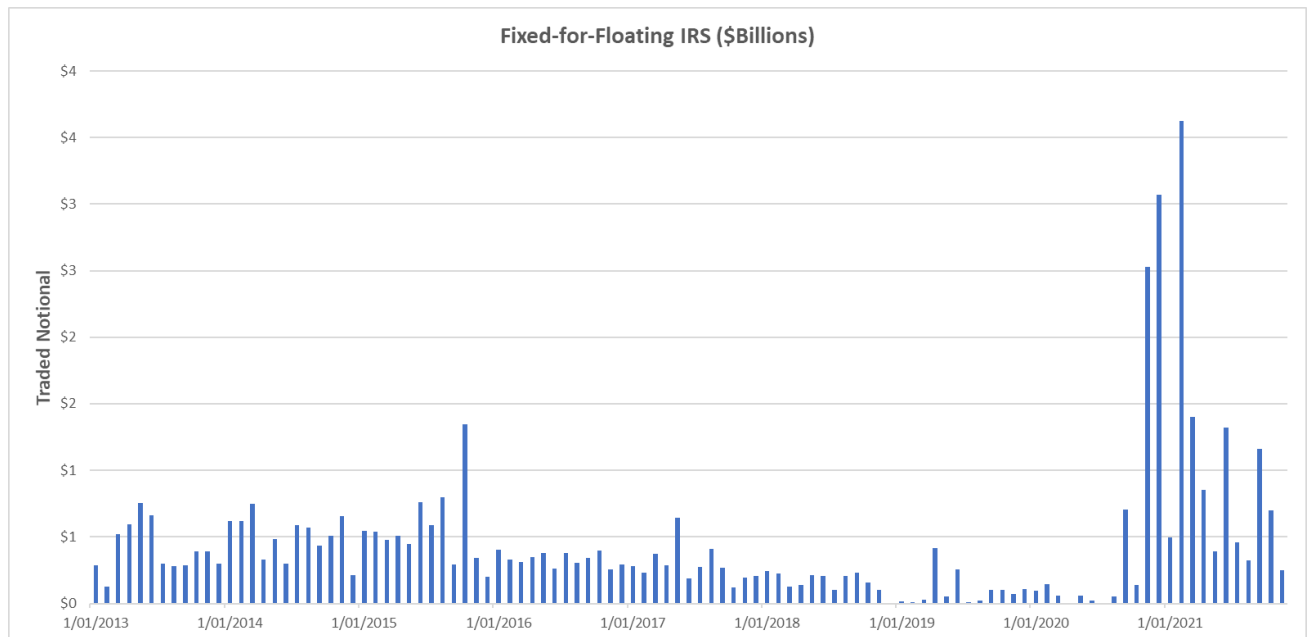


Diagram 8: AUD Uncleared 5 Year Term - Monthly Traded Notional¹⁷

4.6 ENVIRONMENTAL SOCIAL GOVERNANCE

Investor demand for more sustainable investments has increased demand for Green, Social and Sustainability (GSS) bonds¹⁸, used to finance new and existing projects that have a positive and sustainable impact on the environment and society.

For an entity which is able to access domestic funding sources, in particular the GSS bond market, the Australian bond market is both an efficient and cost effective market.

Conversely, there has been an investor push back in Australia on major banks who have funded projects that are not assessed as being environmentally conscious, and reduced demand from institutional investors for issuance of corporate bonds which do not meet internal ESG criteria.¹⁹ For example, "...PIMCO's proprietary ESG process, which incorporates three core approaches:

- Exclude issuers with business practices that are fundamentally misaligned with sustainability principles."

If the local debt capital markets view a regulated entity as not being "green" enough and they cannot raise debt, or are having difficulty in raising debt, they may have to access the international debt markets. Diagram 9 shows market survey results which reflect the growing acceptance of ESG.

¹⁷ [ISDA website](#)

¹⁸ Green Bond Principles seek to support issuers in financing environmentally sound and sustainable projects that foster a net-zero emissions economy and protect the environment.

