31 October 2013

Fiona Towers
Acting Chief Executive Officer
Independent Pricing and Regulatory Tribunal
PO Box Q290
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Dear Fiona

WACC METHODOLOGY – DRAFT REPORT

Hunter Water welcomes the opportunity to continue to participate in the review facilitated by IPART into the methodology for calculating the weighted average cost of capital (WACC). As highlighted previously, the WACC can impose risks on consumers and potentially unrewarded risks on utilities.

Hunter Water engaged Deloitte Touche Tohmatsu to assist in the preparation of this response to the IPART Draft Report. Hunter Water has focussed its response on three key elements of the WACC methodology being the cost of debt assumption, the equity market risk premium (MRP) and the interaction between the cost of debt and the market risk premium assumption. This response should also be read in conjunction with Hunter Water’s March 2013 submission to IPART on the WACC methodology as many of the points raised remain valid.

Cost of Debt Assumption

According to Section 1.2.2 of the Draft Report, IPART proposes to continue using debt securities with a tenor of five years to benchmark the cost of debt assumption for all industries except gas and electricity[1].

In practice, investors in infrastructure assets have longer investment and financing horizons than the five year horizon suggested by IPART as infrastructure assets (such as regulated water assets) are generally viewed to be long life assets. Whilst prices are periodically reset over time, investment decisions are based on an assessment of the long-term cash flows that could be generated by these assets, discounted using a long-term rate. IPART’s proposed approach to estimating the cost of debt assumption is inconsistent with what is actually in practice in the market.

Furthermore, the adoption of a debt assumption based on a five year tenor may lead to inappropriate outcomes:

- It implies that infrastructure companies will renegotiate the terms of their debt at the end of the regulatory period, during the price determination phase. As a consequence of enhanced cash flow uncertainty (ie as regulated prices are not yet set), entities invested in regulated assets would be likely to be exposed to increased refinancing risk during that time period, which may lead to an increase in their funding costs over the subsequent regulatory period.
- It implies companies having to refinance their debt more often will be burdened with more frequent refinancing costs; this is not factored into the regulatory WACC process.

The investors are limited in their ability to achieve IPART’s prescribed cost of debt in the absence of them being able to mitigate against the aforementioned.

[1] For electricity generation, electricity retail, coal mining and gas businesses, IPART proposes a tenor of 10 years

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IPART has stated that it is not its role to determine the financing or hedging practice of those invested in regulated assets. IPART references the views of Professor Kevin Davis and Associate Professor Martin Lally in rationalising its decision to use a cost of debt assumption benchmarked to debt with a tenor of five years. Without contradicting these views, in the event that IPART's proposed approach to the cost of debt assumption prevails, it would be appropriate to recognise a premium on this cost of debt assumption to provide for the increase in refinancing risks discussed above.

**Equity Market Risk Premium**

In the Draft Report, the MRP is set with reference to both current market data and long-term averages. In particular:

- In estimating the cost of equity using current market data, IPART proposes to use six different models to calculate the implied MRP.
- In estimating the cost of equity using long-term averages, IPART proposes to use the ten year average risk-free rate and a MRP in the range of 5.5% to 6.5% given by the historical arithmetic average MRP.

The use of historical and prospective data to estimate the MRP is agreed. Deloitte has advised that they consider both the historically observed MRP and the prospective approaches as a guideline in determining the appropriate MRP for use in valuation engagements. However, Deloitte similarly adopts long term measures to estimate the risk-free rate and cost of debt assumptions within the cost of equity calculation, whereas IPART’s approach to these assumptions is inconsistent with those taken to estimate the MRP.

It is noted that the MRP is highly sensitive to the different approaches adopted in respect of the measurement period, risk-free rate and averaging methodology and, as a result, estimates of the MRP can vary substantially.

Australian studies of the historical risk premium generally indicate that the MRP is in the range of 5.0% to 8.0%. Having considered the various approaches and their limitations, as at the date of this letter, Deloitte’s “house view” in all their work is that an MRP of 7.0% is appropriate.

The premise of the Capital Asset Pricing Model is that risky investments demand a premium to the return available on risk-free investments. Setting the quantum of this premium can be difficult when the return on risk-free investments exhibits significant volatility in response to current market conditions.

The nominal return on Australian risk-free investments has been extremely volatile in recent years, declining from longer term averages of 5.2% to 4.1% (as at the date of this letter) due to progressive decreases in the Reserve Bank of Australia’s target for the cash rate and a ‘flight to quality’ of global capital to AAA-rated Australian Government bonds.

The figure below shows the yield on the 10-year zero coupon Australian Government bonds since 2000.

**Figure 1: 10-year zero coupon Australian Government bonds yields**

![Graph showing 10-year zero coupon Australian Government bonds yields](image_url)
Whilst the return on Australian Government bonds has declined, it is not considered that there is sufficient evidence to suggest that investors have reduced their view of overall required returns.

The recent severe decline in equity values worldwide precipitated by the global financial crisis and the difficulties companies are experiencing in raising equity capital may be indicative of investors demanding a greater risk premium. In addition, with particular regard to expected future cash flows and observed bond default spreads, prospective measures appear to indicate an increase in the MRP.

Deloitte, therefore, considers an adjustment due to short term market risk factors to be appropriate and currently adopts a specific market risk premium of 0.5% in addition to the MRP assumption of 7.0% in all valuation work. Given volatility in risk-free rates MRP settings are revisited on a quarterly basis to ensure there is no over- or underestimating of cost of equity as a consequence of month to month changes in market sentiment.

Whilst IPART’s methodology may be technically comprehensive, the use of a unique range for the MRP over the entire regulatory period fails to capture the current volatility in risk-free rates. It also results in a MRP that is demonstrably lower than the outcomes achieved by others approach to cost of equity and what is believed is currently required by investors.

Interaction Between the Cost of Debt and the MRP Assumptions

IPART proposes to use debt with a tenor of five years to maturity to benchmark the cost of debt and risk-free rate assumption. In contrast, IPART adopts a risk-free rate with a tenor of ten years to maturity to estimate the MRP.

The risk-free rate chosen in computing the MRP should be consistent with the risk-free rate used to compute the expected return [2]. That is, if IPART proposes to adopt a risk-free rate with a tenor of five years (which is consistent with its approach to the cost of debt assumption), IPART should adopt the same parameter to estimate the MRP. The impact of such an inconsistency may be material. For example, Ibbotson and Associates (Risk Premia over Time Report: 2004) reports a difference of 0.4% between the US equity risk premium using long-term (20 year) government bonds and using intermediate-term (5 year) government bonds.

Damodaran noted “for the most part, in corporate finance and valuation, the risk-free rate will be a long term default-free (government) bond rate and not a treasury bill rate.”[3] This is certainly the approach followed in valuation work.

If IPART’s approach to setting the cost of debt assumption is to be followed, the term by which the MRP is estimated should be matched with the length of the regulatory period.

There is a clear disconnect between the assumptions adopted by IPART in the cost of equity calculation, and the use of inconsistent assumptions may result in inappropriate WACC outcomes. In the case of the regulatory process in question, the use of inconsistent assumptions is likely to understate the cost of equity for investors.

I trust the views expressed above will assist the Tribunal in their final deliberations on the WACC methodology. Should you wish to discuss any aspect of Hunter Water’s correspondence please feel free to contact Nicole Holmes, Manager Corporate Strategy and Regulation on (02) 4979 9530.

Yours sincerely

KIM WOOD
Managing Director


[3] Presentation by Damodaran to the World Bank