

REGULATORY FINANCE: UTILITIES' COST OF CAPITAL

Roger A. Morin, PhD

**in collaboration with
Lisa Todd Hillman**

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common equity to obtain the final cost of equity financing.¹ This incremental return is referred to as the "flotation cost allowance," and is the sum total of direct flotation expenses, market pressure, and market break.

To demonstrate the need for adjusting the market-determined return on equity for flotation costs, consider the following simple example. Shareholders invest \$100 of capital on which they expect to earn a return of 10%, or \$10, but the company nets \$95 because of issuance costs. It is obvious that the company will have to earn more than 10% on its net book investment (rate base) of \$95 to provide investors with a \$10 return on the money actually invested. To provide the same earnings of \$10 on a reduced capital base of \$95 clearly requires a return higher than the shareholder expected return of 10%, namely $\$10/\$95 = 10.53\%$. This is because only the net proceeds from an equity issue are used to add to the rate base on which the investor earns.

6.2 Magnitude of Flotation Costs

The flotation cost allowance requires an estimated adjustment to the return on equity of approximately 5% to 10%, depending on the size and risk of the issue. A more precise figure can be obtained by surveying empirical studies on utility security offerings.

According to empirical studies by Borum and Malley (1986) and Logue and Jarrow (1978), underwriting costs and expenses average 4% - 5.5% of gross proceeds for utility stock offerings in the U.S. Eckbo and Masulis (1987) found an average flotation cost of 4.175% for utility common stock offerings, and found that flotation costs increased progressively for smaller size issues.

As far as the market pressure effect is concerned, empirical studies clearly show that the market pressure effect is real, tangible, and measurable. Appendix 6-A describes one method of measuring the market pressure effect. Logue and Jarrow (1978) found that the absolute magnitude of the relative price decline due to market pressure was less than 1.5%. Bowyer and Yawitz (1980) examined 278 public utility stock issues and found an average market pressure of 0.72%. In a classic and monumental study published in the *Journal of Financial Economics*, which reviewed the aggregate empirical evidence on market pressure from several studies, Smith (1986) found a market pressure effect of 3.14% for industrial stock

¹ An alternate way of stating this requirement is that the utility's stock must be maintained at some minimum market-to-book ratio in such a way that the proceeds from new stock issues will not decline below book value per share.

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