¹⁹ PIMCO, Wholesale Class fund Reference Guide Page 2, 1 February 2021

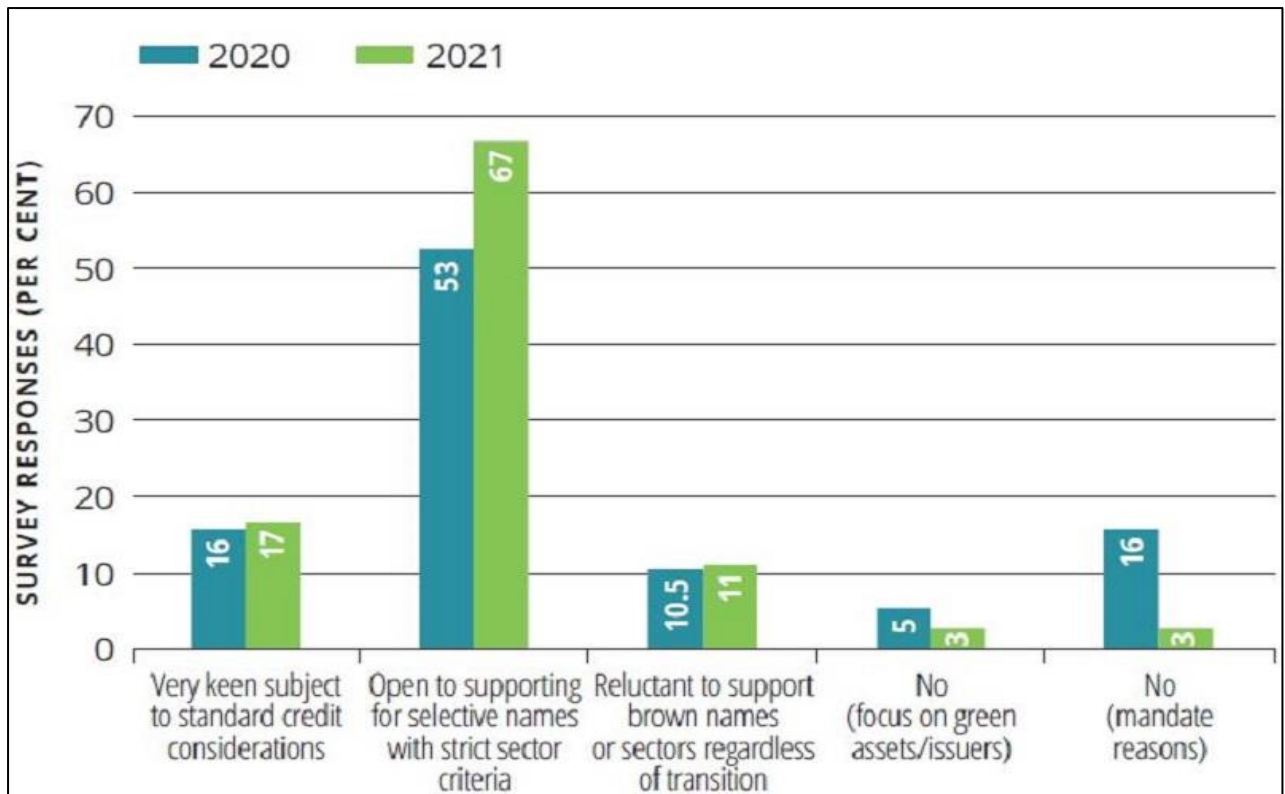


Diagram 9: Bond Financing an Issuer's Transition from Brown to Green²⁰

Similarly, credit rating agencies, e.g., S&P Global have established ESG principles and evaluation tools which flow into a corporate's credit rating.

In a more recent development in the ESG arena, Fitch Group on 15 September 2021 launched Sustainable Fitch. This brings its existing ESG capabilities together in one place and will have a global ESG Ratings solution for all asset classes at an entity and instrument level. It is designed and built on fundamentals entirely and exclusively to help the ESG focused financial community make better-informed decisions.

