Review of rate of return guidelines

Key focus areas

Key focus areas

- **Equity beta estimate**
- **Market risk premium estimate**
- **Return on debt data**
- **Tax**
- **Contingencies for periods of major market volatility**
- **Realised returns (RAB multiples, profitability)**

Engagement approach

What scope is there for agreement between stakeholders?

- **Consumers (CRG, CCP)**
- **Networks (ENA, APGA)**
- **Others? (IRG, RRG)**

Explore: greater direct interaction b/w networks and consumers on key rate of return issues?

AUSTRALIAN ENERGY REGULATOR

Targeted review

Submissions largely support a targeted review

- **Long history behind many issues**

Submissions focus on well-known data limitations:

- **Equity beta**
- **MRP**
- **Third party debt data**
- **Tax statistics**

How should we assess incongruent information?

What can we realistically achieve?

AUSTRALIAN ENERGY REGULATOR

Equity beta

Main issue: limited sample of comparable firms

But alternatives have limitations too:

- **International energy networks**
- **Non-energy infrastructure**
- **Black CAPM**
- **Conceptual approach**

How should we assess relative limitations of incongruent information?

What can we practically achieve?

Equity beta (cont.)

Some contrasting submissions:

- **Small sample**
  - **Does it lead to under-estimate or over-estimate?**
- **Greater detail / disaggregation**
  - **Revenue caps v price caps**
  - **Gas v electricity, transmission v distribution**
  - **Impact of emerging tech, energy policy uncertainty**
  - **But what can we achieve with small sample / limited data?**

What can we practically achieve?

Market risk premium

Submissions

- **Commentary on current information sources**
- **No new sources proposed**
- **Existing limitations of current sources well-known**

Main issue:

- **Correlation between MRP and risk free rate**

Market risk premium (cont.)

Correlation between MRP and risk free rate

- **Finance theory ambiguous**
- **Historical returns and surveys infer little/no correlation**
- **DGM (some specifications) and Wright approach infer relatively strong inverse correlation**

But what does inverse correlation mean for gap between debt premium and equity premium?

How do we assess incongruent information?

Debt data

Submissions tend to agree that a review of the four available sources is worthwhile

Relative merits of different data sources:

- **Complex, many factors to consider**
- **Wide range of methodological choices that would appear appropriate**

If no clearly superior data source, can networks & consumers agree on approach?

Tax

Most submissions consider large part of gamma is settled

Data issues with tax statistics remains

We have reconciled our data with Hathaway’s, we both note discrepancies with tax data

Can further investigate tax data, but may be limits

Periods of major market volatility

Binding guideline will need mechanisms for addressing periods of major volatility / uncertainty.

Mechanisms (‘what to do’) may depend on final guideline for ‘normal’ conditions (eg. Automatic stabilisers or re-review guideline).

But can we agree on ‘when to act’?

- **Info to monitor to assess periods of volatility**
- **Past periods of major volatility**
  - **Calibrate indicators to past**

AUSTRALIAN ENERGY REGULATOR

Realised returns

Given limitations with some data / evidence, can information from RAB multiples and profitability provide new insights?

Much work to be done before robust inferences can be drawn

Overall

Submissions tend to focus on

- **Data limitations**
- **Competing evidence, each with limitations**

But little new evidence submitted

How can we assess incongruent information?

What can be practically achieved with limited data?

END