Ausgrid Submission

International regulatory approaches to rate of return and CAPM

October 2020

9 October 2020

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Australian Energy Regulator
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Dear

Ausgrid welcomes the opportunity to provide this submission to the AER's working papers on international approaches to rate of return and CAPM and alternative return on equity models. For ease of reference we provide a single submission due to the overlapping content of the working papers. We also support the ENA submission.

We are pleased to see important return on equity issues being raised early in the consultation process and the fresh injection of analysis and ideas from the review of international regulatory approaches. It is good regulatory practice to test our own regime against similar international regimes.

As highlighted in our submission on the inflation review consultation paper, equity returns are severely constrained under current economic conditions. It is critical that the rate of return is set a level that is robust to all economic circumstances and allows networks to support the energy market's transformation and provide customers with desired outcomes.

The main themes of our submission are:

- Continued use of the SL-CAPM as the foundation model for return on equity;
- Further analysis of the appropriate data to use for calculating market risk premium (MRP) and equity beta;
- Use of cross checks and assessment of financeability; and
- Further investigation of the relationship between the risk-free rate and MRP is required.

We look forward to engaging with the AER and other stakeholders throughout the rate of return process. If you would like to discuss our submission in more detail, please contact   on   or

Yours sincerely

Chief Customer Officer

Introduction

Ausgrid is pleased to provide comment on the AER's working paper series in the lead up to the rate of return instrument (RORI) consultation. The research into international regulatory approaches is a welcome development as it brings new methodologies to light that may not have been considered previously. We welcome the ideas raised in the report by Brattle, and recognise that even if some recommendations are not adopted it is useful to work through alternative methodologies to better understand the decisions made by various regulators and the associated reasoning.

It appears that the Sharpe-Lintner Capital Asset Pricing model (SL-CAPM) is the preferred model to estimate return on equity because it is widely used and has strong theoretical foundations. Given this, our comments below focus on the sources of information which can be used to inform the market risk premium (MRP) and equity beta parameters as raised in the CAPM working paper.

We also believe that it is appropriate to sense-check the overall result as raised in the international approaches working paper[1].

Forward looking CAPM inputs

Brattle highlights that it is particularly important to include a forward-looking perspective during periods of change in financial markets[2]. We agree, and believe that forward-looking measures of MRP should be considered as part of the range of evidence available to inform the estimate. The AER considers that its current estimate of MRP is forward-looking[3]. We agree that it is forward-looking in the sense that it is estimating something that will happen in the future, however it does not use data that forecasts what may happen in the future; rather it solely uses historical data which does not reflect market expectations and may become out of date quickly when markets are changing.

The dividend growth model (DGM) (or more generically dividend discount models (DDM)) provides a framework to estimate MRP. While there are challenges to be resolved about assumptions to be used when estimating MRP using DGM, these are surmountable and we suggest that the NSW Independent Pricing and Regulatory Tribunal's (IPART) methodology could be considered as a starting point. IPART uses six methods to determine a single point estimate and makes adjustments where appropriate to align with the wider WACC framework[4].

We recommend that DGM is given some weight along with historical excess return data.

Equity beta

Brattle suggests that the estimate of equity beta could be improved by using a shorter data series with more frequent observations and adding international comparators.[5] Given the Australian comparator set contains only three active businesses[6], we do not believe the data can provide a reasonable estimate of beta. Including non-active firms in the comparator selection does not give weight to prevailing market conditions impacting firms operating within the sector. We consider that movements in equity beta for comparator firms that are still listed to be relevant evidence. To address the insufficient

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[1] AER, International regulatory approaches to rate of return: draft working paper, August 2020, p 19.
[2] Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2020, p 59.
[3] AER, CAPM and alternative return on equity models: draft working paper, August 2020, p 23.
[4] IPART, Review of WACC method – Final report, February 2018, p 52.
[5] Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2020, p 61.
[6] AER, Rate of return instrument explanatory statement, December 2018, p 155.

weight given to current market conditions in the domestic comparator set, we believe international comparators in comparable markets should be given consideration.

Use of international data was considered in the 2018 Rate of Return Instrument (RORI) but was discounted because the AER did not consider that the firms were sufficiently comparable or that the risk profile was similar[7]. It would be worth reconsidering this position noting that other regulators have deemed it reasonable to do so.