The International Capital Markets Association (ICMA) serves as the Secretariat to the Green Bond Principles (GBP), the Social Bond Principles (SBP), the Sustainability Bond Guidelines (SBG) and the Sustainability-Linked Bond Principles (SLBP) that have become the framework for the issuance and reporting of sustainable bonds.

Market surveys have shown that investors are increasingly prepared to pay a premium for bonds which are labelled GSS and meet independent reporting requirements. This premium will be included within the DRP for any GSS bond included in the benchmark sample.

For the issuer the costs associated with additional audit and reporting requirements will partially offset this premium and the ERA could consider including as a once off allowance. Diagram 10 shows the increasing willingness of the market to pay a premium on ESG debt.

²⁰ Commonwealth Bank of Australia, Kanga News July 2021

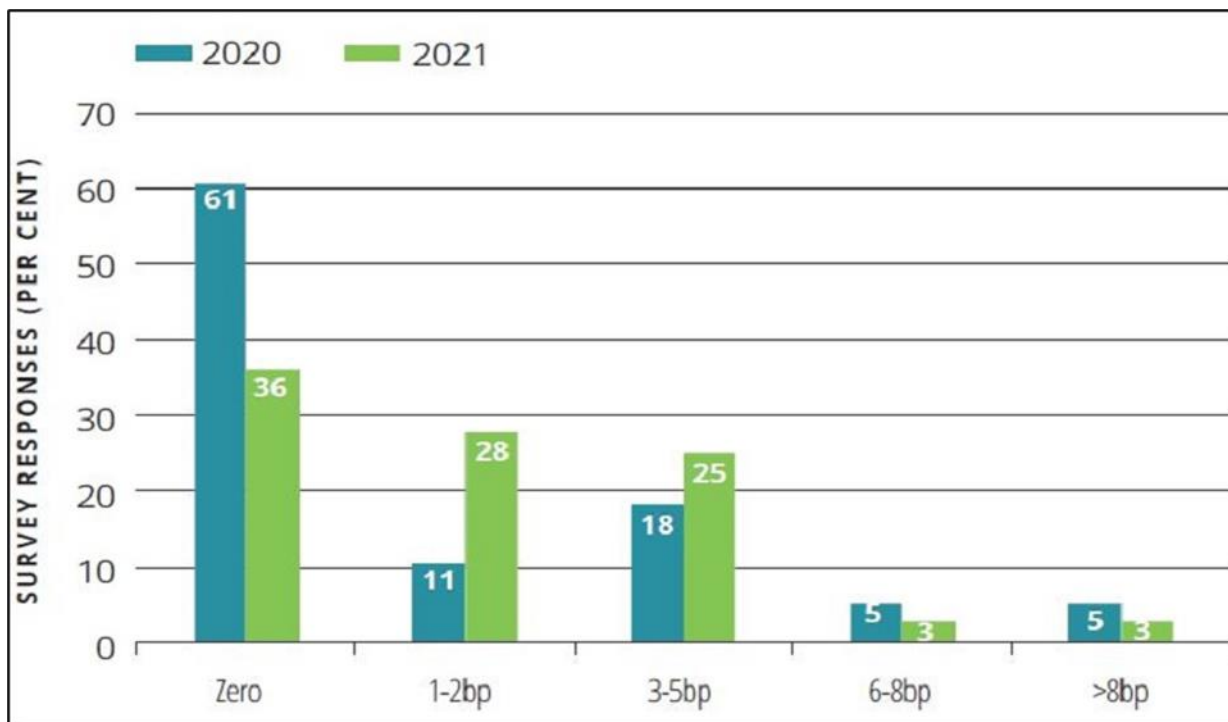


Diagram 10: GSS Bond Relative to an Unlabeled Bond²¹

Diagram 11 shows that about 37% of market participants believe a 25bp cost “is about right” for missing Key Performance Indicators (KPIs) linked to bond issuances.

