

Appendix D

Issuance Costs for Debt and Equity

- 1 The process of raising capital for a company incurs costs that must be borne by the company. Investors must expect that these costs will be recouped for the company to be an attractive *ex ante* investment. This applies to the costs of raising both equity and debt.

Debt Issuance Costs

- 2 The cost of debt capital in the WACC is the cost of debt to the entity; in this case the provider of ULLS and SSS services. The market-based estimates of the debt risk premium provide the cost of debt to the investor. The rate to the ULLS and SSS will not be the same as the rate to the investor.
- 3 This can be illustrated by the example of an individual selling a house with the assistance of a real estate broker. If the house is sold for \$200,000 and the real estate agent's commission is 5%, the house costs the buyer \$200,000, but the seller only receives \$190,000. The difference is the selling cost.
- 4 In the case of a debt issue, the yield on the debt to the investor is based upon the full issue price, whilst the cost of debt to the issuer is based upon the lower net proceeds that are received. Therefore, the cost of debt to the issuer is higher than the yield to the investor.
- 5 In the context of gas transmission, the ACCC has accepted that debt issuance costs are a part of the cost of debt for a company¹. As a result, the issue becomes one of measurement of those costs.
- 6 I am advised by Telstra that the TSLRIC value of the assets of the ULLS and SSS is less than [c-i-c]. With a debt ratio of ten percent, that indicates debt of less than \$2 million. Further, normal financing practice would have this debt raised in more than one tranche. Clearly a given issue of debt for the ULLS and SSS would be very small.
- 7 A number of studies have investigated the issuance costs of debt offerings to the public. The study that is most cited estimated the total direct issuance costs as a percentage of the total proceeds for US corporations during the period 1990 to 1994.² The costs for small issues averaged as follow (proceeds in US\$ millions):

<u>Proceeds</u>	<u>Total Costs</u>
\$2 – 10	4.53%
\$10 – 20	3.28%
\$20 – 40	2.52%

- 8 The average total cost across the three categories is about 3.4%.

¹ ACCC, "Final Decision, GasNet Australia access arrangement revisions for the Principal Transmission System," dated 13 November 2002, section 5.5.2.

² I. Lee, S. Lochhead, J. Ritter and Q. Zhao, "The Costs of Raising Capital," *Journal of Financial Research*, Spring 1996, pp 59-74, table 2.

- 9 This quantum of issuance costs as a percent of the total proceeds of the issue can be converted into an equivalent cost of capital rate. The conversion will depend upon the maturity of the debt, as the longer the maturity, the more years there are over which to spread the costs. In my report, I establish that the appropriate maturity for ULLS and SSS is five years. Thus the issuance cost should be converted to an annualised cost of capital rate for the five-year maturity.
- 10 Therefore, the cost of capital adjustment for the issuance costs would be about 0.9% annually.
- 11 The discussion in this section so far has implicitly been addressing the issuance costs when a debt issue is made to the public. An alternative way to issue debt is by private placement directly to a lender. Given its small size, this would arguably be the appropriate financing method for ULLS and SSS.
- 12 The issuance costs of a direct placement are considerably lower than a public issue. However, the interest rates paid on private placements are usually higher than those on a public issue. So there is a trade-off when issuing debt by private placement – issuance costs are lower but interest rates are higher.
- 13 Brealey and Myers state, “*a typical differential (between the interest rate on public and private issues) is on the order of 50 basis points or 0.50 percentage point.*”³ Hays, Joehnk and Melicher conducted an empirical study of the difference in rates between public and private debt issues and found that the yield to maturity on private placements was 0.46% higher than on similar public issues.⁴
- 14 Because both of these citations are about differences in rates of return rather than the quantum of issuance costs, the differences are quite large. Even if issuance costs of private placements were nil, which of course they are not, it would indicate issuance costs for private debt issues of about 0.50%. I note that the studies cited in the preceding paragraph were for larger debt issues than would be appropriate for ULLS and SSS.
- 15 If private placements have such a higher interest rate, why does anyone issue debt that way? The major reasons are that private placements of debt have advantages in the debt contracts that can be used, and they can be done much faster. The debt contracts for public debt are quite standardised and allow almost no ongoing adjustments to the contract. Private placement debt contracts can be very flexible and can be tailored to the specific needs of the issuer and lender.
- 16 In footnote 16 of Telstra’s 2005 Annual Report, about 25% of its long-term debt is in bonds and 75% is in loans. This is consistent with the larger portion of debt pertaining to the PSTN network being private debt. As ULLS and SSS are considerably smaller, it is likely that there would be a higher percent of debt being raised privately.

³ R. Brealey and S. Myers, *Principles of Corporate Finance* (7th ed), 2003, (McGraw-Hill/Irwin: Boston), p 714.

⁴ P. Hays, M. Joehnk and R. Melicher, “Determinants of Risk Premiums in the Public and Private Bond Market,” *Journal of Financial Research*, Fall 1979, pp 143-152.

