

Corporate Finance

A Focused Approach

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**Corporate Finance: A Focused Approach,
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9.3 Cost of Preferred Stock, r_{ps}

A number of firms, including NCC, use preferred stock as part of their permanent financing mix. Preferred dividends are not tax deductible. Therefore, the company bears their full cost, and *no tax adjustment is used when calculating the cost of preferred stock*. Note too that while some preferred stocks are issued without a stated maturity date, today most have a sinking fund that effectively limits their life. Finally, although it is not mandatory that preferred dividends be paid, firms generally have every intention of doing so, because otherwise (1) they cannot pay dividends on their common stock, (2) they will find it difficult to raise additional funds in the capital markets, and (3) in some cases preferred stockholders can take control of the firm.

The component cost of preferred stock, r_{ps} , is the cost used in weighted average cost of capital calculation. For preferred stock with a stated maturity date, we use the same approach as in the previous section for the cost of debt, keeping in mind that a firm has no tax saving with preferred stock. For preferred stock without a stated maturity date, r_{ps} is

$$\text{Component cost of preferred stock} = r_{ps} = \frac{D_{ps}}{P_{ps}(1 - F)}$$

where D_{ps} is the preferred dividend, P_{ps} is the preferred stock price, and F is flotation cost as a percentage of proceeds.

To illustrate the calculation, assume that NCC has preferred stock that pays a \$10 dividend per share and sells for \$100 per share. If NCC issued new shares of preferred, it would incur an underwriting (or flotation) cost of 2.5%, or \$2.50 per share, so it would net \$97.50 per share. Therefore, NCC's cost of preferred stock is 10.3%:

$$r_{ps} = \$10/\$97.50 = 10.3\%$$

If we had not incorporated flotation costs, we would have incorrectly estimated $r_{ps} = \$10/\$100 = 10.0\%$, which is too big a difference to ignore. Therefore, analysts usually include flotation costs when estimating the cost of preferred stock.

Does the component cost of preferred stock include or exclude flotation costs? Explain.

Why is no tax adjustment made to the cost of preferred stock?

A company's preferred stock currently trades at \$50 per share and pays a \$3 annual dividend per share. Flotation costs are equal to 3% of the proceeds. If the company issues preferred stock, what is cost of the newly issued preferred stock? (6.19%)

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9.4 Cost of Common Stock, r_s

Companies can raise common equity in two ways: (1) directly, by issuing new shares, and (2) indirectly, by reinvesting, or retaining, earnings. If new shares are issued, what rate of return must the company earn to satisfy the new stockholders? In Chapter 6, we saw that investors require a return of r_s . However, a company must earn more than r_s on new external equity to provide this rate of return to investors because there are flotation costs when a firm issues new equity.

Few mature firms issue new shares of common stock through public offerings.⁷ In fact, less than 2% of all new corporate funds come from the external public equity market. There are three reasons for this:

1. Flotation costs can be quite high, as we show later in this chapter.
2. Investors perceive issuing equity as a negative signal about the true value of the company's stock. Investors believe that managers have superior knowledge about companies' future prospects, and that managers are most likely to issue new stock when they think the current stock price is higher than the true value. Therefore, if a mature company announces plans to issue additional shares, this typically causes its stock price to decline.
3. An increase in the supply of stock will put pressure on the stock's price, forcing the company to sell the new stock at a lower price than existed before the new issue was announced.

Therefore, we assume that the companies in the following examples do not plan to issue new shares.⁸ We will address the impact of flotation costs on the cost of equity later in the chapter.

Does new equity capital raised indirectly by retaining earnings have a cost? The answer is a resounding yes. If some earnings are retained, then stockholders will incur an opportunity cost—the earnings could have been paid out as dividends (or used to repurchase stock), in which case stockholders could then have reinvested the money in other investments. *Thus, the firm should earn on its reinvested earnings at least as much as its stockholders themselves could earn on alternative investments of equivalent risk.*

What rate of return can stockholders expect to earn on equivalent-risk investments? The answer is r_s , because they expect to earn that return by simply buying the stock of the firm in question or that of a similar firm. *Therefore, r_s is the cost of common equity raised internally by reinvesting earnings.* If a company cannot earn at least r_s on reinvested earnings, then it should pass those earnings on to its stockholders and let them invest the money themselves in assets that do provide r_s .

Whereas debt and preferred stock are contractual obligations that have easily determined costs, it is more difficult to estimate r_s . However, we can employ the principles described in Chapters 6 and 7 to produce reasonably good cost of equity estimates. Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) method, and (3) the bond-yield-plus-risk-premium approach. These methods are not mutually exclusive. When faced with the task of estimating a company's cost of equity, we generally use all three methods and then choose among them on the basis of our confidence in the input data available for the specific case at hand.

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What are the two sources of equity capital?

Why do most established firms not issue additional shares of common equity?

Explain why there is a cost to using reinvested earnings; that is, why aren't reinvested earnings a free source of capital?

⁷A few companies issue new shares through new-stock dividend reinvestment plans, which we discuss in Chapter 15. Also, quite a few companies sell stock to their employees, and companies occasionally issue stock to finance huge projects or mergers.

⁸There are times when companies should issue stock in spite of these problems; hence we discuss stock issues and the cost of equity later in the chapter.