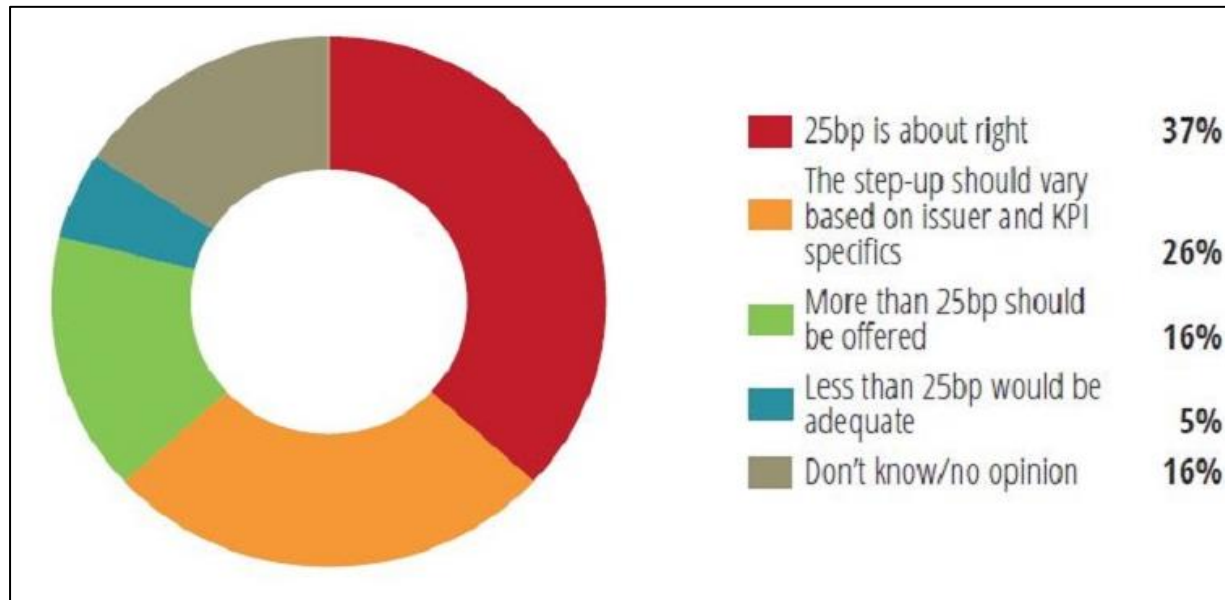


Diagram 11: Appropriateness of 25Bps Margin Step-up for Missing KPI Targets in an SLB²²

There is an argument that the ERA should consider providing relief to regulated entities for ESG compliance. If so, what is the form and conditions that should be attached to such an allowance? There is a counter argument that this is unnecessary as market forces will dictate behaviour.

²¹ Commonwealth Bank of Australia, Kanga News July 2021

²² Commonwealth Bank of Australia, Kanga News July 2021

Regardless any benefit from an increasing premium for GSS bond issuance will require increasing reporting standards which will come at a cost, which ERA should monitor.

In summary, ESG rating and investor requirements are starting to impact on debt issuances and in time unless regulated entities adopt these requirements, they may find their debt raising costs increase or possibly they are unable to access both the international debt capital markets and even the Australian debt markets. Conversely, regulated entities may be able to benefit from cost reductions relative to their peers and benchmark if they are able to meet agreed ESG benchmarks in debt and hedging agreements.

At this point in time there does not appear to be any material impact of ESG on debt raising and hedging costs. With ESG changes quickly spreading across the world the ERA should closely monitor ESG developments and its impact of regulated entities WACC.

5 DEBT RAISING COSTS

5.1 CURRENT APPROACH

Regulators across Australia have typically included an allowance to account for debt raising costs in their regulatory decisions.

These debt raising costs should only include the direct cost components recommended by the ACG in its 2004 report to the Australian Consumer Competition Commission (ACCC). These recommendations have been generally accepted by Australian regulators since its publication.

