# Overall rate of return

Response to AER's Pathway to 2022 Rate of Return
Instrument: Draft Overall Rate of Return Omnibus
Working Paper

3 September 2021

# Contents

# 1    Overview

**Key messages**

» **A stocktake on the current state of engagement**:

ENA strongly supports the AER's approach to early engagement on a range of issues relevant to the 2022 RoRI.

There is already very broad agreement between ENA and the AER on the vast majority of issues that have been identified. ENA broadly agrees with the AER's preliminary position on 32 of the 40 issues that have so far been raised in the Draft Working Papers and appreciates the opportunity to engage further on the remaining 8 issues.

There are a number of issues that have been raised in expert reports commissioned by the AER, but on which the AER has not yet engaged or provided a view. ENA considers it to be an important part of the process for the AER to provide clear responses on these issues at the earliest opportunity.

» **Hybrid securities and subordinated debt**:

ENA considers that where a security has the economic characteristics of debt, it should be treated as debt consistently throughout the entirety of the RoRI parameter estimation process.

» **Gearing**:

ENA recommends that the next step in the consultation on gearing levels would be informed by:

– The preparation of updated gearing figures that include all securities that have the economic characteristics of debt; and

– Consideration of the extent to which changes in average gearing figures are driven by changes in the sample of firms available (and the extent to which the remaining firms have issued subordinated debt that is omitted from the calculations).

» **Gamma**:

ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC. ENA supports the AER's proposed approach of seeking more information to properly assess the reliability of the ATO estimates.

» **Cross checks**:

ENA considers that cross checks have an important role in testing the way regulatory judgment has been used throughout the process. ENA considers that cross checks are most usefully applied to the allowed return on equity and in the form of financeability analysis.

## 1.1    Early consideration of an important issue

Energy Networks Australia (ENA) strongly endorses the Australian Energy Regulator's (AER) approach in commencing consultation on the 2022 Rate of Return Instrument (2022 RoRI) at this early stage. This approach provides an opportunity for thorough stakeholder engagement and proper analysis of

approaches and evidence. ENA welcomes the opportunities provided to engage with the AER and other stakeholders, including through interactive forums, throughout this process.

## 1.2 Evaluation framework is the long-term interests of consumers

ENA notes that the National Electricity Objective (NEO) and National Gas Objective (NGO) are centred around the long-term interests of consumers. Our companion submission on *Allowed Returns in a Low-Rate Environment*[1] explains why we consider that the long-term interests of consumers are best promoted by setting the regulatory allowance for the return on capital equal to the best possible unbiased estimate of the market cost of capital.[2]

That is, the long-term interests of consumers are best served by setting the regulatory allowance to reflect the efficient cost of debt and equity finance required by real-world investors – the opportunity cost of capital for a real-world investor in a firm with a similar level of risk. This approach creates the proper incentives for efficient investment in, and efficient utilisation of, network assets. In turn, correct incentives for investment in, and operation and use of network assets promotes economically efficient signals for customer investment and usage decisions, consistent with the economic efficiency focus of the NEO and NGO. These signals also provide the means of promoting efficient investment and consumption across time, maximising dynamic efficiency and balancing the interests of current and future network customers.

In our view, best reflecting the market cost of capital should be the guiding principle when setting the allowed return on capital.

Throughout this submission we consider which approach best reflects the market cost of capital – the rate of return that real-world investors actually require. Our view is that this approach best promotes the long-term interests of consumers.

## 1.3 Summary of ENA positions

### A stocktake of the current state of engagement

ENA strongly supports the AER's approach to early engagement on a range of issues relevant to the 2022 RoRI. The publication of the AER's preliminary positions on key issues is a significant improvement on the 2018 RoRI process, and is strongly supported, and appreciated, by ENA members.

There is already very broad agreement between ENA and the AER on the vast majority of issues that have been identified:

» ENA broadly agrees with the AER's preliminary position on 32 of the 40 issues that have so far been raised in the Draft Working Papers.

» On 3 issues, the AER is proposing, or at least considering, a new approach, but ENA considers that the current approach should be maintained.

» There are 5 issues on which ENA and the AER currently have different or unsettled views.

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[1] ENA, September 2021, *Allowed Returns in a Low-Rate Environment*.
[2] See particularly Section 2 of that submission.

There are a number of issues that have been raised in expert reports commissioned by the AER, but on which the AER has not yet engaged or provided a view. For example:

» Dr Lally has advised against the approach of changing one parameter (credit rating) to reflect a perceived issue in relation to a different parameter (term of debt). He draws particular attention to the case where a parameter is changed such that it is inconsistent with the empirical evidence in relation to that parameter.[3]

» CEPA has advised that there is "no good evidence" to support the approach to Market Risk Premium (MRP) that was adopted in the 2018 RoRI. [4]

» Brattle has advised that the 2018 AER regulatory return on equity estimation approach is currently producing outcomes below that of a broad range of international regulatory regimes and concluded that the approach adopted in the 2018 RoRI is "not as effective as the approach of other regulators".[5]

ENA considers it to be an important part of the process for the AER to provide clear responses on these issues at the earliest opportunity.

## New criteria to inform the exercise of regulatory judgment

ENA agrees that there is merit in the proposed new criteria of materiality and longevity/sustainability. In particular, ENA considers it to be important that the regulatory approach produces reasonable outcomes over a range of plausible scenarios. This is particularly important in light of the binding nature of the RoRI.

As with all criteria, their usefulness depends on the way in which they can be consistently operationalised in practice. ENA provides a number of examples of how these criteria might be best used to inform the exercise of regulatory judgment.

## Form of the rate of return

ENA agrees that the allowed rate of return should be estimated in the form of a nominal vanilla WACC.

## Gearing

ENA considers that gearing should be estimated on a market value basis (i.e., using the market value of equity and not the book value of equity). There is no useful role for book value gearing estimates when estimating the WACC.

It is important to note that the observed market value gearing of comparator firms will vary over time, even in the absence of any conscious actions from the firm – market value gearing changes with every change in the stock price. For this reason, it is common to estimate market value gearing by having regard to data over the course of a market cycle. ENA considers an estimate over 10 years to provide a reasonable indication of the target level of gearing for each firm.

In relation to hybrid securities and subordinated debt, ENA's view is that the approach should be as follows:

» Analyse and understand the terms and conditions of each security.

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[3] Lally, M., April 2021, *The appropriate term for the allowed cost of capital*, p. 47.
[4] CEPA, June 2021, *Relationship between RFR and MRP*, pp. 6-7.
[5] Brattle, June 2020, *A review of international approaches to regulated rates of return*, p. 58.

»     Determine the extent to which the security has the economic characteristics of debt.

Where a security has the economic characteristics of debt, it should be treated as debt consistently throughout the entirety of the RoRI parameter estimation process.

ENA recommends that the next step in the consultation on gearing levels would be informed by:

»     The preparation of updated gearing figures that include all securities that have the economic characteristics of debt; and

»     Consideration of the extent to which changes in average gearing figures are driven by changes in the sample of firms available (and the extent to which the remaining firms have issued subordinated debt that is omitted from the calculations).

## Gamma

ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC.

If the AER maintains its 'utilisation' interpretation of gamma, what is required is the best possible estimate of the proportion of imputation credits that are redeemed.

Conceptually, it would seem that the Australian Taxation Office (ATO) is best placed to provide that data. ENA supports the AER's proposed approach of seeking more information to properly assess the reliability of the ATO estimates.

In relation to foreign investors:

»     ENA notes that the 'market value' that foreign investors might derive from imputation credits [AER Q9] is irrelevant under a 'utilisation' interpretation of gamma.

»     Under a 'utilisation' interpretation, the relevant question is the extent to which foreign investors redeem imputation credits, not the price they would be willing to pay for them – the same approach that is applied to resident investors under the 'utilisation' approach.

»     ENA agrees that, in the absence of further information, the approach of disregarding credits distributed to foreign investors remains reasonable.

## Cross checks

**Rationale for cross checks:**

WACC parameters cannot be estimated, or combined together, in a precise manner – estimation, simplification, and judgment is required. ENA considers that cross checks have an important role in testing the way regulatory judgment has been used throughout the process. That is, cross checks can be used as part of the process of testing whether the exercise of regulatory judgment throughout the estimation process has produced an output that is reasonable in all of the circumstances.

**Role of cross checks:**

ENA does not consider that cross checks can be used in a mechanical or deterministic way to adjust any WACC parameter or the overall allowed return on equity or WACC. For example, any information that could be used to directly inform the value of a particular parameter should be used to inform the estimate of that parameter – not reserved for some later cross check.

Rather, ENA considers that the appropriate role of cross checks is to identify potential problem areas for re-examination and reconsideration.

To be clear, ENA does not suggest that the allowed return or any component of it should be re-engineered to be consistent with any particular cross check. Such an approach would amount to replacing the initial estimation approach with the crosscheck approach.

ENA considers that cross checks have an important role in testing the way regulatory judgment has been used throughout the process. ENA considers that cross checks are most usefully applied to the allowed return on equity and in the form of financeability analysis.

**Other regulatory allowances:**

One example of how cross checks could be applied relates to other regulatory return on equity allowances. This is because regulators in comparable jurisdictions are performing a task similar to the AER's, and face the same difficult estimation issues as the AER. ENA considers that there is value in observing how comparable regulators address these issues and how they exercise their regulatory judgment.

In this regard, Brattle (June 2020) reports that the AER's return on equity allowances are materially different from those of other comparable regulators performing the same estimation task. For example, ENA does not suggest that the AER's estimate should be discarded and replaced with the mean estimate of the other regulators. Rather, the AER's estimation process might be informed by information about:

» The types of data that other regulators consider;

» The statistical and other methods that other regulators use to estimate parameters; and

» The way in which other regulators exercise their regulatory judgment.

**Financeability:**

Similarly, a financeability cross check can be performed to test the internal consistency of a regulatory decision. ENA proposes that financeability tests should be applied to check whether the allowed return supports the credit rating that was assumed when deriving it. ENA does not suggest that the allowed return be 'back solved' in some manner. Rather, a failure of this cross check would precipitate an examination of the causes of this internal inconsistency and a reconsideration about whether such an internally inconsistent allowed return is the best unbiased estimate of the market cost of capital.

**Historical profitability and RAB multiples:**

ENA does not see how historical profitability data (even if robust) or RAB multiples can have any useful role. This data provides no useful indication about what the best unbiased estimate of the market cost of capital might be.

**Investment trends:**

In relation to investment trends, ENA considers that only information about discretionary investment is relevant. Information about investment that occurred due to ministerial direction or due to changed reliability standards has no relevance to any question about the incentive for efficient investment. Neither does evidence about replacement capital expenditure that is required to meet short-term safety and reliability standards. Evidence of discretionary capital expenditure being delayed would include an increase in the age profile of assets and asset replacement rates falling below sustainable levels.

# 2 A stocktake of the current state of engagement

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**Key messages**

» ENA strongly supports the AER's approach to early engagement on a range of issues relevant to the 2022 RoRI. The publication of the AER's preliminary positions on key issues is a significant improvement on the 2018 RoRI process, and is strongly supported, and appreciated, by ENA members.

» There is already very broad agreement between ENA and the AER on the vast majority of issues that have been identified:

– ENA broadly agrees with the AER's preliminary position on 32 of the 40 issues that have so far been raised in the Draft Working Papers.

– On 3 issues, the AER is proposing, or at least considering, a new approach, but ENA considers that the current approach should be maintained (summarised below).

– There are 5 issues on which ENA and the AER currently have different or unsettled views (summarised below).

» There are a number of issues that have been raised in expert reports commissioned by the AER, but on which the AER has not yet engaged or provided a view. ENA considers it to be an important part of the process for the AER to provide clear responses on these issues (summarised below).

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## 2.1 Significant common ground

ENA strongly supports the AER's approach to early engagement on a range of issues relevant to the 2022 RoRI. Open engagement between stakeholders, including the AER, can only lead to the production of a more robust RoRI. The publication of the AER's preliminary positions on key issues is a significant improvement on the 2018 RoRI process, and is strongly supported, and appreciated, by ENA members.

In the stakeholder forum of 4 August 2021, ENA noted that the AER's Draft Working Paper series has so far identified 40 issues. ENA agrees with the AER preliminary position on 22 of these, and broadly agrees with another 10. Of the remaining 8, ENA's position is to maintain the current approach, whereas the AER is proposing a change on 3 issues. This leaves only 5 issues where the AER and ENA currently have different or unsettled views. Thus, there is already broad agreement between ENA and the AER on the vast majority of issues that have been identified, as summarised in Table 1 below.

**Table 1: Level of agreement between ENA and AER preliminary positions**

| Current status of issue | Count |
|---|---|
| ENA agrees with the AER's preliminary position. | 22 |
| ENA broadly agrees with the AER's preliminary position, but has provided some additional comments about how the AER's proposed position might be implemented. | 10 |
| ENA recommends maintenance of the status quo, but the AER preliminary position involves a change in approach. | 3 |
| ENA and the AER currently have different or unsettled views. | 5 |

A full list of issues, together with ENA and AER preliminary positions, is set out in the Appendix to this submission.

ENA highlights that there is broad agreement about 32 of the 40 issues that have been raised thus far. Although there are 8 issues on which ENA considers more engagement and analysis are required, it is important to view this in the context of the broad agreement on the vast majority of issues.

