

APA Group

Goldfields Gas Pipeline Access Arrangement 2009

Proposed Cost of Debt
March 2009

Overview

The cost of debt capital is normally calculated as the risk-free rate plus a margin for credit or default risk. Debt issuance costs are generally also incurred and these are either reflected in the cost of debt (as an addition to the debt margin) or the cash flows. These costs are being considered separately and so are not addressed in this paper.

The typical approach to determining the debt margin involves:

- if the firm is unrated, assuming an appropriate 'notional' credit rating, which reflects the risk of default; and
- determining an appropriate margin based on the difference between the current cost of debt for a firm of that credit rating, and the risk-free rate. This should be estimated over the same time period as the risk-free rate.

In this context references to 'firm' assumes that the regulated business operates on a stand-alone basis. In other words, the notional credit rating reflects the risks of the regulated asset or project, and is not influenced by other business activities.

Notional credit rating assumption

Determining the notional credit rating assumption for regulated businesses is most commonly based on references to published credit ratings of comparator firms, with a view to establishing an appropriate assumption for an 'efficient benchmark firm'. This necessitates the selection of comparators with a similar risk profile to the regulated asset that are not influenced by other activities

In practice, credit rating agencies undertake an extremely detailed assessment before arriving at a rating recommendation. This analysis firstly considers the nature of the industry that the firm operates in, and its inherent risks. This tends to set a cap on the maximum rating that a firm in that industry is likely to achieve.

The second part of the analysis involves a detailed examination of the firm and its capacity to service debt. While capital structure is important here, there are a number of other factors that are considered, including liquidity, profitability and debt service coverage. This analysis requires the modelling of cash flows to assess the sensitivity of debt capacity to changes in key assumptions, as well as different scenarios for the business in terms of its performance and operating environment. Finally, the quality of management is also considered, given this can impact the firm's capacity to respond to these different scenarios.

While it is impractical for a regulator to undertake such a detailed process (given this also requires expertise that generally only resides in a specialist ratings agency), caution should be exercised when determining an assumption based on a very high level analysis.

The Economic Regulation Authority (the Authority) previously applied a notional credit rating of BBB+ to the GGP. However, in its decision in relation to the Dampier to Bunbury pipeline (which was made in the same year), a rating of BBB was accepted. The rationale for this difference is not clear.

As a starting point for the assessment of the notional credit rating, we have reviewed the current Standard and Poor's ratings of gas businesses in Australia (which includes both transmission and distribution). The sample to firms reviewed was limited to those whose primary business activity is gas transmission or distribution. They are summarised in the following table.

Table 1 Standard and Poor's ratings of owners and operators of gas pipeline infrastructure in Australia (current as at 13 March 2009)

Business	Current Standard and Poor's rating
Energy Partnership (Gas) Pty Ltd	BBB-
Envestra Limited	BBB- (negative)
GasNet Australia (Operations)	BBB
WA Gas Networks	BBB-

Source: www.standardandpoors.com.au

This shows that three firms have a rating of BBB- and only one has a rating of BBB. No firm has a rating of BBB+.

Previous regulatory pipeline determinations are summarised in Table 2. In a couple of decisions the notional credit rating applied was not stated (and therefore they are not in the table below).

Table 2

Decision	Notional Credit Rating
ACCC – Amadeus Basin to Darwin Pipeline (2002)	BBB+
ACCC – Moomba to Sydney Pipeline (2003)	BBB+
ERA – Dampier to Bunbury Pipeline (2005)	BBB
ACCC – Roma to Brisbane Pipeline (2006)	BBB
ACCC – GasNet (2008)	BBB+

As noted in our separate report on the assessment of beta, the risk profile of the GGP is unique compared to other regulated pipelines in Australia, given its exposure to the mining sector. In our view, just as this supports a higher value for beta, this also means that the credit rating of the business can be expected to be lower, particularly if it is assumed to maintain the same 60% gearing level that is applied to other businesses.

In our view, there is no basis to support a notional credit rating higher than BBB. In fact, if regard is given to:

- the current credit ratings of other owners of gas pipeline infrastructure in Australia; and
- the unique risks of the GGP relative to other regulated pipelines, which have been rated a minimum of BBB;

a rating of BBB- is appropriate for the GGP. This is further underpinned by (although not solely dependent on) the difficult current conditions in financial markets and the impact that the global financial crisis could have on a business that is almost solely exposed to the mining sector.

This is lower than the BBB+ rating previously determined by the Authority. In our view, current market data, as well as comparisons with other regulated pipeline decisions in Australia, suggest that such a rating is not supportable for GGP. Instead, a rating of BBB- should be adopted.

Estimating the debt margin

Based on this assumption, it would be normal to take the difference between the twenty day average yield of a ten year Commonwealth Government bond and the yield of a ten year BBB- rated bond. However, due to the sub-prime fallout and the flight of funds from higher risk bonds to lower risk bonds, the market for 10 year BBB (including BBB + or -) rated bonds is now extremely thin. Bloomberg has ceased reporting the yield of a 10 year BBB rated bond.

In response to this problem, the alternative approach that has been employed by the Australian Energy Regulator (AER) and also accepted by the ACCC in estimating margins for BBB rated bonds, is to observe the yield on the longest-dated BBB bond (which is currently 8 years) and add the margin between an A rated 10 year and 8 year bond, as this is considered an appropriate proxy for the difference in yield between a BBB rated 10 year and 8 year bond (that is, the slope of the yield curve is assumed to be similar at this end).

There also needs to be an adjustment for the difference between the cost of issuing BBB and BBB- debt. If the market is pricing debt efficiently, it is reasonable to assume that to the extent that a one notch rating difference signals a difference in the risk of default, the yields charged by lenders will vary accordingly. This will particularly be the case in the current market environment, where the premiums on debt for lesser rated credits have increased significantly.

In this case, after estimating the cost of debt for an 8 year BBB rated bond (by applying a twenty day average of recent market data), the adjustments that would need to be made are:

- an adjustment to reflect the difference between an 8 year and 10 year bond, which is estimated based on the difference between an 8 and 10 year A rated bond. This arrives at an appropriate margin for a 10 year BBB rating compared to an 8 year BBB rating; and
- an adjustment to reflect the difference between a 10 year BBB and BBB- bond. This has been based this on one-third¹ of the difference between an 8 year BBB and 8 year A rated bond. This arrives at an appropriate margin for a 10 year BBB- rating. It is acknowledged that there is little precedent for this adjustment, however if the market is pricing debt efficiently there should be some difference between the two credit ratings. To the extent that interpolation has been deemed an acceptable method to derive a BBB rating in the absence of actual market data, it is equally applicable in estimating the margin between ratings.

Taking an average over twenty business days to the end of the most recent month, which was to the 27th of February 2009, the current estimates are as follows:

¹ One-third is applied given there are two notches between an A and a BBB, being A- and BBB+.

Table 3 Estimation of debt margin (as at 27 February 2009)

Estimate	Method	Margin
Margin on a 10 year BBB bond	Yield on 10 year BBB bond minus yield on 10 year Commonwealth Government bond, where the yield on the 10 year BBB bond = 8 year BBB bond yield + (10 year A yield – 8 year A yield) All yields are 20 day averages	336 basis points
Adjustment between 10 year BBB and 10 year BBB-	1/3 of the difference between 20 day average 8 year BBB yield and 8 year A yield	24 basis points
Ten year BBB- debt margin		360 basis points

Source: Bloomberg

As noted above, this does not include any allowance for incremental debt-raising costs.