

**NOTES FOR THE EXPERT SESSIONS 10 FEBRUARY 2022: AER's INDUSTRY
DEBT INDEX**

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1. Role of the EICSI in the Rate of Return Instrument

The EICSI could be used as follows. The AER should decompose the difference between the EICSI estimate and its current estimate into the part due to credit rating, the part due to debt term, and the residue (which is due to factors other than debt term and credit rating). This is done as follows:

- (a) Use the EICSI data over the observation window (2018-2022) to determine the average debt term and the average credit rating of the regulated businesses. Call these T years and R respectively.
- (b) Reset the weights on the BBB and A bonds to be consistent with this average credit rating R . Call these new weights w and $(1 - w)$. For example, if R is BBB+, the current weights of $2/3$ on the BBB bonds and $1/3$ on the A bonds would still be correct. By contrast, if R is instead A-, then the weights should instead be $1/3$ on the BBB bonds and $2/3$ on the A bonds.
- (c) Re-determine the average DRP allowance over the 2018-2022 period under the current process but using a debt term of T years and the revised weights w , $1 - w$. Call this average new allowance Q_A .
- (d) Compare this average new allowance Q_A with the average DRP in the EICSI data over the 2018-2022 period (Q). Define $D = Q_A - Q$ to be the excess of the allowed rate under the current process over the rate arising from the EICSI data.

For example, using the 2018-2022 period, suppose the EICSI data yields an average DRP of $Q = 4.2\%$, an average debt term of eight years and an average credit rating of $R =$ midway from BBB+ to A-. In addition, using the same 2018-2022 period, suppose the average DRP allowed under the current process with a debt term of ten years and weights on the BBB and A bonds of $2/3$ and $1/3$ respectively is 4.8% . Since R is midway between BBB+ and A-, the weights on the BBB and A bonds should be reset at $w = 0.5$ and $1 - w = 0.5$. Using these new weights and a debt term of eight years, suppose the average cost of debt using the RBA, Bloomberg and Thomson Reuters data over the 2018-2022 period is $Q_A = 4.4\%$. Accordingly, $D = Q_A - Q = 0.2\%$.

The question is then what to do with this analysis. The first step would be to investigate the differences in T , R and Q . One or more might be due to errors or outliers that warrant dismissing. These should be corrected and revised values for T , R and Q determined.

If the AER is confident in the revised EICSI data, which would require a sufficiently large data set, it should use the new values for T and R to amend its existing methodology for the 2018-2022 period. Extrapolation back to the earlier years is problematic because the values for T and R could have changed over time.

If the outperformance ($Q_A - Q$) is not statistically significant, it should be ignored. If it is statistically significant and the AER is sufficiently confident in the EICSI data, it should be used to amend the results from the existing approach over the 2018-2022 period. Extrapolation to earlier years is problematic as it may have changed over time.

2. Implications of Outperformance

See above.

3. Use of the EICSI for Estimating the Term for the Allowed Cost of Debt

See above.