## 2.2 Issues on which ENA supports maintenance of the current approach

There are three issues on which ENA supports maintenance of the current approach, but where the AER is proposing, or at least considering, a new approach:

» **The term of the risk-free rate**

ENA considers that there is strong evidence to support the maintenance of a 10-year risk-free rate. A 10-year term is consistent with every determination the AER has made since its inception and with the approach adopted by other regulators, practitioners and academics.

ENA's position on this point is set out in our *Term* submission of July 2021.[6]

» **Using the EICSI as a cross check**

ENA considers that the EICSI data should be used as a cross check of data obtained from independent third-party data sources. The AER has used independent third-party data sources to determine the allowed return on debt in decisions since its inception. ENA has a number of concerns about the AER's interpretation of the EICSI data and about how bias is introduced by the inclusion of recently privatised entities and by the omission of subordinated debt.

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[6] ENA, July 2021, *The term of the rate of return*.

ENA's position on this point is set out in our *Return on Debt* submission of November 2020.[7]

» **Using the EICSI to estimate outperformance**

The AER in 2018 used the EICSI to investigate whether there might be a difference between the regulatory allowance and the network's actual cost of debt on a like-with-like basis. ENA considers that this is an appropriate use of the EICSI data – if the EICSI is appropriately specified, including tenor-weighting, to ensure a proper like-with-like comparison.

ENA is particularly concerned about the EICSI being used to adjust the assumed credit rating in relation to a perceived difference in the term of debt.

ENA's position on this point is set out in our *Debt Omnibus* submission of August 2021.[8]

## 2.3 Issues where ENA and the AER currently have different or unsettled views

There are five issues where ENA and the AER currently have different or unsettled views:

» **Using government bonds to estimate the CAPM risk-free rate**

ENA has proposed that the AER should reconsider whether the prevailing government bond yield remains an appropriate proxy for the CAPM risk-free rate. ENA notes that some international regulators have questioned whether government bond yields are an appropriate proxy for the CAPM risk-free rate due to a convenience yield – that government bonds have special characteristics beyond being a risk-free instrument. Moreover, government bonds are currently the subject of RBA market interventions, designed to reduce the yield below the level that would otherwise be determined by the market. ENA notes that it is common for practitioners and international regulators to adopt a CAPM risk-free rate above the prevailing government bond yield.

For these reasons, ENA considers that it is too early in the process to conclude that government bond yields remain an appropriate proxy for the CAPM risk-free rate and that more engagement and analysis is required.

ENA's position on this point is set out in our *Low Rates* submission of July 2021.[9]

» **Relying exclusively on domestic comparators to estimate of equity beta**

ENA notes that the AER's sample of domestic comparators is now down to three. When the Spark Infrastructure transaction completes there will be two comparators. The remaining two comparators, APA Group and AusNet Services have both been mentioned as takeover targets in the financial press.[10] Moreover, the AER has previously expressed concerns about the comparability of

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[7] ENA, November 2020, *Return on debt*.

[8] ENA, September 2021, *ENA response to the Debt Omnibus paper*.

[9] ENA, July 2021, *Allowed returns in a low rate environment*.

[10] https://www.afr.com/companies/financial-services/sydney-airports-is-just-the-crest-of-the-m-and-a-wave-20210706-p58799.

APA Group, and AusNet is the subject of a debate about how to measure gearing, which has direct implications for beta.

The AER has previously relied on estimates for firms that no longer exist, and whose beta estimates are frozen permanently in time. The data for these firms is becoming more dated in each new RoRI.

At some point, the AER will have to confront the problem that the domestic evidence is simply insufficient to produce a reliable estimate of equity beta.

Other regulators have different approaches for dealing with the problem of having a small sample of domestic comparators, for example.

ENA considers that the case for applying at least some weight to the international evidence, a broader set of domestic comparators, and to the estimates of other regulators has become more compelling as the set of listed domestic energy networks becomes more and more inadequate.

ENA's position on this point is set out in our *Equity Omnibus* submission of September 2021. [11]

» **The process for estimating the market risk premium**

ENA considers that the estimate of the MRP should have real regard to three pieces of relevant evidence: (a) the historical average MRP; (b) an estimate of the total market return; and (c) a forward-looking dividend growth model, calibrated to produce average estimates that are consistent with the observed historical data.

ENA's position on this point is set out in our *Equity Omnibus* submission of September 2021. [12]

» **Including all debt instruments as debt**

ENA's view is that subordinated debt has the economic characteristics of debt and therefore should be included as debt throughout the regulatory process. Subordinated debt has a higher cost than senior debt and enables senior debt to maintain a higher rating. Including subordinated debt when estimating the amount of debt, but excluding it when estimating the cost of debt, for example, would clearly lead to a biased estimate of the average cost of debt and violate the NPV=0 principle.

ENA's position on this point is set out in Section 5 of this submission.

» **Applying a consistent approach to debt instruments throughout the regulatory process**

ENA considers that debt instruments such as subordinated debt should be used consistently throughout the regulatory process. We demonstrate that the process of including subordinated debt when estimating some parameters, but excluding it when estimating others, can lead to biased outcomes.

ENA's position on this point is set out in Section 5 of this submission.

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[11] ENA, September 2021, *ENA response to the Equity Omnibus paper*.
[12] ENA, September 2021, *ENA response to the Equity Omnibus paper*.

## 2.4 Summary of key issues for consideration during the 2022 RoRI process

ENA submits that the eight key issues set out above should be a key focus of the consultation process throughout the remainder of the 2022 RoRI process. These issues are summarised in Table 2 below.

**Table 2: Key issues to be considered in 2022 RoRI process.**

| Issue | ENA Position | Source |
|---|---|---|
| Term of the risk-free rate | Maintain current approach (10-year term). | *Term* (July 2021) |
| Role of EICSI data | Maintain current approach.<br>EICSI should be used as a cross check only, not determinatively. | *Return on debt* (Nov 2020)<br>*Debt Omnibus* (Sep 2021) |
| Use of EICSI to estimate outperformance | Maintain current approach.<br>Concerns about bias due to omission of subordinated debt and inclusion of recently-privatised networks.<br>Strong concerns about changing credit rating parameter to reflect a perceived discrepancy in the term parameter. | *Return on debt* (Nov 2020)<br>*Term* (July 2021)<br>*Debt Omnibus* (Sep 2021) |
| Use of government bonds to estimate the CAPM risk-free rate | Further consultation required. | *Low rates* (July 2021) |
| Exclusive reliance on domestic comparators when estimating beta | Have real regard to all relevant evidence. | *Equity Omnibus* (Sep 2021) |
| Exclusive reliance on historical excess returns when estimating MRP | Have real regard to all relevant evidence. | *Equity Omnibus* (Sep 2021) |
| Role of subordinated debt | Subordinated debt has all of the economic characteristics of debt and should be included as debt. | *Overall rate of return* (Sep 2021) |

| | | |
|---|---|---|
| Consistent treatment of debt instruments | Debt instruments must be treated consistently throughout the regulatory process. Including an instrument in one part of the process but excluding it in another is likely to lead to biased outcomes. | *Overall rate of return* (Sep 2021) |

## 2.5     Engagement with the evidence and recommendations from AER expert reports

The AER has commissioned a number of expert reports to assist in its decision-making throughout the process to date. These expert reports have presented the results of various analyses and made a number of recommendations to the AER. ENA agrees with, and supports, many of these recommendations. ENA considers that it would now be an appropriate stage of the process for the AER to engage with these recommendations and to set out its views in relation to them. A number of examples are set out below.

» **The 2018 approach is producing regulatory allowances below those of other comparable regulators. Does this matter?**

Section 3.3 of the ENA *Low Rates* submission of July 2021 notes that the Brattle Report of June 2020 identified that:

» The AER's allowed nominal return on equity is lower than that adopted by every other regulator for which a comparison could be made;[13]

» The AER's allowed real return on equity is lower than that adopted by every other regulator for which a comparison could be made. The closest allowed real return on equity is almost double the AER's allowance;[14]

» The AER's allowed nominal equity risk premium is lower than that adopted by every other regulator for which a comparison could be made. (This does not account for other regulators that set the allowed risk-free rate above the prevailing government bond yield.);[15] and

» The AER's allowed real equity risk premium is lower than that adopted by every other regulator for which a comparison could be made. (This also does not account for other regulators that set the allowed risk-free rate above the prevailing government bond yield.)[16]

ENA's *Low Rates* submission notes that Brattle has demonstrated that, by every relevant metric, the allowed return on equity under the AER's 2018 approach is lower than that adopted by every other regulator for which a comparison could be made.

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[13] Brattle, June 2020, *A review of international approaches to regulated rates of return*, Table 4, Row 3, p. 49.
[14] Brattle, June 2020, *A review of international approaches to regulated rates of return*, Table 4, Row 9, p. 49. 2.42% vs. 4.19%.
[15] Brattle, June 2020, *A review of international approaches to regulated rates of return*, Table 5, Row 4, p. 50.
[16] Brattle, June 2020, *A review of international approaches to regulated rates of return*, Table 5, Row 9, p. 50.

Our *Low Rates* submission also notes that these conclusions are corroborated by independent analysis from the Council of European Regulators,[17] Morgan Stanley,[18] and Earwacker.[19]

ENA has proposed that such international comparisons are relevant and important for two reasons:

» They provide an indication of how other comparable regulators have exercised judgment when performing the difficult task of estimating the required return on capital; and

» They provide an indication of the returns that global investors are able to obtain from comparable investment in different markets.

ENA considers that there are two key questions to be addressed in the AER's December 2021 Working Paper:

» Whether the long-term interests of consumers are promoted by regulatory allowances which are below those of comparable mature regulatory jurisdictions; and

» What specific actions and estimation approaches the AER intends to consider to address the risk of internationally uncompetitive regulatory allowances harming efficient long-term investment and network usage.

The AER's interpretation of the international regulatory comparisons has also been raised by some networks' Customer Councils as being valuable to enable a better understanding of the context of this review.

» **The 2018 approach is not as effective as the approach of other regulators.**

Section 3.4 of the ENA *Low Rates* submission of July 2021 notes that the Brattle Report of June 2020 concluded that the AER's approach in relation to the allowed return on equity is not as effective as the approaches of other regulators and makes a number of recommendations for further consideration throughout the 2022 RoRI process:

*when we compare the AER's method with those of the other regulators, we observe important differences in four related areas concerning the cost of equity. We think that these observations indicate some areas in which the AER's approach, in our view, is not as effective as the approach of other regulators. These areas include:*

*a. incorporating forward-looking evidence into the cost of equity;*

*b. use of multiple models for estimating the cost of equity;*

*c. how often to update the cost of equity; and*

*d. equity beta estimation.[20]*

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[17] CEER, March 2021, *Report on Regulatory Frameworks for European Energy Networks 2020: Incentive Regulation and Benchmarking Work Stream*, Ref: C20-IRB-54-03.

[18] Morgan Stanley Research, *Utilities Global Lens: Where to Invest in Regulated Utilities Amidst Global Macro Environment*, 5 April 2021.

[19] Earwaker, J., September 2018, *The AER's draft WACC Guideline: An international perspective*, p. 12, emphasis added.

[20] Brattle, June 2020, *A review of international approaches to regulated rates of return*, p. 58.

ENA notes that the current round of consultation invites stakeholders to submit views on how forward-looking information might be incorporated into the estimate of the MRP and on various issues relating to beta estimation.

However, the AER has not yet responded to the specific recommendations made in the Brattle Report in relation to the four areas set out above.

ENA submits that stakeholders would benefit from the final working paper and December 2021 information paper containing specific concrete proposals based on AER analysis and stakeholder input on mechanisms to address the identified weaknesses in the 2018 approach.

» **Does the forward-looking MRP vary over time in different market conditions?**

The 2018 AER estimated the MRP by first considering the average historical excess return (HER), which the AER then considered to support a figure of 6.1%, and then concluding that no other evidence warranted any adjustment to that figure. Thus, the MRP is fixed at the historical average of 6.1%.

In its *Low Rates* Draft Working Paper, the AER states that:

> *We note that a key challenge is the non-observable nature of the equity risk premium and the fact it is likely to be unstable through time. In this context, while we have primarily focused on historical observed returns over long periods to estimate the market risk premium, this does not imply we consider the market risk premium fixed through time. We have used this historical data because we have considered it the best data we have available for estimating the forward looking market risk premium[21]*

That is, the AER appears to recognise that the MRP changes through time as market conditions change, but then suggests that the best estimate of this changing MRP is an effectively constant historical average. It is not clear to ENA how an effectively constant figure can be the best available estimate of a parameter that varies over time in different market conditions.

Dr Lally (April 2021) has advised the AER that its current approach to the MRP produces estimates that are upwardly biased in some market conditions and downwardly biased in others:

> *Since the MRP estimated by the AER is very stable over time (because high weight is placed on the long-term historical averaging methodology), and the true value is likely to fluctuate much more than this (with high values during unfavourable economic conditions and low values during favourable economic conditions), the MRP is likely to be overestimated during favourable economic conditions and underestimated during unfavourable conditions.[22]*

Dr Lally goes on to note that these "MRP estimation errors" would tend to be offset by opposite errors that arise if the on-the-day approach were used to estimate the debt risk premium,[23] but that is not an approach that is being considered for the 2022 RoRI.

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[21] AER, May 2021, *Rate of return and cashflows in a low interest rate environment: Draft working paper*, p. 27.
[22] Lally, M., 9 April 2021, *An appropriate term for the allowed cost of capital*, p. 33.
[23] Lally, M., 9 April 2021, *An appropriate term for the allowed cost of capital*, p. 33.

