AUSTRALIAN ENERGY REGULATOR

Explanatory note – RAB multiples

The Australian Energy Regulator (AER) reports four regulatory profitability measures for regulated networks and accompanying explanatory notes.

This note explains our approach to reporting on regulatory asset base (RAB) multiples for the electricity network service providers (NSPs) that we fully regulate. It also explains factors to consider when interpreting these multiples.

This note discusses:

- Calculation and scope of RAB multiples
- Approaches to reporting RAB multiples
- Notes on interpreting RAB multiples
- Factors that influence RAB multiples

Calculation and scope of RAB multiples

RAB multiples are calculated using the following formula:

$$\text{RAB Multiple} = \frac{\text{Enterprise value of NSP}}{\text{Regulatory Asset Base}}$$

RAB multiples can be thought of as indicating investor expectations about the sufficiency of cash flows from investment in an NSP at the time of the relevant transaction or trade.

As a market-based metric of investor expectations, RAB multiples are distinct from other profitability measures, which are based on the NSP's regulatory accounting results.

For a detailed background on the theory of RAB multiples, we recommend reading Dr Darryl Biggar's 2018 paper, 'Understanding the role of RAB multiples in the regulatory process' on our website. Biggar (2018) observes:

> *One of the common objectives in public utility regulation is to ensure that the investors in the regulated firm are adequately compensated – and no more than adequately compensated – for the funds they provide to the regulated firm.*
>
> *RAB multiples are an objective, market-based, measure of the present value of the expected future cash-flows of the firm relative to the amount required to fully compensate investors in the firm.*
>
> *They therefore are sometimes taken as a measure of whether the regulatory framework is achieving this objective.*

Types of RAB multiples

We will report two types of RAB multiples:

- Transaction RAB multiples
- Trading RAB multiples

We source the RAB multiples we report from credible market experts and publish them with permission.

Where we are aware of materially different estimates for the same RAB multiple, we will seek to publish both multiples. Further, where we identify relevant comparator multiples as reference points for our published multiples, we will include them in our reporting.

Transaction RAB multiples

Transaction multiples arise when an asset or part of an asset is sold, and therefore generally relate to a specific regulated asset. These are therefore more likely to relevant for regulated cash-flows compared to trading multiples.

However, transaction multiples may also be affected by specific issues relating to acquisition of a controlling stake in an asset such as a 'control premium'. They may be affected by 'winner's curse'. Winner's curse occurs when the winning party in an auction or tender process is likely to have over-paid due to the competitive nature of the acquisition process. Biggar (2018) discusses both of these factors.

Trading RAB multiples

Trading multiples are generated for listed entities using the market capitalisation of the company. Market capitalisation is the total market value of a company's shares, or number of shares multiplied by price per share.

These multiples reflect the share price of publicly traded entities, which involve trading smaller proportions of equity than a full acquisition. They are therefore less likely to include a control premium or winner's curse.

The trading multiples we report on relate to publicly listed entities that own regulated assets. However, these listed entities may also own unregulated assets or provide unregulated services, which may affect the RAB multiple in a way that does not reflect the regulatory framework.

Notes on interpreting RAB multiples

Various factors can influence RAB multiples. Some of those factors may not be direct outcomes of the regulatory regime or the NSP's core regulated services. When advising on the 2018 rate of return instrument, Biggar (2018), observed that:

> *Based on the data above and the analysis in this paper, is it possible to suggest a "normal" or "typical" range for RAB multiples?*
>
> *This is difficult to assess and there is no fully objective perspective. In my view, due to each firm's ability to earn rewards for taking desirable actions, an Enterprise Value (EV)/RAB ratio of slightly above one should be considered normal. This is consistent with the theoretical observation that the regulated firm must be left some "information rents" in an optimal regulatory contract. I therefore suggest that, as a starting point, an EV/RAB in the vicinity of 1.1 should be considered unobjectionable. In addition, due to uncertainties and complexities in the regulatory process, and in the process of estimating the EV and the RAB, I suggest an error margin of plus or minus twenty per cent on this figure could be considered a "normal range". I therefore suggest that an EV/RAB outside the range of 0.9-1.3 might give cause for further exploration and investigation.*

For these reasons, we do not expect RAB multiples to be precisely at one under a well-functioning regulatory regime. We consider RAB multiples some what above one would not necessarily indicate a problem.

Factors that influence RAB multiples

Factors other than expected returns can also influence RAB multiples. For example, a RAB multiple may be higher than one if a buyer expects to achieve one or more of the following:

- Efficiency gains that result in lower operating and capital expenditure than the amount currently allowed by the regulator
- An increase in the NSP's revenue by increasing demand for regulated services
- A more efficient tax structure or higher gearing levels than the benchmark assumption adopted by the regulator
- Higher returns due to favourable regulatory changes

A high RAB multiple arising from the sale of an asset may also reflect other factors, including:

- The 'winner's curse', as explained above
- Expected returns from unregulated business units within the transacted asset (transaction multiples) or the listed entity (trading multiples)

These factors are difficult to quantify. However, RAB multiples persistently and materially different to one may trigger further investigation.