



# Notice

7 September 2020

## Economic Regulation Authority's Weighted Average Cost of Capital

### Update of debt risk premium process

In many regulatory determinations, the ERA is required to determine a rate of return on capital investment that is then used to determine allowable revenues and/or prices for regulated businesses. The ERA determines rates of return as a weighted average cost of equity and debt. In determining the rate of return the ERA estimates a cost of debt.

The ERA is proposing to update its method for estimating the debt risk premium to account for upcoming changes in product packages provided by financial data provider Bloomberg. The ERA is seeking submissions from stakeholders on its revised process to calculate the debt risk premium.

The return on debt is the return that lenders require from a firm to compensate them for the risk they take in providing debt finance. The ERA's method of estimating the cost of debt is as follows:

Return on debt = risk-free rate + debt risk premium + administrative costs

The debt risk premium is the return above the risk-free rate that lenders require to compensate them for the risk of providing debt funding, and compensates holders of debt securities for the possibility of default.

The ERA uses its 'revised bond yield approach' to determine the debt risk premium at a point in time. The ERA's process for calculating the debt risk premium is set out in the separately published [appendices to the Explanatory Statement for the Gas Rate of Return Guidelines 2018](#). This method is used in determinations on access arrangements and pricing arrangements for regulated electricity, gas and rail businesses in Western Australia.

The ERA's method uses bond data from the standard Bloomberg product and Bloomberg's Swap Toolkit module. From 1 October 2020, Bloomberg is removing access to the Swap Toolkit module and transferring the module into to a premium derivatives product.

The ERA has worked with Bloomberg to understand the implications of the move of the Swap Toolkit to a premium product and has examined options available for calculating the debt risk premium.

The ERA considers that the large additional cost, around US\$50,000 per year, to access the premium product, in addition to a standard Bloomberg subscription, would be an unreasonable cost to pass on to regulated entities. This cost would also make it difficult for regulated entities to affordably replicate the ERA's process.

The ERA has decided to instead use bond data available under a standard Bloomberg subscription to estimate the debt risk premium.

The ERA is revising its method to reflect the removal of the Swap Toolkit and provide the required changes to formulas to calculate the debt risk premium. The spreadsheet template has been updated and continues to allow data to be automatically downloaded from Bloomberg for ease of use. Updated debt risk premium process documents are available on the [ERA website](#) and include:

- Updating DRP using R (version 2).
- Updating DRP using Excel (version 2).
- DRP Methods (version 2).

The ERA's analysis across its recent decisions suggests that variances from using the revised calculations are very small – in the order of a few basis points of the absolute value of the debt risk premium (Table 1).

**Table 1: ERA analysis of updated debt risk premium process on its forecast cost of debt\***

Utility – the averaging period for the cost of debt calculation	Existing process cost of debt from DRP process (%)	Updated process cost of debt from DRP process (%)	Variance in cost of debt (equal variance in debt risk premium) (basis points)	Annual debt risk premium from ERA decision (basis points)
Mid-West and South-West Gas Distribution System Final Decision – September 2019	2.987	2.997	1.0	177
Dampier to Bunbury Natural Gas Pipeline Draft Decision – February 2020	2.635	2.596	(3.9)	151
Goldfields Gas Pipeline Final Decision – October 2019	2.862	2.866	0.4	173
Rail BBB+toBBB Final – June 2019	3.806	3.798	(0.8)	228
Rail BBB+ Final – June 2019	3.549	3.515	(3.4)	202
Rail BBB- Final – June 2019	5.019	5.001	(1.8)	349
Rail A+toA- Final – June 2019	3.207	3.198	(0.9)	168
Rail A Final – June 2019	3.264	3.263	(0.1)	174
Rail BBB+toBBB Final – June 2020	3.664	3.659	(0.5)	274
Rail BBB+ Final – June 2020	3.629	3.622	(0.7)	271

Utility – the averaging period for the cost of debt calculation	Existing process cost of debt from DRP process (%)	Updated process cost of debt from DRP process (%)	Variance in cost of debt (equal variance in debt risk premium) (basis points)	Annual debt risk premium from ERA decision (basis points)
Rail BBB- Final – June 2020	4.806	4.805	(0.1)	388
Rail A+toA- Final – June 2020	2.680	2.695	1.5	176
Rail A Final – June 2020	2.946	2.945	(0.1)	202

\* This analysis calculated the on-the-day debt risk premium for the relevant averaging period. For the rail WACC the on-the-day debt risk premium is used. For electricity and gas, a 10-year trailing average debt risk is used.

Any small variances in the cost of debt will result in even smaller variances in the weighted average cost of capital, because debt makes up only a portion of the overall weighted average cost of capital estimate. The effect on the weighted average cost of capital will be equal to the variance multiplied by the proportion of debt in the total weighted average cost of capital. For electricity and gas networks, historic debt risk premia amounts will remain unchanged and the use of a 10-year trailing average debt risk premium will further reduce any variance.

The updated debt risk premium process:

- Is consistent with the ERA’s debt risk premium principles.
- Avoids the need to pay for the Bloomberg premium product.
- Improves the Excel templates’ stability and performance.
- Removes the requirement of a Bloomberg Anywhere subscription, and only requires the standard Bloomberg product, improving accessibility.

### Invitation for submissions

The ERA invites interested parties to make submissions on the proposed update of the debt risk premium process.

Submissions close 4:00 pm (WST) Monday, 21 September 2020.

Submissions should be lodged online using the form on our website [www.erawa.com.au/consultation](http://www.erawa.com.au/consultation).

### Further information

General enquiries  
 Jason Dignard  
 Ph: 08 6557 7917  
[info@erawa.com.au](mailto:info@erawa.com.au)

Media enquiries  
 Natalie Warnock  
 Ph: 08 6557 7933 | Mob: 0428 859 826  
[media@erawa.com.au](mailto:media@erawa.com.au)