He also suggests that the MRP estimation errors do not necessarily support a change in the approach to estimating the MRP – because the size of the error is difficult to precisely quantify even though the direction is clear. [24]

ENA considers that an approach that is known to be upwardly biased in some periods, and downwardly biased in others is not consistent with the AER's own interpretation of its rate of return task:

> *In our view, the guiding principle is: an unbiased estimate of the expected efficient return, consistent with the relevant risks involved in providing regulated network services. We consider that the NEO, NGO and the long term interests of consumers are best served through this guiding principle. [25]*

And also:

> *If the expected rate of return deviates from the market cost of capital then it may not promote efficient investment in, and use of, the service provider's energy network in the long term interests of consumers. [26]*

ENA submits that stakeholders would benefit from the final working papers and December information paper presenting clear conclusions about how the AER intends to ensure that it estimates the MRP in a way that produces the best unbiased estimate of the market cost of capital in the 2022 RORI.

In addition, CEPA (June 2021) have advised the AER that there is "no good evidence" to support the historical excess returns approach to estimating the MRP:

> *There is no good evidence that the MRP should be assumed to be independent of the RfR, the current assumption of the AER. [27]*

The AER's *Equity Omnibus* Draft Working Paper cites the above advice from CEPA[28] but does not respond to it.

That the AER's consultant has advised the AER that there "is no good evidence" to support the AER's current approach is an important consideration when evaluating potential alternative approaches.

ENA submits that stakeholders would benefit from the final working paper and December information paper presenting clear conclusions about the broader range of evidence that the AER intends to consider when estimating the MRP.

» **Is it appropriate to adjust the credit rating in relation to a perceived difference in the term of debt?**

Section 3.1 of the ENA *Term* submission of July 2021 explains that the approach of adjusting the assumed credit rating to account for a perceived difference in the term of debt results in a

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[24] Lally, M., 9 April 2021, *An appropriate term for the allowed cost of capital*, Footnote 22, p. 33.
[25] AER, May 2021, *Assessing the long term interests of consumers*, p. 1.
[26] AER, May 2021, *Assessing the long term interests of consumers*, p. 1.
[27] CEPA, June 2021, *Relationship between RFR and MRP*, p. 44.
[28] AER, July 2021, *Equity Omnibus: Draft working paper*, p. 5-32.

benchmark debt management approach that is not viable to implement and is therefore not an appropriate regulatory benchmark.

Suppose, by way of example, that the AER concluded that the EICSI data indicated that networks tended to issue 8-year BBB+ debt,[29] but that the AER adopted a regulatory benchmark of 10-year A rated debt. In this case, the regulatory allowance would be based on an assumed debt management strategy that is not viable – because the benchmark network could not issue A rated debt.

Dr Lally (April 2021) provided similar advice to the AER, agreeing with the ENA submission on this point:

> *The AER proposes to use this EICSI data over an observation window (the 2018-2022 period) to alter the weights on the currently employed ten-year BBB and ten-year A indexes for corporate bond DRPs (currently 2/3 and 1/3 respectively) so that the resulting weighted average over these two DRPs matches the average DRP in the EICSI data over the observation window, and then to apply these new weights in its existing process for determining the ten-year trailing average DRP.*
>
> *In response, the ENA (2020b, paras 4-8) argues that the difference between the average DRP observed in the EICSI data and that in the currently employed data is attributable purely to the regulated businesses having an average term on their debt of less than ten years and therefore the appropriate course of action by the AER would (at most) be to reduce its benchmark debt term within the context of its current process. I agree, providing the difference referred to by the ENA is purely due to debt term and the evidence in ENA (2020b, Figure 2-3) is consistent with that.*
>
> *The ENA (2020b, paras 9-11) also argues that the AER's proposal would involve effectively changing the benchmark credit rating to reflect evidence that instead related to the debt term, thereby producing a new benchmark credit rating that differed from the observed ratings of energy network businesses. I agree. [30]*

The AER has not yet engaged with this issue or the advice it has received from Dr Lally about it. ENA considers this to be a very important conceptual issue – whether a debt management strategy that is impossible for any network to viably implement is an appropriate regulatory benchmark. The ENA submission on the *Debt Omnibus* draft working paper contains detailed submissions on this point, which is very important to network businesses. [31]

Moreover, ENA submits that it is difficult to see how an approach that cannot be implemented in debt capital markets by any network is capable of providing the best unbiased estimate of the market cost of capital. In addition, Dr Lally links 'viability' (implementability) to the NPV=0 principle.[32]

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[29] ENA does not consider that such a conclusion can be reasonably drawn from the EICSI data. This is adopted here solely for the purposes of illustration.

[30] Lally, April 2021, *The appropriate term for the allowed cost of capital*, pp. 46-47.

[31] ENA, September 2021, *ENA response to the Debt Omnibus paper*.

[32] Lally, April 2021, *The appropriate term for the allowed cost of capital*, p. 25.

# 3      Proposed new criteria

> **Key messages**
>
> »    ENA agrees that there is merit in the proposed new criteria of materiality and longevity/sustainability.
>
> »    As with all criteria, their usefulness depends on the way in which they are operationalised in practice. ENA provides a number of examples of how these criteria might be best used to inform the exercise of regulatory judgment.

The Draft Working Paper proposes two new criteria to inform the AER's exercise of regulatory judgment:

»    The materiality of any proposed change; and

»    The longevity or sustainability of new arrangements.

The Draft Working Paper explains that:

> *These additional criteria ensure that change is not to be adopted lightly in the absence of compelling evidence. Importantly, any case for change must demonstrate there to be a clear improvement or a benefit to be realised.[33]*

ENA agrees that change should not be adopted lightly and should only be adopted if there is a clear improvement to be realised. In this setting "improvement" should be taken to mean a step toward the best possible unbiased estimate of the market cost of capital at the time of the decision.

Where the evidence indicates that the current approach is not producing the best possible estimate of the market cost of capital, there is a strong case for change. But where the updated evidence is imprecise and little changed from the current estimate, the case for change is much weaker.

Because it is difficult to be precise about the application of these criteria in an abstract sense, ENA provides a number of examples for how the new criteria might assist in the exercise of regulatory discretion.

**Example 1: Gearing**

ENA notes that the AER has adopted 60% market value gearing in all decisions since its inception.

ENA also notes that market value gearing fluctuates over time as market conditions change. Even where a firm makes no change to its target gearing, and no change to its debt portfolio, market value gearing will vary as stock prices vary.

Consequently, if the AER were to adopt a 'rate on the day' approach to gearing, it would likely end up changing the gearing parameter back and forth around 60% in each new RoRI. ENA submits that this would be inconsistent with the longevity and sustainability criterion.

ENA further considers that there are two aspects to the materiality criterion:

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[33] AER, July 2021, *Overall rate of return: Draft working paper*, p. 22.

» If a proposed change is unlikely to have a material effect on the allowed return, there is a question about whether resources should be devoted to that issue; and

» A proposed change should only be considered if there is material evidence to support that change.

In relation to gearing, there would seem to be materiality issues with a potential change from 60% to 55%:

» There is evidence that a change would have little impact on the overall allowed return; and

» The data to support such a change is weak in that:

> » The sample of firms used to estimate gearing has fallen from five to three, so that the average level of gearing changes over time, in some part, due to the change in the composition of firms in the sample;

> » The figures for the remaining firms do not include subordinated debt, so they reflect only a portion of the debt issued by these remaining firms; and

> » Gearing changes of a subset of actual firms measured over relatively short periods (compared to the asset lives of the investments supported by that financing) is not strong evidence about the underlying efficient benchmark gearing level.

**Example 2: Market risk premium**

The AER has commissioned two expert reports that consider, among other things, the AER's current approach to estimating the MRP.

Both reports are strong and frank in their conclusions and recommendations.

Brattle (June 2020) has advised the AER that its approach in relation to the allowed return on equity is "not as effective as the approach of other regulators."[34]

CEPA (June 2021) has advised the AER that there "is no good evidence" to support the AER's current approach to estimating the MRP.

Both reports recommend that the AER consider significant changes to its approach for estimating the MRP.

In terms of the proposed new criteria:

» The set of evidence supporting change is material – the recommendation is strong and clear in two reports commissioned by the AER. In addition, the potential change to the MRP allowance is also material – the sorts of changes proposed by the AER's consultants have the potential to result in a materially different estimate of the MRP.

» The basis of the recommendation for change is that the AER's current approach does *not* satisfy the criteria of longevity or sustainability in that it fails to produce the best possible unbiased estimate of the market cost of capital in the current market conditions.

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[34] Brattle, June 2020, *A review of international approaches to regulated rates of return*, p. 58.

**Example 3: Equity beta**

As noted above, the AER's sample of domestic comparators is now down to three. The AER has previously expressed concerns about the comparability of one of these comparators and another is currently the subject of a takeover bid. The third is the subject of a debate about how to measure gearing, which has direct implications for beta.

The AER has previously relied on estimates for firms that no longer exist, and whose beta estimates are frozen permanently in time. The data for these firms is becoming more dated in each new RoRI.

That is, the quantum of domestic evidence is becoming more scant and less reliable as time passes. This raises the question of the appropriate weighting to be applied to statistical estimates using the remaining domestic firms relative to other evidence.

As also noted above, other regulators have different approaches for dealing with the problem of having a small sample of domestic comparators. The ERA, NZCC, and Ofgem, for example, have all adopted different approaches to the AER to estimating equity beta.

ENA considers that a weighing of the available evidence should consider the relative materiality of different sets of evidence. As the materiality of the domestic evidence shrinks over time (as the number of comparator firms declines and the de-listed firms sink further into history), the reliance on that single data source should also decline.

Moreover, as the distance between the AER's estimate and the estimates adopted by other regulators becomes more material, and as the distance between the AER's estimate and the estimates from international comparators becomes more material, there becomes a greater imperative to re-examine the AER's current approach.

In addition, the AER's current approach does not seem to be sustainable over time as the domestic data evaporates,[35] and as questions are raised about the reliability of the remaining domestic data.

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[35] For example, the set of domestic comparators appears to have reduced even further during the drafting of this submission.

# 4      Form of the rate of return

> **Key messages**
>
> »     ENA agrees that the allowed rate of return should be estimated in the form of a nominal vanilla WACC.

## 4.1      Continued use of nominal vanilla WACC

ENA agrees with the AER's proposal to maintain its current approach of using a nominal vanilla WACC to estimate the allowed rate of return.

In addition to the reasons set out in the Draft Working Paper, ENA notes that the PTRM is structured around a nominal vanilla WACC.

# 5 Gearing

**Key messages**

» ENA considers that gearing should be estimated on a market value basis (i.e., using the market value of equity and not the book value of equity). There is no useful role for book value gearing estimates when estimating the WACC.

» It is important to note that the observed market value gearing of comparator firms will vary over time, even in the absence of any conscious actions from the firm – market value gearing changes with every change in the stock price. For this reason, it is common to estimate market value gearing by having regard to data over the course of a market cycle. ENA considers an estimate over 10 years to provide a reasonable indication of the target level of gearing for each firm.

» In relation to hybrid securities and subordinated debt, ENA's view is that the approach should be as follows:

  – Analyse and understand the terms and conditions of each security.

  – Determine the extent to which the security has the economic characteristics of debt.

  Where a security has the economic characteristics of debt, it should be treated as debt consistently throughout the entire regulatory process.

» ENA recommends that the next step in the consultation on gearing levels would be informed by:

  – The preparation of updated gearing figures that include all securities that have the economic characteristics of debt; and

  – Consideration of the extent to which changes in average gearing figures are driven by changes in the sample of firms available (and the extent to which the remaining firms have issued subordinated debt that is omitted from the calculations).

## 5.1 Book value or market value?

ENA's submission to the 2018 RoRI Review[36] noted that market value gearing is consistent with the market value estimates of all other WACC parameters. Indeed, the WACC, by its very nature, is a market value concept. Weighting the market cost of equity capital and the market cost of debt capital by an accounting book value produces an output that has no meaningful economic interpretation.

ENA's 2018 submission also noted that market value gearing is the approach that is recommended by standard finance textbooks and is also the standard approach adopted in practice.

For example, McKinsey Inc. notes that the use of market values follows directly from the derivation of WACC:

> *Using market values rather than book values to weight expected returns follows directly from the formula's algebraic derivation (see Appendix B for a derivation of free cash flow*

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[36] ENA, May 2018, *AER review of the rate of return guideline: Response to discussion papers and concurrent expert evidence sessions*, Section 5.2.

*and WACC). But consider a more intuitive explanation: the WACC represents the expected return on a different investment with identical risk. Rather than invest in the company, management could return capital to investors, who could reinvest elsewhere. To return capital without changing the capital structure, management can repay debt and repurchase shares, but must do so at their market value. Conversely, book value represents a sunk cost, so it is no longer relevant.[37]*

The advice from Brealey, Myers, Partington and Robinson (2000) is even more direct:

*[After presenting a book value balance sheet for an example company called Geothermal]… Why did we show the book value balance sheet? Only so you could draw a big X through it. Do so now. We hope this will help you remember that book values are not relevant to estimating the cost of capital. When estimating the weighted average cost of capital, you are not interested in past investments but in current values and expectations for the future. Geothermal's true debt ratio is not 50 per cent, the book ratio, but 40 per cent [the market value ratio].[38]*

ENA considers that:

» Gearing should be estimated on a market value basis (i.e., using the market value of equity and not the book value of equity); and

» There is no useful role for book value gearing estimates when estimating the WACC.

