

The book cover features a dark, marbled pattern with swirling, organic shapes in shades of grey and black. A central white rectangular box with a thin black border contains the title and authors' names. The text is centered within this box. The spine of the book is visible on the left side, showing some wear and the binding structure.

FINANCIAL MANAGEMENT

THEORY AND PRACTICE

SEVENTH EDITION

EUGENE F. BRIGHAM
LOUIS C. GAPENSKI

by interest payments; preferred stockholders are compensated by fixed dividend payments; and the firm's remaining income belongs to its common stockholders and serves to "pay the rent" on stockholders' capital. Management may either pay out earnings in the form of dividends or retain earnings for reinvestment in the business. If part of the earnings is retained, an *opportunity cost* is incurred: Stockholders could have received those earnings as dividends and then invested that money in stocks, bonds, real estate, and so on. *Thus, the firm should earn on its retained 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 other investments of equivalent risk? The answer is k_s , because they can earn that return simply by buying the stock of the firm in question or that of a similar firm. Therefore, if our firm cannot invest retained earnings and earn at least k_s , then it should pay those earnings to its stockholders so that they can invest the money themselves in assets that do provide a return of k_s .

Whereas debt and preferred stocks are contractual obligations which have easily determined costs, it is not at all easy to estimate k_s . However, three methods can be used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) model, and (3) the bond-yield-plus-risk-premium approach. These methods should not be regarded as mutually exclusive—no one dominates the others, and all are subject to error when used in practice. Therefore, 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 data used for each in the specific case at hand.

SELF-TEST QUESTIONS

What are the two types of common equity whose costs must be estimated? Explain why there is a cost for retained earnings.

THE CAPM APPROACH

As we saw in Chapter 5, the Capital Asset Pricing Model is based on some unrealistic assumptions, and it cannot be empirically verified. Still, because of its logical appeal, the CAPM is often used in the cost of capital estimation process.

Under the CAPM we assume that the cost of equity is equal to the risk-free rate plus a risk premium that is based on the stock's beta coefficient and the market risk premium as set forth in the Security Market Line (SML) equation:

$$\begin{aligned} k_s &= \text{Risk-free rate} + \text{Risk premium} \\ &= k_{RF} + (k_M - k_{RF})b_i \end{aligned}$$

Given estimates of (1) the risk-free rate, k_{RF} , (2) the firm's beta, b_i , and (3) the required rate of return on the market, k_M , we can estimate the required rate of