These direct costs will be recompensed in proportion to the average annual issuance, and will cover:

- gross underwriting fees
- legal and roadshow fees
- company credit rating fees
- issuance credit rating fees
- registry fees
- paying fees.

Indirect costs should not be included in the estimate of debt raising costs and should not be compensated.

The debt raising cost allowance will be added to the return on debt.

5.2 CURRENT DEBT RAISING COSTS

The 2018 ERA Guidelines for the Rate of Return ²³ specifies a debt raising cost allowance of 0.10 basis points per annum, noting it is consistent with other regulators.

This allowance fell within the range provided by a 2013 Price WaterhouseCoopers study and is comparable with estimates used by the ACCC and Queensland Competition Authority (QCA).

5.3 MARKET FEEDBACK - DEBT RAISING COSTS

Debt raising costs for issuances in the Australian bond market are not published. As mentioned earlier, Chairmont has undertaken informal interviews with several financial market intermediaries and other service providers to assist with determining these costs.

The costs for a BBB+ Australian corporate to establish a bond program and issue either 5 year or 10 year debt, in either AUD or through a global program (USPP) swapped back into AUD are shown in table I below.

The USPP market may be categorised into the Qualified Institutional Buyers (QIB) and Non-Qualified Institutional Buyers (NQIB). Rule 144A came into existence in 2012 and allows investments (securities) to be traded among QIBs without the normal restrictions that apply under rule 144 of the Securities Exchange Act 1933. These securities are referred to in the marketplace as 144As. This rule has substantially increased liquidity of affected securities. Table I below shows both QIBs and NQIBs, as well as Australian domestic issuances costs.

The market feedback results are shown in table I below.

²³ ERA, 2018 Final Gas Rate of Return Guidelines Explanatory Statement Page 241

Cost Item	Fee Occurrence	AUD Domestic	AUD Domestic	USPP (NQIBs)	US144a (QIBs)
Amount Raised		\$250m 5 year	\$250m 10 year	US\$100m 10 year	US\$100m 10 year
Arranger/Dealer Fee	Ongoing	25bp payable upfront	30-35bp	35bp	40bp
Legal Counsel - Master Programs (includes Issuer Counsel and programme establishment)	One off	\$60-150k			US\$600-750k
Legal Counsel - Fees for the Issuer (Dealer Counsel)	One off	\$20-60k		US\$50-75k	US\$150k
Credit Rating - Initial credit rating	One off	\$110k-130k	\$110k-130k	A\$110k-130k	A\$110k-130k
Credit Rating - Annual Surveillance	Ongoing	\$95k-100k	\$95k-100k	A\$95k-100k	A\$95k-100k
Credit Rating - Up-front bond issue fee	Ongoing	5-7bps payable upfront	5-7bps payable upfront		5-7bps payable upfront
Credit Rating - Initial credit rating (2 nd agency)	One off	\$110k-130k	\$110k-130k		A\$110k-130k
Credit Rating - Annual Surveillance (2 nd Agency)	Ongoing	\$80k-100k	\$80k-100k		A\$80k-100k
Credit Rating - Up-front bond issue fee (2 nd Agency)	Ongoing	5-7bps payable upfront	5-7bps payable upfront		5-7bps payable upfront
Credit Rating - Issuer consultancy cost	One off		\$200k	A\$200k	
Registrar - Up-front fee	One off	\$10k	\$10k	Not required	Not required
Registrar - Annual fee	Ongoing	\$5k-15k	\$10k	Not required	Not required
Agent's Out-of-pocket fees	One off			US\$20k	
With a physical roadshow		\$50k	\$50k	US\$125k	
Without a physical roadshow		\$5k-10k	\$5k-10k	US\$3k	
Other Costs - Execution	One Off	\$5k	\$5k	US\$10k	

Table 1: Estimated Debt Raising Costs

With the expansion of the Australian Corporate Bond market since ACG report in 2004, there is now a liquid domestic market for regulated entities to access debt.