The use of market value gearing is consistent with:

» The mathematical derivation of WACC;

» The market value estimation of all other WACC parameters;

» Finance theory and the approach recommended in finance textbooks;

» The approach adopted by finance practitioners and other regulators; and

» The views expressed in the 2018 Joint Experts' Report. [39]

## 5.2    Length of estimation period

Before estimating gearing, it is important to precisely define the role of that parameter. In the regulatory context, gearing represents the efficient proportion of debt finance that would be employed by the benchmark efficient firm. It is a benchmark efficient target proportion of debt finance.

In this context, it is important to note that the observed market value gearing of comparator firms will vary over time, even in the absence of any conscious actions from the firm. Indeed, market value gearing changes with every change in the stock price. Thus, a firm that maintains a constant level of debt finance can see market value gearing estimates vary significantly due simply to fluctuations in the firm's stock price.

For this reason, it is common to estimate market value gearing by having regard to data over the course of a market cycle. This provides an estimate of the efficient target level of gearing, noting that observed

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[37] Koller, T., M. Goedhart and D. Wessels, 2015, *Measuring and managing the value of companies*, McKinsey and Company, pp. 308-309.

[38] Brealey, R., S. Myers, G. Partington and D. Robinson, 2000, *Principles of corporate finance*, McGraw-Hill Australia, p. 566.

[39] Joint Experts' Report, 2018, pp. 26-32.

gearing will tend to be above the target during periods of rising stock prices and below the target during periods of falling stock prices.

ENA considers an estimate over 10 years to provide a reasonable indication of the target level of gearing for each firm. The use of a short averaging period could result in the gearing parameter being reduced and then increased from one RoRI to the next, even where the long-run target gearing level of network firms had remained constant.

## 5.3 The role of subordinated debt

### To what extent does subordinated debt have the economic character of debt?

The Draft Working Paper recognises that some Australian networks have issued subordinated debt or 'hybrid securities' as they are called in the Paper.

ENA agrees with the AER that:

> *It is important to understand the terms and conditions of each security.* [40]

ENA proposes that a security should be included as 'debt' throughout the regulatory process to the extent that it has the economic characteristics of debt. The key economic characteristics that identify a security as a debt instrument are:

» The instrument promises a particular series of payments to investors that can be mechanically determined (e.g., a series of coupon payments every three or six months that is fixed or can be objectively determined by adding a spread to a floating reference rate);

» The redemption of the security involves the issuer making a known lump sum cash payment to the holder (e.g., a cash payment equal to the par value of the security); and

» The payments due to holder of the security all rank ahead of equity.

ENA considers that non-convertible subordinated notes, such as those issued by AusNet Services, possess all of the above economic characteristics of debt. The key features of those subordinated notes are that:

» A series of regular coupon payments are to be made. Some securities specify a fixed rate and others specify a spread to be applied to a standard floating reference rate. In all cases the coupon payments can be objectively and mechanically determined;

» The securities cannot be redeemed for a certain period (e.g., five years) but can be redeemed by the issuing firm any time thereafter;

» The interest rate increases or 'steps up' after a certain period (e.g., 10 years);

» The interest rate increases further after a certain period (e.g., 15 years); and

» All of the payments due to subordinated noteholders rank ahead of equity.

That is, while a subordinated note is on foot, there are a series of mechanically-determined payments that must be made to noteholders where those payments have a priority ranking ahead of equity. Thus, the subordinated notes have all of the key economic characteristics of debt.

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[40] AER, July 2021, *Overall rate of return: Draft working paper*, p. 34.

## Treatment should be consistent throughout the regulatory process

ENA notes that subordinated debt has potential implications for a number of parameters including:

» Gearing: Whether subordinated debt is included as debt, or some mixture of debt and equity, or is disregarded entirely, has a direct effect on estimated gearing;

» Return on debt: Subordinated debt obviously has a higher cost than higher-ranking senior debt. Consequently, the decision about whether (and how) to include subordinated debt has a direct effect on estimates of the cost of debt;

» Equity beta: The estimated equity beta reflects the extent to which the returns paid to equity holders rank behind the payments to debt holders. Other things being equal, more prior-ranking debt payments will result in a higher equity beta;

» Credit rating: Subordinated debt generally has a lower credit rating than higher-ranking senior debt. Consequently, the decision about whether (and how) to include subordinated debt has an impact on estimates of average credit ratings.

Because subordinated debt affects a number of parameters, it is important that a consistent treatment is maintained throughout the regulatory process.

By way of example, it would be inconsistent to include subordinated debt when estimating re-levered equity betas, but to exclude subordinated debt when estimating the return on debt. That is, it would be inconsistent to take account of the extent to which payments to subordinated debt holders increase the risk to equity holders, but to disregard those same payments when estimating the cost of debt.

Similarly, it would be inconsistent to have regard to the credit rating for senior debt (A- in the case of AusNet Services) while disregarding the credit rating of subordinated debt (BBB for AusNet) in circumstances where the senior debt rating is only possible because part of the debt portfolio is subordinate. For example, it would be misleading to adopt an A- rating for AusNet's debt portfolio generally in circumstances where part of that portfolio has a much lower rating.

For the reasons set out above, ENA considers that:

» The treatment of subordinated debt should be consistent throughout the regulatory process; and

» Because subordinated debt has all of the key economic characteristics of debt, it should be treated as debt throughout the regulatory process.

## Response to the Draft Working Paper

The AER has set out a number of preliminary views in the Draft Working Paper, Section 8.2.3. Whereas those preliminary views consider 'hybrid' securities in a broad and general manner, elsewhere the Draft Working Paper notes the importance of understanding the terms and conditions of each security.[41]

ENA's view is that the approach should be as follows:

» Analyse and understand the terms and conditions of each security. This task is not difficult and can be assisted by the networks that have issued the relevant securities.

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[41] AER, July 2021, *Overall rate of return: Draft working paper*, p. 34.

» Determine the extent to which the security has the economic characteristics of debt. For example, non-convertible subordinated debt has all of the economic characteristics of debt, as explained above.

» Where a security has the economic characteristics of debt, it should be treated as debt consistently throughout the entire regulatory process.

ENA's responses to the issues raised in Section 8.2.3 of the Draft Working Paper are as follows:

» It is the economic characteristics of the security that determine whether it should be treated as debt. When determining the WACC, a security has the economic characteristics of debt if it makes a series of coupon payments that can be objectively determined, it is redeemed by making a known cash payment, and all payments rank ahead of equity. The cost of servicing such a security can be observed and does not require estimation via an asset pricing model. It is this economic test that determines whether a security should be considered to be debt. Treatment under accounting standards or by credit rating agencies is not the primary test.

For example, when estimating beta, what is relevant is the extent to which an instrument has an objectively determined entitlement to a coupon payment that ranks ahead of equity.

The fact that the particular instrument is required to be grouped with other debt securities in the accounting statements, or the fact that it is considered to be debt for tax purposes, or the way it might be treated by credit rating agencies is not the primary test. The primary test is whether the instrument has the economic character of debt for the purposes of estimating the required return.

» Securities should not be excluded because "it is difficult to adjust for" them.[42] There are relatively few securities in question and many have similar terms (e.g., the AusNet subordinated notes have materially similar terms). Moreover, for some securities the adjustment is not difficult at all. For example, if the AusNet subordinated notes are considered to have the economic characteristics of debt they would simply be included as debt – no adjustment is required.

» The fact that 'hybrid' securities were excluded from the EICSI[43] is not a valid reason for eliminating them from consideration. Clearly, it cannot be the case that a security is eliminated from consideration because it was eliminated from consideration. Rather, a security should be included as debt if it has the economic character of debt. Moreover, if a security has the economic character of debt it should be included as debt and treated consistently throughout all facets of the regulatory process. [44]

» It is important that a consistent approach is adopted throughout all facets of the regulatory process. ENA does not agree with the view that:

> *we note that the treatment of hybrid securities for estimating gearing does not need to be the same as that for the EICSI. The EICSI provides a measure of industry debt costs while gearing is a measure of the value of debt to equity.* [45]

It does not follow that, since gearing and cost of debt are different parameters, they can be estimated in an inconsistent way. If a security has the economic character of debt, it should be

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[42] AER, July 2021, *Overall rate of return: Draft working paper*, p. 36.
[43] AER, July 2021, *Overall rate of return: Draft working paper*, p. 36.
[44] ENA provides more detail on this important issue in our submission on the *Debt Omnibus* draft working paper.
[45] AER, July 2021, *Overall rate of return: Draft working paper*, p. 38.

included as debt for both parameters – if it is debt when estimating gearing, it is debt when estimating the cost of debt.

### Examples of problems caused by the inconsistent treatment of subordinated debt

To see why this internal consistency is important, we set out a number of examples of problems that would arise if subordinated debt was treated inconsistently throughout the regulatory process.

**Example 1: Inconsistency between credit rating and gearing.**

Consider an extreme scenario in which networks issue a very small amount of senior debt with an A+ rating and a large amount of subordinated debt with a BBB- rating. If the subordinated debt is included when estimating gearing, but excluded when estimating the cost of debt, the conclusion would be that a large amount of debt (measured as the senior plus subordinated debt) can be issued at a very low cost (measured with reference to the senior debt only), which is inconsistent with the evidence. Such misleading conclusions, which lead to a biased estimate of the required return, can be avoided by maintaining a consistent approach throughout all facets of the regulatory process.

**Example 2: Inconsistency between return on debt and gearing for beta.**

It would be inconsistent to include subordinated debt when estimating re-levered equity betas, but to exclude subordinated debt when estimating the return on debt. That is, it would be inconsistent to make an adjustment to the allowed return on equity (via the beta parameter) to reflect the subordinated debt, but then to ignore that same subordinated debt when setting the allowed return on debt. When estimating the WACC, the subordinated debt must be treated symmetrically in the return on equity and the return on debt. Otherwise the result will inevitably be a biased estimate.

**Example 3: Inconsistency when un-levering betas.**

An inconsistency arises if a firm has subordinated debt which is ignored when re-levering equity beta. The raw beta will reflect the risk caused by having subordinated debt which ranks ahead of equity in the capital structure. If that is ignored when performing the un-levering step, the result will be an incorrectly re-levered equity beta estimate, and consequently a biased estimate of the required return.

## 5.4    Is a change in the gearing parameter warranted?

### Updated gearing data is required

ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC.

For the reasons set out above, ENA considers that:

»   Gearing should be measured on a market value basis.

»   Gearing should be interpreted as the efficient proportion of debt finance that would be employed by the benchmark efficient firm. It is a benchmark efficient target proportion of debt finance.

»   It is important to note that the observed market value gearing of comparator firms will vary over time, even in the absence of any conscious actions from the firm, as stock prices change. For this reason, it is common to estimate market value gearing by having regard to data over the course of a market cycle. ENA considers an estimate over 10 years to provide a reasonable indication of the target level of gearing for each firm.

» Since subordinated debt has the economic character of debt, it should be included when estimating gearing.

The Draft Working Paper reports a number of high-level summary estimates of gearing. ENA considers the most relevant of these to be estimated over a 10-year period and including subordinated debt.

The closest estimate to fulfilling those characteristics is the 56% estimate reported in Table 5 of the Draft Working Paper.[46] However, that estimate appears to include 'hybrid' securities other than subordinated debt. The terms and conditions of those securities would have to be assessed to determine the extent to which those securities have the economic characteristics of debt. Also, the 56% figure does not include subordinated debt issued after 2018.

ENA recommends that the next step in the consultation on gearing levels would be informed by the preparation of:

» Updated gearing figures that include all securities that have the economic characteristics of debt; and

» A table that sets out the year-by-year levels of gearing for each firm in the sample set, including all securities that have the economic characteristics of debt. The current Draft Working Paper shows only the high-level average figure (averaged across firms and years), and inclusive of all hybrids and subordinated debt.

That is, the gearing figure adopted in the RoRI should be based on the best available data. This requires updated data including all debt instruments (such as subordinated debt).

### Change in sample of firms

Another important point to note when interpreting the gearing estimates in Table 2 of the Draft Working Paper[47] is that the sample of firms has changed over time. The estimate in the 2018 RoRI was based on five firms whereas the estimates for the most recent five-year period are based on only three firms – ENV and DUE have dropped out of the sample, leaving only APA, AST and SKI. Thus, part of the change in the average level of gearing occurs because the average is being taken over a different sample of firms.

The change in the sample of firms is particularly important when interpreting Table 2, because that table omits subordinated debt. In the last five years, AST and SKI have issued subordinated debt. Thus, the recent average, omitting that subordinated debt, would seem to understate the true level of gearing.

Moreover, it is important to consider that the 'debt comparators' are used appropriately when estimating beta and gearing. The AER's estimates of gearing have been stable since its inception (60% in every determination) whereas its estimates of equity beta have changed markedly in every WACC review. This would imply that the dead comparators have more relevance when estimating gearing than equity beta.

## 5.5      Practical implications of gearing changes based on EICSI data

Using the EICSI data to change the allowed return on debt and gearing parameters at the time of each RoRI would prevent networks from replicating the regulatory allowance. It would also prevent networks

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[46] AER, July 2021, *Overall rate of return: Draft working paper*, p. 37.
[47] AER, July 2021, *Overall rate of return: Draft working paper*, p. 30.

from being able to forecast future debt-related cash flows, which is an important component of a network's financial management.

This is because the gearing and return on debt parameters would depend not only on independent third-party market data, but also on the choices made by other networks. Thus, the cash flow forecasts of smaller networks, for example, would have to consider what changes the larger networks (who have proportionately more weight in the EICSI) might make to their debt management strategies in the future.

Moreover, a network seeking to replicate the AER's allowance would have to rebalance its capital structure at the time of each RoRI, to reflect any changes made by other networks.