- 17 Given the evidence cited above on the cost of debt issues and giving regard to the small size of a debt issue of ULLS and SSS, I believe 0.70% is a best estimate for the debt issuance costs.
- 18 I see no reason why the issuance cost would change between the three periods under review. Therefore, I estimate the debt issuance cost for each of the three fiscal years 2005/06, 2006/07 and 2007/08 for ULLS and SSS is 0.70%.

Equity Issuance Costs

- 19 To raise its equity financing, a company will incur substantial costs. In its Final Decision on GasNet,⁵ the ACCC decided GasNet's access arrangement should (page 151) "include an allowance for equity raising costs of 0.224 per cent of regulated equity, to be recovered as an annual non-capital cost cash flow."
- 20 The total direct issuance costs of public equity offerings have been studied for both initial public offerings ("IPO") and secondary offerings ("SEO"). The costs as a percent of the offering proceeds for relevant offering sizes (in US\$ millions) are shown below.⁶

<u>Proceeds</u>	<u>Total Costs - IPO</u>	<u>Total Costs - SEO</u>
\$2 – 10	16.97%	13.76%
\$10 – 20	11.64%	9.01%
\$20 – 40	9.70%	7.07%

- 21 The average total cost percentage across the six categories above is 11.4%.
- 22 One textbook⁷ reports that the average cost of initial public offerings in Australia in 1995 was 2.5% but does not provide support for this estimate and does not indicate the size of offerings being evaluated. Among other things, this does not recognise the underpricing cost.
- 23 It has been extensively documented that the issue price on IPOs is at a discount. Brealey and Myers⁸ refer to underpricing as the hidden cost of share issues. The magnitude of the underpricing in Australia is reported in a recent textbook to average 15.2%.⁹
- 24 The IPO discount is another cost of issuance to investors. However, I have not attempted to factor that cost into my analysis here.
- 25 Certainly a company must have an initial raising of equity. However, it can be argued that the first equity offering is done privately and at lower, but not trivial,

⁵ "Final Decision, GasNet Australia access arrangement revisions for the Principal Transmission System", dated 13 November 2002, pp 143-151.

⁶ I. Lee, S. Lochhead, J. Ritter and Q. Zhao, "The Costs of Raising Capital," *Journal of Financial Research*, Spring 1996, pp 59-74, table 2.

⁷ R. Brealey, S. Myers, G. Partington and D. Robinson, *Principles of Corporate Finance* (Australian ed), 2001, (McGraw-Hill), p 432.

⁸ R. Brealey, and S. Myers, *Principles of Corporate Finance* (7th ed), 2003, (McGraw-Hill/Irwin: Boston), p 420.

⁹ P. Vernimmen, P. Quiry, M. Dalocchio, Y., Le Fur and A. Salvi, *Corporate Finance: Theory and Practice*, 2005, John Wiley & Sons, West Sussex, p 605.

cost than above. Then subsequently there may be an initial public offering. Depending upon the circumstances it may or may not have a subsequent offering. Further, the amount of equity capital raised in the three possible methods is not clear.

- 26 The estimation of WACC for ULLS and SSS is as if they were stand-alone businesses. Therefore, an allowance should be provided that permits ULLS and SSS to recover the costs they would be expected to incur in raising equity if they were separated entities. The quantum of issuance costs as a percent of the total proceeds of the issue can be converted into an equivalent cost of capital rate. The conversion will depend upon the maturity assumed for the equity, as the longer the maturity, the more years there are over which to spread the costs.
- 27 ACCC used a perpetuity assumption in its GasNet decision to estimate the allowance. I believe the equity of any company has an expected life short of perpetual. The quantification of life expectation is problematic. For long-lived infrastructure assets such as a gas pipeline or the PSTN, I believe it is reasonable to assume that the expected equity life approximates the life of the assets.
- 28 The life of the ULLS and SSS assets is only five years. However the life of a business offering ULLS or SSS would be longer. Although a business that is software based is likely to have a shorter expected life than the PSTN, five years seems too short. Given the uncertainty in any such estimate I believe it is reasonable and conservative to estimate the life of the ULLS and SSS businesses at 20 years.¹⁰ I note that the difference in the allocation of the allowance is not dramatic even if a very long life or perpetuity is assumed.
- 29 The allowance could be recovered in two different ways. ACCC decided for GasNet that equity issuance costs would be recovered as an annual non-capital cost cash flow. Alternatively, the costs could be treated as an increment to the cost of equity. My preference is to incorporate the allowance into the cost of equity capital.
- 30 ULLS and SSS are each significantly smaller than GasNet. There are significant economies of scale in raising equity, so the cost as a percent of proceeds in equity raising should be higher than for GasNet.
- 31 If the 11.4% issuance costs as a percent of proceeds is recovered over 20 years, the annual allowance would be about 1.7%. However, at least some equity would be raised privately at lower cost. Being conservative, I estimate that the annual allowance for equity raising costs for ULLS and SSS should be at least 0.3% of equity value, and this will apply across the three fiscal years 2005/06, 2006/07 and 2007/08.

¹⁰ Recent research by Dechow, Sloan and Soliman ("Implied Equity Duration: A New Measure of Equity Risk," *Review of Accounting Studies* 9, 2004, pp 197-228) supports a duration for equity of 15.1 years. They also show that equity duration is positively associated with return volatility and equity beta.