One-off costs for global issuance are additional to the costs for issuance in the domestic market and these additional one-off costs would be reflected in the operational expense for the regulated entity.

All transactions costs are not continually re-incurred in respect of the total stock of capital.

The results from the market survey were consistent with actual data provided to the ERA by the regulated entities in survey responses.

5.4 PROPOSED DEBT RAISING COSTS

Chairmont is proposing the current allowance of 0.100 per cent per annum for debt raising costs be increased to 0.155 per cent per annum with an additional allowance for one off costs

Table 2 below contains a breakdown of the costs based on market feedback assuming a \$250m, BBB+ and for 10 year debt issuance in the Australian market.

Cost Item	Fee Occurrence	AUD Domestic	AUD Proposed (Ongoing)	AUD Proposed (One off)
Amount Raised		\$250m 10 year		
Arranger/Dealer Fee	Ongoing	30-35bp	32.5bp	
Legal Counsel - Master Programs (includes Issuer Counsel and programme establishment)	One off	\$60-150k		\$105k
Legal Counsel - Fees for the Issuer (Dealer Counsel)	One off	\$20-60k		\$40k
Credit Rating - Initial credit rating	One off	\$110k-130k		\$120k
Credit Rating - Annual Surveillance	Ongoing	\$95k-100k	\$97.5k	
Credit Rating - Up-front bond issue fee	Ongoing	5-7bps payable upfront	6bp	
Credit Rating - Initial credit rating (2 nd agency)	One off	\$110k-130k		\$120k
Credit Rating - Annual Surveillance (2 nd Agency)	Ongoing	\$80k-100k	\$90k	
Credit Rating - Up-front bond issue fee (2 nd Agency)	Ongoing	5-7bps payable upfront	6bp	
Credit Rating - Issuer consultancy cost	One off	\$200k		\$200k
Registrar - Up-front fee	One off	\$10k		\$10k
Registrar - Annual fee	Ongoing	\$10k	\$10k	
Agent's Out-of-pocket fees	One off			
With a physical roadshow		\$50k		\$50k
Without a physical roadshow		\$5k-10k ⁺		\$7k
Other Costs - Execution	One Off	\$5k		\$5k

⁺The calculation is based on physical roadshow amount and not without a physical roadshow.

Table 2: Estimated Domestic Debt Raising Costs

Table 3 below shows the estimated costs for a US\$100m offshore issuance.

Cost Item	Fee Occurrence	Offshore	Proposed (Ongoing)	Proposed (One off)
Amount Raised		US\$100m 10 year		
Arranger/Dealer Fee	Ongoing	35-40bp	37.5bp	
Legal Counsel - Master Programs (includes Issuer Counsel and programme establishment)	One off	US\$600-750k		US\$700k
Legal Counsel - Fees for the Issuer (Dealer Counsel)	One off	US\$50-150k		US\$75k
Credit Rating - Initial credit rating	One off	A\$110k-130k		A\$120k
Credit Rating - Annual Surveillance	Ongoing	A\$95k-100k	A\$97.5k	
Credit Rating - Up-front bond issue fee	Ongoing	5-7bps payable upfront	6bp	
Credit Rating - Initial credit rating (2 nd agency)	One off	A\$110k-130k		A\$120k
Credit Rating - Annual Surveillance (2 nd Agency)	Ongoing	A\$80k-100k	A\$90k	
Credit Rating - Up-front bond issue fee (2 nd Agency)	Ongoing	5-7bps payable upfront	6bp	
Credit Rating - Issuer consultancy cost	One off	A\$200k		A\$200k
Registrar - Up-front fee	One off		Not required	Not required
Registrar - Annual fee	Ongoing		Not required	Not required
Agent's Out-of-pocket fees	One off	US\$20k		US\$20k
With a physical roadshow		US\$125k		US\$125k
Without a physical roadshow		US\$3k		US\$3k
Other Costs - Execution	One Off	US\$10k		US\$10k

Table 3: Estimated Costs for US Issuance

The proposed weighted cost of debt raising costs for ERA is shown in table 4 below.