This highlights the circular nature of setting parameters based on the EICSI data, rather than using the EICSI data as a cross check of regulatory allowances based on independent third-party data sources – the approach adopted in 2018.

ENA submits that a change from adopting a settled and accepted 60% estimate of the long-run efficient gearing level, and changing to an approach whereby the gearing level changes at the time of each RoRI, would amount to a very large change in the AER's regulatory approach. Such a change would have lasting implications for future RoRIs and would create a direct link between the AER's regulatory decisions and the incentives for networks to adopt different financing structures. Under the AER's evaluation criteria, such a large change should only be contemplated if the AER considered that there was clear evidence that the current 60% gearing level was materially inefficient over the long-run.

# 6      Gamma

**Key messages**

» ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC.

» If the AER maintains its 'utilisation' interpretation of gamma, what is required is the best possible estimate of the proportion of imputation credits that are redeemed.

» Conceptually, it would seem that the ATO is best placed to provide that data. ENA supports the AER's proposed approach of seeking more information to properly assess the reliability of the ATO estimates.

» In relation to foreign investors:

   – ENA notes that the 'market value' that foreign investors might derive from imputation credits [AER Q9] is irrelevant under a 'utilisation' interpretation of gamma.

   – Under a 'utilisation' interpretation, the relevant question is the extent to which foreign investors redeem imputation credits, not the price they would be willing to pay for them – the same approach that is applied to resident investors under the 'utilisation' approach.

   – ENA agrees that, in the absence of further information, the approach of disregarding credits distributed to foreign investors remains reasonable.

## 6.1      The interpretation of gamma informs the appropriate estimation method

ENA notes that two alternative interpretations of 'the value of dividend imputation tax credits,' or gamma, have been considered in the regulatory context. The approach to estimating gamma depends on the interpretation that is adopted.

### Market value approach

The 'market value approach' proposes that gamma should be interpreted as the market value of imputation credits. Under this approach, gamma is estimated as the amount of dividends and capital gains that investors would be prepared to give up in order to receive an imputation credit.

This approach is based on the role of gamma within the AER's regulatory process – the regulatory allowance for dividends and capital gains is reduced by the regulatory estimate of gamma. Under this approach, gamma is set so that investors would be indifferent between receiving a sum of imputation credits or receiving the dividends and capital gains that are displaced. That is, gamma has the role of determining the amount by which dividends and capital gains can be reduced while leaving investors equally well off.

Under this interpretation, gamma must be estimated as the market value of imputation credits relative to the dividends and capital gains that they displace. This relative market value can be obtained from traded market prices using techniques such as dividend drop-off analysis. These techniques provide direct estimates of the market value of imputation credits relative to dividends and capital gains.

## Utilisation approach

The 'utilisation approach' proposes that gamma should be interpreted as the proportion of credits that end up being redeemed by the shareholders that receive them. This approach has no regard to the market value of imputation credits (the amount of dividends or capital gains that investors would be prepared to give up to obtain an imputation credit) – it interprets gamma in terms of the number of credits that end up being redeemed.

Under this approach, the appropriate estimation method is clear – what is required is an estimate of the proportion of created credits that end up being redeemed.

## Different definitions of what gamma means

It is important to note that the two approaches above represent entirely different definitions of what gamma means. They are not simply different approaches to estimating the same thing. That is, the utilisation approach is not an alternative method for estimating the market value of credits (relative to dividends and capital gains) – it is an approach for estimating a different thing. For this reason, it would be inappropriate to have average, or even to have regard to, both estimates – because they are estimates of different things. Rather, a determination must be made about how gamma is defined and what it means, and then the estimation approach should be selected accordingly.

In its 2018 RoRI Final Decision, the AER distinguished between the market value approach:

> *the price that the investor would be prepared to pay for a distributed credit if there was a market for it* [48]

and the 'utilisation' approach:

> *the proportion of distributed credits return (sic) to investors through the utilisation (redemption) of imputation credits.* [49]

The AER rejected the market value interpretation and adopted the 'utilisation' interpretation of gamma.

## The interpretation informs the estimation method

The Draft Working Paper is clear about the AER's adoption of the 'utilisation' interpretation:

> *We interpret the value of imputation credits as an estimate of the proportion of company tax, which is expected to be returned to investors through utilisation of imputation credits. That is, we apply an 'utilisation' approach to estimating the post company tax value of imputation credits.* [50]

This utilisation interpretation therefore drives the appropriate estimation method. Under the 'utilisation' definition of gamma, what is required is the best possible estimate of the proportion of imputation credits that are redeemed – not an estimate of the market value of those credits to investors.

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[48] AER, December 2018, *Rate of Return Instrument: Final Decision*, p. 328.
[49] AER, December 2018, *Rate of Return Instrument: Final Decision*, p. 328.
[50] AER, July 2021, *Overall rate of return: Draft working paper*, p. 39.

## 6.2 The best available estimate is required

ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC.

Having decided that gamma is to be interpreted as the proportion of credits that are redeemed by investors, the best possible estimation method and data should be used to estimate it. That is, what is required is the best possible estimate of the proportion of credits that are redeemed by investors.

## 6.3 Alternative 'utilisation' estimates

The 2018 RoRI estimated the proportion of distributed credits that are likely to be redeemed using aggregate equity ownership data produced by the Australian Bureau of Statistics (ABS). This represented a departure from the AER's previous approach, which had regard to data on imputation credit redemption rates compiled and published by the ATO.

During the 2018 RoRI review process, ENA submitted that:

» There were a number of issues affecting the reliability of the ABS equity ownership data, including that this approach could only be interpreted as an upper bound because it is known that not all credits distributed to resident investors will be redeemed;[51] and

» There was some merit in having at least some regard to the ATO redemption rate data. [52]

During the 2018 RoRI review process, the AER sought further advice and analysis from the ATO about the robustness and reliability of its estimates, but unfortunately the ATO's response was received too late in the process to be given any material weight.

The current draft working paper notes that the AER has recently asked the ATO to update its estimates and to provide further information about the reliability of those estimates and is currently waiting for a response from the ATO.

The draft working paper observes that the ATO's 2018 note provides two sets of estimates – one that reflects the flow of imputation credits through resident entities including companies, superannuation funds and charities, and one that does not. The former, which is referred to as 'net franking credit usage' is a direct estimate of the proportion of credits that ends up being redeemed. Consequently, this estimation method is aligned with the AER's 'utilisation' interpretation of gamma. For this reason, ENA supports the AER's conclusion that:

> *Our initial assessment is that the utilisation rate should take into account the imputation credits that are recycled within companies. When estimating the utilisation rate we need to determine what proportion of investors can use imputation credit (resident investors) vs investors that cannot use imputation credits (non-resident investors). Effectively assuming investors in a company can use 100 per cent of the imputation credits it receives may therefore result in an upward biased utilisation rate estimate. As a result, out of the two measures proposed by the ATO for the utilisation rate, we consider the 'net franking credit usage' measure would be more consistent with our assessment. [53]*

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[51] ENA, September 2018, *AER review of the rate of return guideline: Response to draft guideline*, Section 10.4.

[52] ENA, September 2018, *AER review of the rate of return guideline: Response to draft guideline*, Section 10.5.

[53] AER, July 2021, *Overall rate of return: Draft working paper*, p. 44.

## 6.4    Next steps

The draft working paper concludes that the AER intends to maintain reliance on the ABS equity ownership approach, while it obtains further information from the ATO in relation to its approach:

> *Our preliminary view, for the reasons set out above, is to continue the use of the equity ownership information (based on ABS wealth data) to inform the value of the utilisation rate. However, the weight accorded to it will be subject to findings from our review of the December 2018 ATO note and any updated data the ATO can provide.* [54]

ENA supports this approach as being consistent with the principle of seeking the best possible estimate of each parameter at the time of the decision. In light of the AER's adoption of the 'utilisation' interpretation of gamma, what is required is the best possible estimate of the proportion of imputation credits that are redeemed. Determining the best possible estimation approach involves weighing up the strengths and weaknesses of the available estimates. To the extent that such an exercise requires more detailed information from the ATO, ENA supports the AER's proposal to seek that information so that it can inform the 2022 RoRI process.

## 6.5    The value of credits to foreign investors

The AER has consistently assumed that foreign investors do not value imputation credits because they are unable to redeem those credits. The draft working paper notes that the AER is considering whether that assumption remains reasonable:

> *We are currently considering if non-resident investors assign a material value to imputation credits.* [55]

ENA considers that the reference to the value that investors assign to imputation credits is inconsistent with a 'utilisation' interpretation of gamma. Under a utilisation interpretation, the price that foreign investors might be prepared to pay for an imputation credit is irrelevant. What is required is an estimate of the proportion of credits that foreign investors are able to redeem – the same interpretation of gamma that is applied to resident investors.

Thus, the appropriate task would be to determine the proportion of credits that are redeemed by foreign investors, rather than to seek an estimate of the amount they would be prepared to pay for a credit.

In any event, there seems to be no evidence of either that is readily available. This has led the AER to the preliminary view that foreign investors should remain irrelevant to the estimation of gamma:

> *The assumption that non-resident investors assign no value to imputation credits is conservative and can remain reasonable.* [56]

ENA agrees that, in the absence of further information, that approach remains reasonable. ENA considers that any further consideration of this issue should be consistent with the AER's interpretation of gamma.

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[54] AER, July 2021, *Overall rate of return: Draft working paper*, p. 42.
[55] AER, July 2021, *Overall rate of return: Draft working paper*, p. 45.
[56] AER, July 2021, *Overall rate of return: Draft working paper*, p. 45.

# 7     Cross checks and scenario testing

**Key messages**

» **Rationale for cross checks:** Cross checks are an important part of the process of testing whether the exercise of regulatory judgment throughout the estimation process has produced an output that is reasonable in all of the circumstances.

» **Role of cross checks:** ENA does not consider that cross checks can be used in a mechanical or deterministic way to adjust any WACC parameter or the overall allowed return on equity or WACC. Rather, ENA considers that the appropriate role of cross checks is to identify potential problem areas for re-examination and reconsideration.

» **Other regulatory allowances:** One example of how cross checks could be applied relates to other regulatory return on equity and equity risk premium allowances. Brattle (June 2020) reports that the AER's 2018 return on equity allowances are materially different from those of other comparable regulators performing the same estimation task. For example, ENA does not suggest that the AER's estimate should be discarded and replaced with the mean estimate of the other regulators. Rather, the AER's estimation process might be informed by information about:

    » The types of data that other regulators consider;

    » The statistical and other methods that other regulators use to estimate parameters; and

    » The way in which other regulators exercise their regulatory judgment.

» **Financeability:** Similarly, a financeability cross check can be performed to test the internal consistency of a regulatory decision. ENA proposes that financeability tests should be applied to check whether the allowed return supports the credit rating that was assumed when deriving it.

» **Historical profitability and RAB multiples:** ENA does not see how historical profitability data (even if robust) or RAB multiples can have any useful role. This data provides no useful indication about what the best unbiased estimate of the forward-looking market cost of capital might be.

» **Investment trends:** ENA considers that only information about discretionary investment is relevant. As with other backward-looking historical data, it is not clear how such information provides any useful indication about the best unbiased estimate of the forward-looking market cost of capital.

## 7.1     The rationale for cross checks

ENA considers that no cross checks can be used in a mechanical or deterministic way to adjust any WACC parameter or the overall allowed return on equity or WACC. For example, evidence that can inform the estimate of a WACC parameter should be used as part of the estimation process for that parameter. Otherwise the process ends up being one in which one subset of evidence is used in a first estimation stage and then another subset of evidence is used to adjust the estimate from the first stage. A better process is to consider all relevant evidence when estimating each parameter.

Cross checks have a role to play only because the process for estimating the required return on capital is inevitably imprecise and requires the exercise of judgment. If every WACC parameter could be precisely

estimated such that there was a single agreed estimate, and if the CAPM perfectly and precisely described the way investors determine required returns, there would be no need for cross checks. In such a case the regulator could *measure* (or even *observe*) the required return on capital. But we do not have that level of precision and agreement, so the regulator must *estimate* the required return on capital.

The estimation task is inevitably imprecise. WACC parameters cannot be estimated, or combined together, in a precise manner – estimation, simplification, and judgment is required. The best that can be achieved from the available data and econometric methods is to determine a reasonable range for some parameters. Selecting a point estimate for each parameter requires a degree of judgment.

Thus, the WACC estimation exercise involves a number of imprecisely estimated parameters being combined to produce an even more imprecise estimate of the required return on equity and the WACC. It is important to recognise that any regulator does not set the allowed return equal to the WACC – the regulator sets the allowed return equal to its *imprecise estimate* of the WACC.

It is entirely possible that the regulator uses a reasonable approach to estimate each parameter, and applies reasonable judgment in selecting a point estimate for each, but that the compounding effect of estimation error and the exercise of judgment produces an overall WACC estimate that is unreasonable. This is particularly possible where key parameter estimates are being drawn from a limited or diminishing data set.

Cross checks have a role in testing whether the compounding effect of estimation error and the exercise of judgment might have produced a return on equity or an overall WACC estimate that is unreasonable. In that way, cross checks can help to identify potential problem areas for re-examination and reconsideration.

To be clear, ENA does not suggest that the allowed return or any component of it should be re-engineered to be consistent with any particular cross check. Such an approach would amount to replacing the initial estimation approach with the cross check approach.