Relationship between risk free rate and MRP

As noted in industry submissions to the 2018 RORI, the one-for-one relationship between risk free rate and return on equity is questionable particularly given the volatility of risk-free rates and relative stability of return on equity expectations. We agree that there is not a perfect negative correlation between the risk-free rate and MRP. However, we do not agree that there is a perfect one-to-one relationship between the risk-free rate and MRP. We consider that it is reasonable to investigate a suitable methodology to estimate the relationship between risk free rate and MRP in the context of a long-term asset based regulated business.

Related to this is Brattle's suggestion that updating SL CAPM parameters at different times creates an inconsistency due to the relationships between the parameters through time[8]. We agree that it seems desirable for all parameters to be estimated at the same time so there is consistency at the time of estimating the model. However, we agree with the analysis outlined by the AER[9] that it is difficult under the law governing the rate of return instrument to achieve this. Ausgrid considers that there is merit in fully exploring all the options available to best align the estimation timing of equity parameters.

Cross checks

Ausgrid suggests that the 2022 RORI review process establishes a clear framework for how cross checks will apply and the remedy if one was breached.

In this regard, Brattle identifies that cross checks are a feature in several regulatory regimes. Cross checks are useful as a top down method of testing whether an output produced by a bottom up methodology is reasonable. In the UK and New Zealand where a cross check has not met the expected threshold, an adjustment has been made so that the cross check is met.

In the Brattle review of the 2018 RORI, stakeholders raised the issue that cross checks were used by the AER but that in the case of a failed check for return on equity it was discounted rather than acted on[10]. We believe that the approach used by other international regulators noted above should be considered as part of implementing cross checks in the 2022 RORI.

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[7] AER, Rate of return instrument explanatory statement, December 2018, p 155.
[8] Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2020, p 60.
[9] AER, International regulatory approaches to rate of return: draft working paper, August 2020, p 17.
[10] Brattle Group, Stakeholder feedback on the AER's process for for the 2018 rate of return instrument, 27 June 2019, p 11.

Financeability

One form of cross check is to assess overall financeability. Brattle's report noted that financeability is considered in some other jurisdictions[11] but the AER did not raise it as an issue for consideration in its report. This is perhaps because financeability has been identified as a topic for the working series in 2021. Ausgrid believes that adding financeability checks would enhance the regulatory framework and help to avoid businesses being put into financial difficulty by regulatory decisions, particularly during extended periods of low inflation and low interest rates. For example, analysis of Ausgrid's 2019 final decision demonstrates that the cash flows provided at 60% gearing do not meet the credit metrics required to maintain its credit rating nor the credit rating of the benchmark firm. It is not sustainable to continue making such decisions.

We will provide more commentary on this matter in response to the financeability working paper.

Adjustment for expected outperformance

Brattle noted that Ofgem was intending to adjust return on equity by a forecast of outperformance, so that businesses would only receive the allowed return on equity including incentive scheme rewards. If the outperformance does not eventuate, an ex post true up reimburses the business. Ofgem's draft decision in July has confirmed that it intends to implement this method of adjustment[12].

The question of whether a regulator should set returns below the best estimate of the cost of capital has been investigated by Earwaker and Fincham, who interviewed several ex-regulators from the UK's regulated sectors[13]. The majority disagreed that a regulator should deduct revenues to account for the firm making cost savings[14]. The overall sentiment seemed to be that revenue deductions were not an appropriate way to respond to information asymmetry between the regulator and the regulated business[15].

Ausgrid agrees with this sentiment and is concerned that the Ofgem proposal does not align well with incentive-based regulation. Incentive schemes are put in place to incentivise businesses to outperform the efficient costs or service outcomes determined by the regulator. If the value of the reward is removed by a reduction in the efficient return on equity, but then reimbursed if the outperformance is not achieved, the incentive is lost and customers are unlikely to see any long-term efficiency improvements to drive down prices.

Our view is that an efficient return on equity estimated using the CAPM is distinct from and independent of the design and operation of incentive schemes. Adjustments for expected outperformance are not an appropriate change to the current framework.

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[11] Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2020, p 10.

[12] Ofgem, RIIO-2 Draft Determinations – Finance Annex, 9 July 2020, p 135.

[13] John Earwaker and Nick Fincham, Information Asymmetry and the Calibration of Price Controls, August 2020.

[14] John Earwaker and Nick Fincham, Information Asymmetry and the Calibration of Price Controls, August 2020, p 17.

[15] John Earwaker and Nick Fincham, Information Asymmetry and the Calibration of Price Controls, August 2020, p 23.

Thank you

Ausgrid