Transaction	BPPA	Factor %	BPPA Cost
10 year Australian dollar debt issuance (based on AUD250m)	13.340	65	8.671
10 year non – Australian dollar debt issuance (based on USD100m)	19.502	35	6.826
Total		100	15.497

Table 4: Proposed Calculation of Weighted Average Debt Raising Costs

There is no change to the weighting, rather the inclusion of more costs that results in an increased allowance. The existing Floating Rate Notes exclusion is maintained.

BPPA means Basis Points Per Annum.

6 DEBT HEDGING COSTS

6.1 CURRENT APPROACH

Hedging costs for cross currency swaps have increased as regulators require financial intermediaries to set aside capital for bilateral non-cleared and non-collateralised hedging transactions.

IRS are derivative contracts which typically exchange, or swap fixed-rate interest payments for floating-rate interest payments. They provide a means to hedge and manage risk which comes at a cost.

The current ERA methodology for estimating debt hedging costs allows for the following.

Hedging costs involved in converting from a typical 10 year fixed rate debt to the regulated five-year fixed rate will involve four legs:

- Swapping 10-year fixed rate for a base floating rate at the time of issuance, i.e., paying floating rate and receiving 10-year fixed rate payments; and
- Swapping the base floating rate at the time of the regulatory reset for five-year fixed while receiving floating and paying five-year fixed.

For each set of two legs, the following costs may be incurred by the regulated entity:

- **A credit and capital charge.** This compensates for the risk of the counterparty and will depend on the credit rating and the potential default loss.
- **An execution charge.** This compensates the swap intermediary for the costs of transacting the swap.

The benchmark efficient entity would potentially engage in four different transactions in hedging the base of its portfolio of debt:

- **Five-year floating to fixed Australian dollar swaps.** This transaction will occur at start of an access arrangement for the full amount of the debt portfolio.
- **Bond issuance.** There are potentially three different issue types being fixed rate, floating rate and foreign currency issuances. Each will require different swap considerations. For foreign currency bonds will require a cross-currency swap into floating Australian dollars; whereas fixed-rate Australian dollar bonds require a fixed-float Australian dollar swap.

6.2 CURRENT DEBT HEDGING COSTS

Table 5 contains a breakdown of the allowed hedging costs components. The hedging cost allowance is added to the return on debt.

Transaction	BPPA	Factor %	BPPA Cost
Five-year swap floating for fixed for the full amount of debt	4.0	100	4.0
plus 10-year cross currency swaps (100-65=) 35% of debt issuance	14.0	35	4.9
plus 10-year fixed-float Australian dollar swaps for (65-24 =) 31% of debt issuance ²⁴	6.0	41	2.5
Floating rate bank loans 24% of debt issuance	0	24	0
Total			11.4

Table 5: Calculation of Weighted Average Hedge Costs 2018

The Final Gas Rate of Return Guidelines Explanatory Statement provides guidance.²⁵ The levels (factor) are meant to change in line with market liquidity and counterparty portfolios; however, ERA has adopted a fixed approach, i.e., 35/65 split.

Table 6 contains a breakdown of the hedge costs by transaction type.

Transaction Type	Cost
5 year pay fixed IRS	4-6bp (1-2bp exec + 3-4bp credit)
10 year pay BBSW IRS	6-8bp (1.5-2.5bp exec + 4.5-5.5bp credit)
10 year Cross Currency Swap fixed foreign Cross Currency to BBSW (Assumes AUD-USD CCS)	14-16bp (2-3bp exec + 12-13bp credit)

Table 6: Hedge Transaction Type and Estimated Costs

Issuers would need to have an up-to-date ISDA in place. ISDAs are generally negotiated on a case-by-case basis and it can take up to 1-3 months to execute a new ISDA. The current approach does not include any allowance for legal costs borne by a regulated entity to negotiate and document an ISDA agreement.