## Return on debt

ENA considers that the allowed return on debt is best estimated using independent third-party data sources, with EICSI data having a role as a cross check – consistent with the approach taken in the 2018 RoRI. The reasons for this are explained in the ENA submission on the *Debt Omnibus* paper.

## Return on equity

ENA considers that cross checks are usefully applied to the allowed return on equity and the equity risk premium (beta multiplied by MRP). The estimation of the required return on equity requires substantial regulatory judgment. The beta and MRP parameters are difficult to estimate with precision such that the range of reasonable estimates is wide. Cross checks can provide useful information about the exercise of judgment in selecting a point estimate from such wide ranges.

The ENA submission on the *Equity Omnibus* paper provides more detail about our proposed approach to return on equity cross checks.

## 7.2 Example: Cross check of other regulatory return on equity allowances

One example of how cross checks could be applied relates to other regulatory return on equity allowances. For example, Brattle (June 2020) reports that the AER's return on equity allowances and equity risk premium (beta multiplied by MRP) are materially different from those of other comparable regulators performing the same estimation task. This exercise will presumably be updated and compared with the proposed allowance in the 2022 RoRI.

ENA considers that a discrepancy between the AER's proposed allowance and comparable allowances from other regulators performing a similar task should give rise to a re-examination of the AER's approach to understand why it is producing different allowances and a reconsideration of whether those different allowances remain the best unbiased estimate of the market cost of capital.

To be clear, ENA certainly does not suggest that the AER's estimate should be discarded and replaced with the mean estimate of the other regulators. Rather, the AER's estimation process might be informed by information about:

» The types of data that other regulators consider;

» The statistical and other methods that other regulators use to estimate parameters; and

» The way in which other regulators exercise their regulatory judgment.


The ENA submission on the *Equity Omnibus* paper provides more detail about this, and other return on equity cross checks.

## 7.3 Historical profitability and RAB multiples

The relevance and use of RAB multiples was considered in detail in the 2018 RoRI process. During that process, ENA made detailed submissions explaining why information about historical profitability and RAB multiples had no useful role to play in the setting of allowed returns.[57]

Nothing has occurred since 2018 to affect that analysis or the conclusions drawn from it. ENA remains of the view that information about historical profitability and RAB multiples continue to have no useful role to play in the setting of allowed returns.

ENA notes that the 2018 AER's conclusion on this issue was that:

*Given the subjectivity and uncertainty in assumptions required to disaggregate RAB multiples and historical profitability measures we do not consider that they can be used in a deterministic way to inform the allowed rate of return.* [58]

The 2018 AER further concluded that:

*The substantial difficulty in disaggregating the information contained in RAB multiples and historical profitability measures means that this information cannot currently be used to reliably determine the degree of outperformance of the allowed rate of return. However,*

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[57] ENA, September 2018, *AER review of the rate of return guideline: Response to draft guideline*, Section 11.
[58] AER, December 2018, *Rate of Return Instrument: Final Decision*, p. 387.

*they may provide contextual information that can assist our investigation of other evidence and our risk-cost trade-off assessment. [59]*

ENA agrees with the AER that historical profitability and RAB multiples cannot be used to determine the adequacy of the allowed rate of return. ENA also notes that the draft working paper explains that regulators generally do not use RAB multiples to inform the estimation of any WACC parameter or the allowed return – for the same reasons that the AER has come to that conclusion.[60]

However, ENA does not understand how that information can be used to assist what the AER has described as its "risk-cost trade-off assessment." Neither the 2018 Explanatory Statement nor the current Draft Working Paper explains how the AER would use the historical profitability and RAB multiple information for that purpose.

Rather, ENA is of the view that historical profitability and RAB multiple information has no role to play whatsoever in determining the allowed return on capital.

Specifically, ENA considers that historical profitability and RAB multiple information cannot be used to:

» Inform the estimate of any individual WACC parameter;

» Adjust the overall estimate of the required return on equity;

» Adjust the overall estimate of WACC; or

» Assist in any way in identifying whether a proposed regulatory allowance represents the best unbiased estimate of the market cost of capital at the relevant point in time.

Consequently, ENA sees no means by which that information can be used to inform the allowed return on capital.

ENA considers it to be an important part of a transparent regulatory process to explain what role past profitability figures and/or RAB multiples have in the process of setting the allowed return. In this regard, the Explanatory Statement should clearly identify the extent to which this data has had any impact on the estimate of any parameter or on the overall allowed return on equity.

Finally, ENA notes that, if any further engagement on RAB multiples is required, it would be misleading to continue to refer to a RAB multiple of 1 as a "normal" or "reference" case.

There is no reason to expect that any firm would trade at its book value. The 1991 Nobel Prize in Economic Sciences was awarded to Ronald Coase for his insights into the reason firms exist.[61] Coase was the first to explain that the organisation of resources into firms was an efficient way of reducing transactions costs, such that a firm would be expected to have more value than the collection of assets that it owned. That is, a firm is a mechanism to avoid transactions costs (including inefficiencies such as asymmetric information) that would otherwise have to be incurred in the operation of a set of assets.

Indeed, there is a large literature on Tobin's $q$, which provides an estimate of the extent to which the market value of the firm exceeds the book value of its assets. Tobin's $q$ is defined as:

$$q = \frac{Market\ value\ of\ equity + Market\ value\ of\ debt}{Book\ value\ of\ equity + Book\ value\ of\ debt}.$$

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[59] AER, December 2018, *Rate of Return Instrument: Final Decision*, p. 388.
[60] AER, July 2021, *Overall rate of return: Draft working paper*, pp. 49-50.
[61] https://www.nobelprize.org/prizes/economic-sciences/1991/press-release/.

Damodaran provides estimates of Tobin's q for each sector of the US market. He reports that, as at January 2021, the average Tobin's q in the US market is approximately 2.[62]

Thus, in addition to Coase's work showing that there is no theoretical or principled reason to expect a firm to trade at a multiple of one, Damodaran's work also suggests that there is no empirical reason to expect that any firm would trade at its book value.[63]

In this regard, the Draft Working Paper does note the advice that the AER has received from Dr Biggar on this point:

> *However, RAB multiples do not provide information about the relativity of allowed and expected returns on capital or equity. The report noted that the regulatory-allowed cost of capital could also perfectly reflect the firm's true cost of capital and the RAB multiple could still be above one.* [64]

However, the Draft Working Paper states that:

> *When the RAB multiple is more than one it can indicate that abnormal returns (that is, above the regulatory rate of return) are being earned or are expected to be earned on the RAB.* [65]

ENA considers any reference to a RAB multiple of 1, and any reference to RAB multiples providing information about the level of allowed returns, to be misleading and inappropriate.

## 7.4    Investment trends

ENA agrees with the AER that the NEO and NGO are best served by setting the allowed return equal to the market cost of capital. This creates the appropriate incentives for the efficient investment in, and the efficient use of, energy networks. Thus, the primary objective of the RoRI is to ensure that the allowed return creates these appropriate incentives.

Within this context, it is important to note that incentives are only relevant to *discretionary* capex. For example, capital expenditure that is required to meet altered reliability standards tells us nothing about the adequacy, or otherwise, of allowed returns. That expenditure must be made whether or not the allowed return is adequate.

The same applies to replacement capex that is required to meet short-term safety and reliability standards. A certain amount of capital expenditure is required each year to ensure that the network is able to operate safely and reliably in the short term. Again, this expenditure tells us nothing about the adequacy of allowed returns at the time it is made.

For these reasons, it is only information about discretionary capex that has any potential relevance. Evidence of discretionary capex being delayed would include an increase in the age profile of assets and asset replacement rates falling below sustainable levels. For example, an asset replacement rate of 0.5%

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[62] https://www.stern.nyu.edu/~adamodar/pc/datasets/pbvdata.xls.

[63] See also the submissions made previously in: ENA, September 2018, *AER review of the rate of return guideline: Response to draft guideline*, Section 11.

[64] AER, July 2021, *Overall rate of return: Draft working paper*, p. 48.

[65] AER, July 2021, *Overall rate of return: Draft working paper*, p. 47.

implies that assets are replaced, on average, every 200 years, which is unsustainable an inefficient in the long-run even if safety and reliability standards are maintained in the short-term.

The key question for the AER to consider is whether the regulatory allowance is sufficient to provide the appropriate incentive for efficient discretionary investment in the future. Thus, information about historical investment (or non-investment) is only relevant to the extent that it can shed some light on the incentives for future discretionary investment.

Information about investment that occurred due to ministerial direction or due to changed reliability standards has no relevance to any question about the incentive for efficient investment. Neither does evidence about replacement capex that is required to meet short-term safety and reliability standards. It is only evidence about discretionary investment that has any potential relevance to the allowed rate of return and the incentive for efficient investment.

ENA agrees with the conclusion in the Draft Working Paper that:

> *it is unclear if investment trends can be used to reliably inform the allowed rate of return in any deterministic way* [66]

and proposes that any consideration of investment trends should be limited to discretionary investment.

## 7.5    Financeability tests

### The role of financeability tests

ENA has set out a number of recommendations in relation to financeability tests in Section 6 of our *Low Rates* submission in July 2021.[67] Our view is that financeability testing to ensure the internal consistency of regulatory decisions is part of good regulatory process. If financeability tests are conducted and confirm that the allowed returns are likely to support the assumed credit rating, they have served their purpose. Their role is to identify those special cases in certain market conditions where internal inconsistency problems arise.

In our *Low Rates* submission, ENA proposed that financeability tests would be performed by making a simple augmentation to the PTRM to report the key financial ratios that form the basis of credit ratings for regulated utilities.[68] This analysis would be used as a cross check of the internal consistency of the outputs of AER's decision. It would ensure that the regulatory allowance aligns with and supports the credit rating that is assumed when deriving that regulatory allowance.

It is difficult to see how a regulatory allowance that is internally inconsistent could represent the best unbiased estimate of the cost of capital, or how it could support the NPV=0 principle.

ENA does not recommend that this financeability cross check would be used in a mechanistic way to adjust any parameter or the overall allowed return. Rather, it would provide the AER with an indication of any internal inconsistency in its regulatory decision. The AER would then consider how to resolve that inconsistency. That is, the financeability cross check would raise an issue to the AER's attention, but would not prescribe any mechanical response to that issue.

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[66] AER, July 2021, *Overall rate of return: Draft working paper*, p. 53.
[67] ENA, July 2021, *Rate of return and cashflows in a low interest rate environment: Response to draft AER working paper*.
[68] Those calculations were set out in augmented versions of the PTRM submitted as part of the Victorian DB

The ENA *Low Rates* submission in July 2021 contains substantial detail on how ENA considers that financeability tests should be used within the regulatory framework, so that detail is not repeated here.

## The relevance of countermeasures

The Draft Working Paper raises the prospect of networks taking countermeasures in the event that their credit rating is placed under pressure. [69] For example, a firm that is in danger of losing its investment grade credit rating might be expected to take measures such as ceasing distributions to equity holders, or raising equity capital or selling certain assets to retire debt.

These countermeasures are not relevant to the financeability testing regime that ENA has proposed, which is focused on the benchmark firm. ENA has proposed that financeability tests would be conducted to highlight any internal inconsistencies in the AER's decision-making process. It is possible that an internally inconsistent return allowance would cause financial stress (e.g., if the allowed return was insufficient to support the assumed investment grade credit rating), and that a network could respond by taking certain countermeasures. But those possible countermeasures are independent of the value of identification of the internal inconsistency. That is, it is not a sufficient response to a critical internal inconsistency within a regulators' assessment of the efficient rate of return to suggest that an actual firm exposed to the outcome of this inconsistency has the means and responsibility to protect its credit rating. The purpose of testing for inconsistency is to better reach an unbiased estimate.

The discussion about the relevance of countermeasures raises an important issue. ENA considers that every regulatory decision should be internally consistent in that the allowed return should support the credit rating that was assumed in deriving it. Financeability tests applied to the benchmark firm (via the PTRM) are the means by which internal consistency can be tested.

## The relevance of recent debt issuances

The Draft Working Paper also suggests that AusNet's recent issuance of subordinated debt instruments indicates that there is no financeability issue for that firm. [70]

This highlights the need for clarity about the purpose of financeability tests. ENA has submitted that financeability tests should be used to assess the internal consistency of a determination for a benchmark efficient firm, as set out in the PTRM. The fact that a particular firm has been able to raise capital is not a test of internal consistency.

## 7.6 Scenario testing

### The importance of scenario testing in the context of a binding instrument

The ENA *Low Rates* submission in July 2021 also explains how a financeability cross check can be used to test whether a RoRI is robust to a range of different scenarios. This can be done by considering how regulatory allowances would vary across different future scenarios. In this regard, ENA notes that the financial market conditions at the beginning of the current RoRI (i.e., early 2019) are very different from the conditions in early 2020, which are different from current conditions. It is important that the RoRI is

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[69] AER, July 2021, *Overall rate of return: Draft working paper*, p. 54.
[70] AER, July 2021, *Overall rate of return: Draft working paper*, p. 58.

robust to, and provides sensible allowances, across the range of financial market conditions that might be contemplated over the life of the instrument.

Ensuring that the RoRI is robust to a range of future market scenarios is more important for the AER than for other regulators, due to the nature of the binding instrument legislation. Whereas other regulators are able to make decisions that are informed by all relevant evidence at the time of the decisions, the Australian framework forces the AER to bind itself at the time of each RoRI for decisions that might be made up to four years later. Thus, the RoRI must be robust to the range of conditions that might occur over that four-year period.

