The Cost of Money

This edition of Management Wire is the second in a two-part series discussing the sources and costs of capital financing typically used by government-owned water and sewer agencies.

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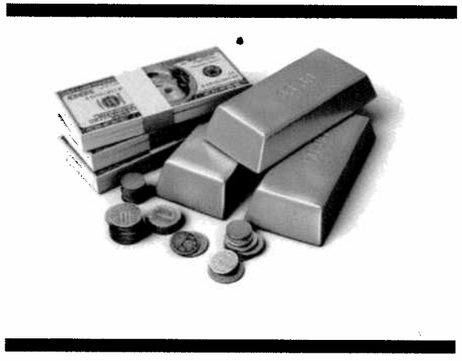
I was recently surprised upon reading a report by Fitch Ratings, one of the premier municipal credit rating agencies in the US that summarized, among other things, the national trends in capital financing for municipal water and sewer agencies. In a survey that Fitch had conducted and published in a 2004 report, I noted with keen interest that the median capital structure – the percentage of the assets funded with debt as opposed to equity - as reported by the survey respondents was 38 percent debt, and 62 percent equity. This was surprising because, like many people I suspect, I expected to see that government utilities were employing a much higher level of debt than what Fitch reported. But it just wasn't true. For the highest rated credits, those with AAA credit ratings (based on Fitch's credit rating system), the median amount of debt as a percentage of the capital structure was only 29 percent!

By now, I am guessing, you are probably wondering what about the Fitch survey was worth being surprised about? After all, who cares if our utility uses 100 percent debt, or 100 percent equity or any combination in between so long as the funding needs are met and we can build the infrastructure that is necessary?

In Part I of this two-part series of Management Wire (see *Rumbles*, July 2006) we coined a catch phrase: "It takes money to buy money." Also in Part I, we discussed just how much debt can cost, and what factors might contribute to that debt costing more or less than initially thought. Regardless, I think it is obvious to anyone that debt comes with a cost. For utilities, that cost comes down to a series of principal and interest payments that, along with all of the utility's other costs, must be recovered in the revenues earned from providing service to customers (i.e. rates).

But what does equity cost? Unlike debt, equity doesn't come with repayment schedules and it's not a liability on the balance sheet. Equity does have a cost though, and that cost is quantifiable. With equity, the question is: "How much do I (the one providing the equity) need to receive in order to compensate me for the risk of losing that equity?" It may help at this point to imagine equity as the purchase of stock in a company. You give your money to your broker and you receive a share of stock in ABC Company – the amount you expect to earn from that investment above and beyond the amount you paid for the stock is what the equity costs the ABC Company.



ABC Company needs to return that amount, or eventually its stock price will fall and the market value of ABC Company will suffer as a result. Imagine that ABC Company is Enron in October 2001, how much would you want in exchange for giving Enron the use of your money knowing then what you probably know now (you probably wouldn't make such an investment at all unless you were a compulsive gambler or insane)? Now imagine that ABC Company is The Sure and True Water and Sewer Authority of Wholesome County, USA. The point is that risk is what drives the cost of equity. With Enron the cost of equity would be quite high if not impossibly high; in the latter example we would expect the cost of equity to be lower for a whole bunch of reasons.

The cost of equity for water and sewer utilities is, by industry-based estimates, about 5 to 6 percent as of the writing of this edition of Management Wire (by comparison, the average expected return on an investment in the S&P 500 index would be about 12 percent). That's the cost of equity for about the largest utility you could imagine (few if any of these actually exist in the municipal world); the cost of equity for smaller utilities is, based on empirical evidence, higher (expect to add up to 6-10 percentage points for most). This is the amount that should be returned to equity to compensate for risk. But where and how exactly does that payment take place?

In an investor-owned utility, there is a term called "return on rate base" and it is meant to compensate owners for the use of their capital – both equity and debt. The return on rate base is factored into and allowed by the regulatory authorities as part of the costs that in turn make up the approved rates. In other words, for an investor-owned utility, the cost of equity is explicitly recovered in the rates where it is then available for redistribution to owners in the form of dividends. Publicly-owned utilities don't pay dividends, and the cost of equity for those entities is, in most cases, ignored. But what about the Fitch report? Fitch says that municipal utilities are, on the median, using 62 percent equity in funding their capital needs.

Maybe the results of the Fitch survey should not have been that surprising after all. It turns out that in the vernacular of "less is more" it is in this case true that "nothing is everything." Since the cost of equity is ignored as a component of municipal utility rates, the return is transferred to customers by way of lower rates instead of dividends. Since nothing is added to the rate to compensate for the cost of equity, everything related to the return to equity is left in the ratepayers' pockets. At least that's how it would work out in the long-term, and I think it helps explain why the majority of utilities in the US, or at least the majority of respondents to the Fitch survey, preferred equity over debt. It helps explain some other things too, but those will have to wait for future editions of Management Wire. ❖