In Australia, corporates swap transactions are generally non-collateralised and non-cleared with the clearing cost borne by the market participant. Market participants estimate these costs and include them in the upfront hedging costs to the corporate. Furthermore, market participants advised that generally, but not always, an ISDA facility will be linked to broader corporate banking relationships.

For corporates that transact cleared swaps, the up-front hedging costs will be lower, offset by margin calls and clearing house fees throughout the life of the transaction.

²⁴ Only a proportion of debt is raised overseas, requiring overseas credit and execution costs. For example, Competition Economists Group found that regulated energy companies had about 65 per cent of debt issued in Australian dollars in 2013, with the remainder in foreign currencies. Further, it found that 24 per cent of debt amounts outstanding was already floating (typically bank loans) Page 242

²⁵ ERA, The Final Gas Rate of Return Guidelines Explanatory Statement 18 December 2018 Page 243

6.3 MARKET FEEDBACK - DEBT HEDGING COSTS

Chairmont's survey of market participants on debt hedging costs provided the following results, and consistent with maintaining confidentiality of the participants we will only be providing broad guidance to the ERA and not referencing, or attributing, any specific response.

Regulatory change has reduced availability for corporates to access bilateral cross currency credit limits. Feedback from market participants was that generally, though not always, ISDAs will be facility-linked to broader corporate banking relationships.

The results from the market survey were consistent with actual data provided to ERA by the regulated entities in survey responses.

Table 7 contains the market feedback received on debt hedging costs.

Cost item	5 year AUD (Pay Fixed) BPPA	10 year AUD (Receive Floating) BPPA	10 year (Cross Currency) BPPA
Credit Charge + Capital	0.5-4.0	3.0 – 7.0	7.0 – 14.0
Transaction Charge	0.75 – 2.00	0.75 – 2.5	1.50 – 3.00
Total Market Estimate	3.50	6.50	13.0

Table 7: Market Feedback Debt Hedging Costs

Consistent with benchmark replication, 100% 10 year debt issued and hedged back into floating at issuance. At each regulatory reset this is swapped back into a 5 year fixed rate for the full amount of the debt.

The ERA approach has included within debt hedging costs an allowance for offshore issuance.

Access to the Australian domestic market with a liquid source of funds has made seven and often ten year tenor issuance the preferred option for many corporate borrowers. Offshore debt markets provide more liquid sources of funds for all term debt.

The USPP market in recent years had been providing un-swapped Australian dollar funding. Funding accessed in AUD reduces the weighting of cross currency swaps included in hedging transactions.

Consistent with the ACG method any cross currency swap margin should be treated as part of the debt risk premium rather than the transaction cost on debt, so it is excluded from the calculation of transaction costs.

6.4 PROPOSED DEBT HEDGING COSTS

Chairmont proposes the weighted cost of hedging be increased from 0.100 to 0.123 per cent per annum as shown in table 8 below.

Transaction	BPPA	Factor %	BPPA Cost
Five-year swap floating for fixed for the full amount of debt	3.5	100	3.50
plus 10-year cross currency swaps	13.0	35	4.6
plus 10-year fixed-float Australian dollar swaps for full amount of debt issuance	6.5	65	4.2
Total			12.3

Table 8: Proposed Calculation of Weighted Average Hedge Costs

As table 8 shows the factors have been re-weighted to be aligned to the index. This required:

1. 5 year Floating for Fixed Rate swap weighting be increased to 100%.
2. Cross currency swaps at issuance is 35%.
3. 10 year swap at time of issuance have a 65% weighting.

In future, regulated entities may receive a benefit for green initiatives through a reduction in debt hedging transaction costs. Chairmont has assumed that any reduction in costs would be to the benefit of the regulated entity which has achieved any required ESG derivative performance targets.

Any reduction in debt hedging transaction costs would likely require the regulated entity to have increased reporting costs.