AUSTRALIAN ENERGY REGULATOR

Explanatory note—RAB Multiples

The Australian Energy Regulator (AER) reports four regulatory profitability measures for regulated networks. We publish explanatory notes to accompany each of these measures.

This note explains our approach to report on RAB multiples for the network service providers (NSP or NSPs) we regulate as well as factors that should be taken into consideration when interpreting these ratios. This note discusses:

- Calculation and scope of RAB multiples
- Approaches to report RAB multiples
- Notes on interpreting RAB multiples
- Factors which influence RAB multiples

Calculation and scope of RAB multiples

RAB multiples are calculated using the following formula:

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

In simple terms, RAB multiples can be thought of as an indicator of investor expectations about the sufficiency of cash flows from investment in a NSP.

As a market-based metric of investor expectations, RAB multiples are distinct from all other profitability measures which are financial-based metrics.

For a detailed background on the theory of RAB multiples, we recommend reading Dr Darryl Biggar's paper 'Understanding the role of RAB multiples in the regulatory process'. As set out in in Dr Biggar's paper:

> *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 and
- Trading RAB multiples

Transaction RAB Multiples

Multiples arising when an asset or part of an asset is sold.

Implications:

Generally relate to a specific regulated asset. In this way they are more likely to have direct implications for regulated cash-flows.

However, they may also be affected by specific issues relating to acquisition of a controlling stake in an asset such as a 'control premium'. Similarly, they may be affected by 'winner's curse'. Both of these factors are discussed in Dr Biggar's paper.

Trading RAB Multiples

Multiples 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.

Implications:

Relate to publicly listed entities that own regulated assets. These multiples reflect the share price of publicly traded entities, which involve the trade of smaller proportions of equity than a full acquisition,

they are less likely to include a control premium or winner's curse.

However, these listed entities may also own unregulated assets or provide unregulated services which may affect the RAB multiple without being informative about the regulatory framework.

We will source our RAB multiples for reporting 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.

Notes on interpreting RAB multiples

In practice there are a number of factors which impact RAB multiples and not all of those factors are directly outcomes of the regulatory regime or the networks' core regulated services. In advice given during development of the 2018 rate of return instrument, Biggar observed that:[1]

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".

For these reasons, we do not expect RAB multiples to be precisely at 1 under a well-functioning regulatory regime, and consider that RAB multiples somewhat above 1 would not necessarily indicate a problem.

Factors which influence RAB multiples

Importantly, there are a range of factors, in addition to expected returns, that can influence RAB multiples. A RAB multiple greater than one may be the result of a buyer:

- Expecting to achieve greater efficiency gains that result in actual operational and capital expenditure below the amount currently allowed by the regulator
- Expecting to increase the NSP's revenue by increasing demand for regulated services
- Benefiting from a more efficient tax structure or high gearing levels than the benchmark assumption adopted by the regulator; and
- Expecting to achieve higher returns if regulation is relaxed.

It is also possible that a high RAB multiple arising from the sale of an asset is a reflection of other factors, including:

- The 'winner's curse', with the winning party in an auction or tender process likely to have over-paid as a result of the competitive nature of the acquisition process.
- Expected returns from unregulated business units within the transacted asset (transaction multiples) or the listed entity (trading multiples).

The factors described are not easily quantified. However, RAB multiples persistently and materially higher or lower than one may serve as a trigger for further investigation.

[1] Available on our website here.