As the 2018 Rate of Return Instrument was being prepared, the legislative framework for the Instrument was still being settled. At that time, there remained the potential for the final Instrument to be capable of re-opening at the discretion of the AER. This feature, however, was not adopted as part of the final legislative framework, following key parts of the AER's 2018 approach being settled. As the 2022 Instrument is being prepared, the AER's approach must take this factor into account.

## The role of scenario testing

It is important to note that it is not just financeability tests that should be conducted across a range of future scenarios. Rather, the role of scenario testing is to consider all aspects of a regulatory determination across a range of possible future scenarios.

The key role of scenario testing is to provide the AER and stakeholders with a degree of confidence that its RoRI is expected to produce reasonable allowances in a range of scenarios that might reasonably be contemplated. This is particularly important in the setting of a binding instrument.

## Practical implementation of scenario testing

The Draft Working Paper poses a number of questions for stakeholders to consider in relation to scenario testing. ENA's responses are as follows:

» ENA considers that all scenario testing should be performed for the benchmark efficient firm. This essentially involves producing a PTRM for each scenario.

» The entire set of PTRM outputs should be prepared for each scenario. The scenario testing should not be constrained to financeability metrics, but should extend to estimates of allowed returns, allowed risk premiums, comparisons with comparable allowances that are likely to be made by other comparable regulators in each scenario.

» The outcomes of scenario testing would not result in mechanistic adjustments, but would simply identify both the range of potential outcomes under the proposed AER approach, and any scenarios for which the proposed RoRI may not appear to produce reasonable outputs. There would be no mechanistic adjustments to any parameter or to the overall allowed return. Rather, the analysis would highlight potential areas of concern. The AER would then consider how the RoRI might be made robust to those concerns – how it might ensure that the RoRI produces sensible outputs in a set of plausible scenarios that might reasonably be contemplated;

» Because scenario testing would not have a mechanical role, there is no requirement to assign specific probabilities to each scenario. Rather, the range of scenarios should span what might be reasonably envisaged based on historical observation and current evidence. The RoRI should be robust to (i.e., produce sensible allowances in) the range of scenarios that are contemplated.

» The scenario testing should be performed at the time of the RoRI. In the setting of a binding instrument, there would seem to be no role for such tests at the time of individual determinations. Rather, the current legislation binds the AER such that each determination must be mechanically implemented. That is precisely why such scenario testing at the time of the RoRI is so important.

By way of example, ENA has discussed three interest rate scenarios with the AER and other stakeholders throughout the 2022 RoRI review process to date. Those scenarios include a rise in rates towards their long-run average level, a persistently low rate at current levels, and a further decline in rates to a negative nominal rate such as has occurred in European jurisdictions. These scenarios are summarised in Figure 1 below.

**Figure 1: ENA risk-free rate scenarios**
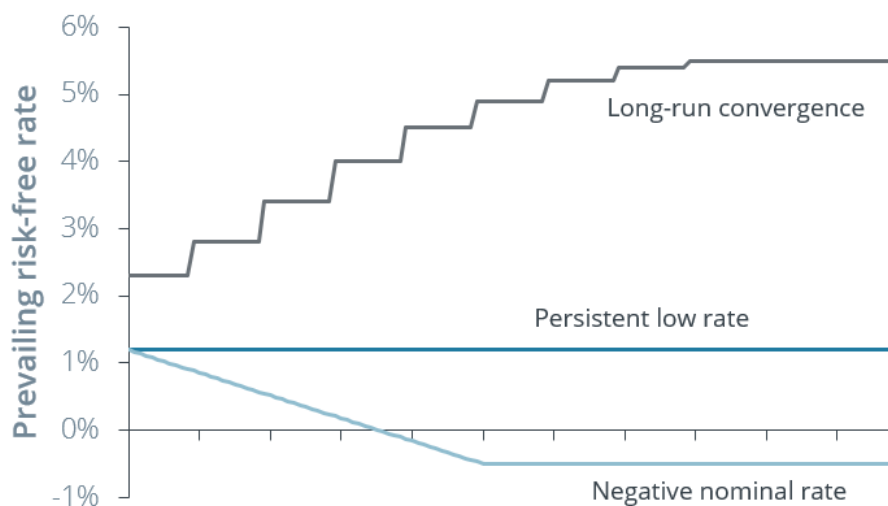


*Source: ENA*

ENA considers that it would be useful to test any proposed RoRI against these interest rate scenarios – to ensure that the proposed instrument produces reasonable allowances across the range of scenarios.

To this end, ENA has developed an initial simplified PTRM-style model tool for a benchmark network to demonstrate how allowed return outcomes vary over these scenarios and is working towards being able to share and discuss this model with the CRG and AER. ENA submits that an exercise such as this one should be applied to any proposed RoRI instrument.

# 8   Appendix A - Response to AER questions

**Question 1: Should a nominal vanilla WACC be used to estimate the allowed rate of return?**

ENA agrees that the allowed rate of return should be estimated in the form of a nominal vanilla WACC.

**Question 2: What is the appropriate approach for estimating gearing?**

ENA considers that gearing should be estimated on a market value basis (i.e., using the market value of equity and not the book value of equity). There is no useful role for book value gearing estimates when estimating the WACC.

It is important to note that the observed market value gearing of comparator firms will vary over time, even in the absence of any conscious actions from the firm – market value gearing changes with every change in the stock price. For this reason, it is common to estimate market value gearing by having regard to data over the course of a market cycle. ENA considers an estimate over 10 years to provide a reasonable indication of the target level of gearing for each firm.

In relation to hybrid securities and subordinated debt, ENA's view is that the approach should be as follows:

» Analyse and understand the terms and conditions of each security. This task is not difficult and can be assisted by the networks that have issued the relevant securities.

» Analyse and understand the terms and conditions of each security.

» Determine the extent to which the security has the economic characteristics of debt. Where a security has the economic characteristics of debt, it should be treated as debt consistently throughout all facets of the regulatory process.

**Question 3: What is the appropriate value for benchmark gearing?**

ENA recommends that the next step in the consultation on gearing levels would be informed by:

» The preparation of updated gearing figures that include all securities that have the economic characteristics of debt;

» The preparation of a table that sets out the year-by-year levels of gearing for each firm in the sample set, as the AER has provided in previous review processes; and

» Consideration of the extent to which changes in market value gearing have been actively driven by firms issuing relatively more debt, or by passive changes caused by changing stock prices.

**Question 4: What is the appropriate treatment of hybrid securities in the gearing estimation methodology?**

ENA's view is that the approach should be as follows:

» Analyse and understand the terms and conditions of each security. This task is not difficult and can be assisted by the networks that have issued the relevant securities.

» Determine the extent to which the security has the economic characteristics of debt. For example, non-convertible subordinated debt has all of the economic characteristics of debt.

» Where a security has the economic characteristics of debt, it should be treated as debt consistently throughout all facets of the regulatory process.

**Question 5: What is a suitable method for allocating hybrid securities between debt and equity?**

ENA considers that there is no single method for allocating securities between debt and equity. Rather, each security has to be considered in terms of the economic substance of that security. For example, subordinated debt has the economic characteristics of debt, so should be treated as debt consistently throughout all facets of the regulatory process.

**Question 6: To what extent should the treatment of hybrid securities in the gearing estimation methodology align with the estimation of equity beta?**

ENA considers it to be important that a consistent approach is adopted throughout all facets of the regulatory process. For example, ENA does not agree with the view that:

> *we note that the treatment of hybrid securities for estimating gearing does not need to be the same as that for the EICSI. The EICSI provides a measure of industry debt costs while gearing is a measure of the value of debt to equity. [71]*

It does not follow that, since gearing and cost of debt are different parameters, they can be estimated in an inconsistent way. If a security has the economic character of debt, it should be included as debt for both parameters – if it is debt when estimating gearing, it is debt when estimating the cost of debt.

To see why this internal consistency is important, consider an extreme scenario in which networks issue a very small amount of senior debt with an A+ rating and a large amount of subordinated debt with a BBB-rating. If the subordinated debt is included when estimating gearing, but excluded when estimating the cost of debt, the conclusion would be that a large amount of debt (the senior plus subordinated debt) can be issued at a very low cost (the senior debt only).[72] Such misleading conclusions can be avoided by maintaining a consistent approach throughout all facets of the regulatory process.

This submission also provides other examples of how an inconsistent treatment of subordinated debt produces a biased estimate of the required return.

**Question 7: Should the data used to inform gamma in the 2018 instrument continue to be used?**

ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC.

It is important to first make a determination about how gamma is defined and what it means, and then the estimation approach should be selected accordingly. The Draft Working Paper adopts a 'utilisation' interpretation whereby gamma is defined to be the proportion of credits that are redeemed. Under the 'utilisation' definition of gamma, what is required is the best possible estimate of the proportion of imputation credits that are redeemed.

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[71] AER, July 2021, *Overall rate of return: Draft working paper*, p. 38.
[72] ENA provides more detail on this point in our submission on the *Debt Omnibus* draft working paper.

Conceptually, it would seem that the ATO would be best placed to report the proportion of distributed imputation credits that are redeemed – because those redemptions are all made through the ATO's tax system.

However, because the ATO has not yet responded to the AER's March 2021 request for more information, it is not yet possible to make a final determination about the appropriate role of this data. Consequently, ENA supports the AER's proposed approach of seeking more information to properly assess the reliability of the ATO estimates.

### Question 8: Is the data in the ATO's December 2018 note suitable for informing the utilisation rate?

As noted in the answer to Question 7 above, ENA supports the use of the best available estimation methods and data for every parameter and for the overall required return on equity and WACC. To that end, ENA supports the AER's proposed approach of seeking more information to properly assess the reliability of the ATO estimates.

### Question 9: Should non-resident investors be assumed to derive no market value from imputation credits?

ENA considers that any further consideration of this issue should be consistent with the AER's interpretation of gamma. If the AER maintains its 'utilisation' interpretation of gamma, the market value of credits is of no relevance – to resident or foreign investors. Under the utilisation interpretation, what is relevant is the extent to which distributed credits are redeemed by investors. Thus, the relevant question is the extent to which foreign investors redeem imputation credits, not the price they would be willing to pay for them – the same approach that is applied to resident investors under the 'utilisation' approach.

ENA agrees that, in the absence of further information, the approach of disregarding credits distributed to foreign investors remains reasonable.

### Question 10: How can profitability measures be used as a possible cross check for informing the overall rate of return?

ENA considers that historical profitability measures have no role to play in estimating the required return on capital. Rather, profitability measures can only provide some broad contextual information on the operation of the entire framework (expenditure allowance setting, the operation of incentives schemes, cost recovery arrangements and other elements of the framework).

The reasons why historical profitability measures have no useful role to play in estimating the required return on capital were traversed in detail during the 2018 Review, and in the original development of the profitability measures, and those same reasons remain valid today.

ENA proposes that the AER should rule out any further consideration of historical profitability information at this stage of the process – to allow stakeholders to focus on more important issues throughout the remainder of the consultation process.

### Question 11: How can RAB multiples be used as a possible cross check for informing the overall rate of return?

ENA considers that RAB multiples have no role to play in estimating the required return on capital.

The reasons why RAB multiples have no useful role to play in estimating the required return on capital were traversed in detail during the 2018 Review and those same reasons remain valid today.

ENA proposes that the AER should rule out any further consideration of RAB multiples at this stage of the process – to allow stakeholders to focus on more important issues throughout the remainder of the consultation process.

**Question 12: How can investment trends be used as a possible cross check for informing the overall rate of return?**

ENA considers that the primary objective of the RoRI is to ensure that the allowed return creates the appropriate incentive for efficient investment in, and the efficient utilisation of, energy networks.

Within this context, it is important to note that incentives are only relevant to *discretionary* capex. Information about investment that occurred due to ministerial direction or due to changed reliability standards has no relevance to any question about the incentive for efficient investment. Neither does evidence about replacement capex. It is only evidence about discretionary investment that has any potential relevance to the allowed rate of return and the incentive for efficient investment.

ENA agrees with the conclusion in the Draft Working Paper that information about investment trends cannot be used to inform the allowed rate of return in any deterministic way and proposes that any consideration of investment trends should be limited to discretionary investment.

**Question 13: How can financeability metrics be used as a possible cross check to inform the overall rate of return?**

ENA has set out a number of recommendations in relation to financeability tests in Section 6 of our *Low Rates* submission in July 2021.[73]

In that submission, ENA proposed that financeability tests would be performed by making a simple augmentation to the PTRM to report the key financial ratios that form the basis of credit ratings for regulated utilities. This analysis would be used as a cross check of the internal consistency of the AER's decision. It would ensure that the regulatory allowance supports the credit rating that is assumed when deriving that regulatory allowance.

ENA does not recommend that this financeability cross check would be used in a mechanistic way to adjust any parameter or the overall allowed return. Rather, it would provide the AER with an indication of an internal inconsistency in its regulatory decision. The AER would then consider how to resolve that inconsistency. That is, the financeability cross check would raise an issue to the AER's attention, but would not prescribe any mechanical response to that issue.

It is difficult to see how a regulatory allowance that is internally inconsistent could represent the best unbiased estimate of the cost of capital, or how it could support the NPV=0 principle.

**Question 14: Can scenario testing be used to inform the overall rate of return?**

The ENA *Low Rates* submission in July 2021 also explains how scenario testing can be used to test whether a RoRI is robust to a range of different scenarios. It is important that the RoRI is robust to, and provides sensible allowances, across the range of financial market conditions that might be contemplated over the life of the instrument. In the first instance, and most relevantly for the issues the AER has before

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[73] ENA, July 2021, *Rate of return and cashflows in a low interest rate environment: Response to draft AER working paper*.

it today, the potential outcomes of final return on equity approaches under a plausible set of pathways for government bond rates, bounded by, for example assumptions in the Intergenerational Report, and experience of other regulators would be a valuable initial area of focus.

Ensuring that the RoRI is robust to a range of future market scenarios is more important for the AER than for other regulators, due to the nature of the binding instrument legislation. Whereas other regulators are able to make decisions that are informed by all relevant evidence at the time of the decisions, the Australian framework forces the AER to bind itself at the time of each RoRI for decisions that might be made up to four years later. Thus, the RoRI must be robust to the range of conditions that might occur over that four-year period.

That is, the key role of scenario testing is to provide the AER with a degree of confidence that its RoRI will produce reasonable allowances in all scenarios that might reasonably be contemplated.

# 9 Appendix B - Response to stakeholder themes

This appendix provides a summary of ENA perspectives on a number of themes and points arising from the AER's Public Forum on the Overall Rate of Return Omnibus Working Paper and a separate Technical Session held by ENA.

| Stakeholder theme | ENA Response |
|---|---|
| Cross checks should include a principle of 'symmetry'. | Agreed. |
| Consumer-focused cross checks should be developed and evaluated. | Agreed. Following discussions at the ENA Technical Session on 19 August 2021, ENA is reaching out to commence detailed discussions with the AER Consumer Reference Group on the possible basis and scope of a range of 'consumer-focused' and other cross-checks. |
| Cross-checks may face challenges in practical application where the ranges of values they suggest do not overlap. | Agreed. In these cases, cross-check information can be used in two ways. First, cross check information that results in an estimate, can be used to inform the plausible range in which regulatory discretion could operate. Where two cross-check ranges do not intersect, this should be taken into account in the final discretionary decision by the regulator. Second, where the ranges overlap, this may provide good evidence that a narrower range of potential values is more consistent with multiple pieces of evidence. This can serve to narrow the scope of plausible regulatory estimates, increasing confidence in an estimate that is consistent with evidence from more than a single source. Alternative approaches, which assess a single value against multiple cross-checks, but seek merely to explain why potential defects in a cross-check mean that a value or parameter from the single source should be preferred, do not bring the full range of evidence available to the regulator into effective operation. |
| Volatility of cross-check information may be a challenge for implementation. | Agreed, noting that the volatility of cross-checks can be an issue considered in selecting from the potential candidates of cross-checks. Volatility of cross-checks would be a more significant issue if it was proposed for cross-checks to be used mechanistically to alter or displace a foundation model estimate. In this case, however, ENA is proposing cross-checks as a means of informing the exercise of regulatory discretion in the |

| | implementation of the CAPM, where significant judgment is required when selecting regulatory allowances from within the range supported by the evidence.<br><br>To avoid another form of volatility, it is important that these cross-checks are pre-specified, and committed to on an ex ante basis. A cross-checks approach which featured cross-checks being adopted or dismissed between decision-stages would represent a source of regulatory risk and volatility, impacting on transparency and confidence in the regulatory assessment process. |
|---|---|
| Financeability may become a further area of disagreement, rather than providing helpful information | One of the benefits of the use of financeability metrics is that they are an externally developed approach built on common usage around firm analysis. The application of financeability metrics to the benchmark entity, as represented in the AER's Post-Tax Revenue Model, is a matter of simple coding – with the metrics being able to be produced without any judgement or discretion.<br><br>In many ways, this is in contrast to a range of backward-looking profitability measures which were developed and published in response to consumer group requests. ENA supported these requests for the purpose for providing contextual information about the operation of the entire regulatory framework, noting that the application of a mixture of regulatory and statutory-based measures, without significant simplifications and caveats, was potentially problematic.<br><br>Moreover, as a matter of good regulatory practice, all potentially relevant information should be considered by the regulator – even if stakeholders have different views about the weight it should be given. |
| AER decisions may not need to consider price/reliability trade-offs closely, as network firms are not on the efficiency 'frontier' where these trade-offs may be required. | The AER operates an incentive-based framework in which all building blocks are set on the basis of the requirements of an efficient benchmark firm. It is important to ensure that every building block allowance is consistent with the requirements of an efficient benchmark firm to avoid trade-offs occurring. For example, overall efficiency requires that there would be no incentive or capacity for a benchmark firm to 'make up' for inadequately low return on equity allowances by other allowances being higher than required. Such an approach would be an asymmetric violation of the NPV=0 principle, both within and across any given regulatory period. |

# 10    Appendix C - Summary of AER and initial network views

This table is an expanded reproduced version of Table 1 in the AER's Overall Rate of Return Omnibus paper, with an abbreviated summary of network businesses' initial views on the current position set out by the AER. For the full views of the ENA in respect of each issue, reference should be had to relevant sections of this submission.

| Working Paper | 2018 Instrument position | Current Position | Networks initial views |
|---|---|---|---|
| *Energy network debt data* | Use the EICSI as a cross-check for benchmark credit rating | EICSI is to be used directly to determine the benchmark blend of A and BBB bonds | EISCI used directly to determine benchmark blend not consistent with a replicable benchmark. |
| | Use the WATMI as the floor of possible options for the benchmark term | An updated WATMI, combined with the more detailed drawdown data, may be useful in determining a benchmark term | Agree - Benchmark term should follow empirical evidence where data indicates sustained change in commercial practice. |
| *International regulatory approaches to the rate of return* | Review of instrument to be held every five years consistent with legislation. Annual updates to be undertaken annually. | Review of instrument to be held every four years consistent with legislation. Annual data updates published. | Agree. |
| | Set the risk-free rate only at the beginning of each reset period | Set the risk-free rate only at the beginning of each reset period | Agree, noting that either determining a more forward-looking MRP or acknowledging relationship with MRP may result in different MRP estimates at the time of a determination. |
| | Make no adjustments for expected incentive scheme outcomes | Make no adjustments for expected incentive scheme outcomes | Agree. |
| *CAPM and alternative return on equity models* | Standard Sharpe-Lintner CAPM model used as the basis for determining the return on equity | Standard Sharpe-Lintner CAPM model used as the basis for determining the return on equity | Agree, noting that appropriate regard should be given to underlying weaknesses in the model where this is supported by evidence (for example, low-beta bias). |
| *Term of the rate of return** | The term of equity and debt were of ten-year duration | It is unnecessary to align the term of equity, debt and expected inflation | Agree. |

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| | 10-year term for return on equity, consistent with life of underlying asset | Ten-year term consistent with existing practice or five-year term for return on equity, consistent with length of the regulatory period | 10-year term for return on equity, consistent with life of underlying asset and market and regulatory practice. |
| | Return on debt determined through a trailing average approach | Return on debt determined through a trailing average approach | Agree. |
| | Ten-year term for return of debt | Match the term of the return on debt to that of an efficient firm's borrowing | Agree. Proper interpretation of available evidence supports 10 years. |
| | | We are currently in a low interest rate environment. | Agree. |
| | | The reduction in our return on debt has been in line with movements in the broader market for debt and the costs the regulated businesses face. | Agree – noting that when term and value adjusted, network debt costs follow the AER benchmark closely. |
| *Rate of return and cashflows in a low interest rate environment** | Commonwealth Government Securities are an appropriate proxy for the riskless investment for our purposes. | Commonwealth Government Securities are an appropriate proxy for the riskless investment for our purposes. | This is a matter which should be actively considered by the AER in the context of evolving international practice, monetary policy interventions in government bond markets, and market conditions |
| | Measures of financeability are not used directly when setting the rate of return | Measures of financeability are not used directly when setting the rate of return | Agree – financeability is not proposed to be used directly, but as a cross-check to inform significant regulatory discretion in making the instrument, building on AER 2018 approaches. |
| | Use comparator set of nine Australian firm to estimate equity beta | Use comparator set of nine Australian firms to estimate equity beta | Use comparator set of live Australian firms supplemented by other relevant evidence including international comparators and regulatory estimates to estimate equity beta. |
| *Equity Omnibus** | Give the greatest weight to equity beta estimates from the longest estimation period | Give the greatest weight to equity beta estimates from the longest estimation period | 10-year period provides appropriate trade-off between recency and statistical reliability. |
| | Set a forward-looking market risk premium | Set a forward-looking market risk premium | Agree. |

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|---|---|---|---|
| | Diminished confidence in the use of dividend growth models | Consider if the dividend growth model might be used to inform the relationship between the MRP and risk-free rate | Agree – consistent with CEPAand Brattle advice dividend growth models can and have been used by other regulators. |
| | In determining the MRP, have regard to the historical excess return, both the arithmetic and geometric mean MRP, and MRP surveys | In determining the MRP, have regard to the historical excess return, both the arithmetic and geometric mean MRP, and MRP surveys | In determining the MRP, have regard to more forward-looking evidence such as DGM estimates, with the arithmetic mean historical excess return more relevant for informing the estimate. Take into account matched risk-free approaches if surveys used. |
| | No reliance placed on the Wright approach | Consider the potential for a relationship between the MRP and risk-free rate, and whether an appropriate implementation method is available | Agree. Appropriate implementation approach to be suggested, consistent with advice from CEPA.. |
| | Allow networks flexibility in nominating the averaging period for the risk-free rate | Allow networks flexibility in nominating the averaging period for the risk-free rate | Agree. |
| | Averaging period was between 20 and 60 consecutive business days within a window running from between three and seven months prior to the commencement of the regulatory control period | Shift the allowed nomination period window for the risk-free rate forward in time by one month to lessen timing issues | Agree. |
| | Use cross checks to inform our overall return on equity point estimates | Use cross checks to inform our overall return on equity point estimates | Agree. Support role for cross-checks to inform exercise of regulatory discretion (for example, re-evaluating highly uncertain parameter point estimates where cross-checks suggest an issue may be present). |
| | Adopt a single benchmark for electricity and gas businesses. | Adopt a single benchmark for electricity and gas businesses. | Agree. |
| *Debt Omnibus** | Application of a simple trailing average approach to determine the return on debt, with a 10 per cent weighting for each of the 10 years | Seek views on weighting trailing average approach by capex spending. | Agree. |

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| | The debt averaging period must start no more than 16 months before the regulatory period, and finish no less than four months prior to the commencement of the regulatory period | Change timing so the debt averaging period must start no more than 17 months before the regulatory period, and finish no less than five months prior to the commencement of a regulatory year. | Agree. |
| | Included only pure debt instruments in the EICSI, excluding hybrids, working capital and bridging loans, any instrument with a term under 12 months, and any instrument not used to finance the RAB | Included only pure debt instruments in the EICSI, excluding hybrids, working capital and bridging loans, any instrument with a term under 12 months, and any instrument not used to finance the RAB | Include all debt instruments that support the entity credit rating. Need to apply consistent approach to inclusion/exclusion across cost of debt and gearing estimates to produce a replicable benchmark allowance. |
| | Used the EICSI purely as a cross-check for benchmark credit rating | Implement the EICSI by adjusting the weights of A and BBB data to match network cost of debt over the past four years | Agree with use in 2018 instrument.<br><br>If EICSI is appropriately specified, including tenor-weighted, it could be used to estimate an outperformance adjustment to be applied to benchmark debt margin. |
| | Instrument set out a number of contingencies to ensure that the formulaic application of the instrument could be applied in instances where all relevant debt data was not available | Continuation of 2018 approach | Agree. |
| | Debt raising costs collected on the basis of historical criteria | Debt raising costs collected through a Debt RIN to be issued in 2021 | Agree. |
| | Continued use of the RBA and Bloomberg data providers, while adding Thomson Reuters | Continued use of the RBA, Bloomberg and Thomson Reuters data providers. | Agree. |
| | | Consider the merits of any additional debt data providers | Agree. |
| | Debt averaging periods must be between 10 days and a year in length and not overlap with each other. | Debt averaging periods must be between 10 days and a year in length and not overlap with each other. | Agree. |
| *Overall Rate of Return Omnibus** | Nominal vanilla WACC, estimated as a weighted average of the return on equity and return on debt | Nominal vanilla WACC, estimated as a weighted average of the return on equity and return on debt | Agree. |

| | | | |
|---|---|---|---|
| | Place primary reliance on market value estimates and the continued use of existing observation periods when estimating gearing | Place primary reliance on market value estimates and the continued use of existing observation periods when estimating gearing | Agree. |
| | In calculating gearing, hybrid securities excluded from Envestra and Spark Infrastructure, but included for AusNet services | Seek views on the inclusion of hybrid securities for gearing. | Include all debt instruments that support the entity credit rating. Need to apply consistent approach to inclusion/exclusion across cost of debt and gearing estimates to produce a replicable benchmark allowance. |
| | After reviewing data, consistency with previous use of 60 percent gearing | Consider adjusting gearing to more closely align with market data | Agree with adjusting if market data supports material change, noting that subordinated debt should be used consistently throughout the regulatory process. |
| | Distribution rate for imputation credits obtained through the use of ASX50 firms, utilisation rate from ABS wealth data | Distribution rate for imputation credits obtained through the use of ASX50 firms, utilisation rate from ABS wealth data, pending investigation of ATO data | Agree. |
| | Assume that non-resident investors assign no value to imputation credits | Assume that foreign non-resident investors assign no value to imputation credits | Agree. Although not clear why value is relevant under a 'utilisation' framework. |
| | Cross checks have limitation but can provide contextual information. However they are not useful in informing the rate of return directly | Seeking views on the use of cross checks | Support role for cross-checks to inform exercise of regulatory discretion (for example, re-evaluating return on equity allowance where cross-checks suggest an issue may be present). |