

Chapter 10
The Cost of Capital and the Capital Structure Decision

Answers to Review Questions

10.1 To find out whether or not a planned level of leverage is likely to be acceptable to investors, the managers of a business could look at the levels of leverage in similar businesses operating within the same industry. If the business adopts a much higher level of leverage than these businesses, there may be problems in raising long-term funds. The managers could also discuss the proposed level of leverage with prospective investors such as banks and financial institutions to see whether they regard the level of leverage as acceptable.

10.2 The lender may consider the following factors:

- The security for the loan
- The performance record of the business
- Likely future prospects of the business and the industry
- The existing level of leverage for the business
- Likely times interest earned ratio for the loan
- The purpose of the loan
- The expected level of return compared with other investment opportunities of the same level of risk
- Restrictive loan covenants in place from existing lenders.

10.3 It would not be appropriate to use the specific cost of raising capital for an investment project as the appropriate discount rate. Such an approach could result in bizarre decisions being made. Projects with an identical return may be treated differently according to the particular cost of raising funds for each project. It is better to view the individual elements of capital as entering a pool of funds and thereby losing their separate identity. The cost of capital used for investment decisions will represent the average cost of the pool of funds. It should also be remembered that individual elements of capital are interrelated. It would not be possible, for example, to raise debt unless the business had a reasonable level of common share equity. To treat each source of capital as being quite separate is therefore incorrect.
10.4  (a) The traditional approach requires that financial managers should try to establish the mix of debt/share financing that will minimize the overall cost of capital. At this point, the business will be said to have achieved an *optimal capital structure*. By minimizing the overall cost of capital in this way, the value of the business will be maximized.

(b) The MM (excluding tax effects) approach says that the financing decision is not really important. As the overall cost of capital remains constant, a business does not have an optimal capital structure as suggested by the traditionalists. This means that one particular capital structure is no better or worse than any other and so managers should not spend time evaluating different forms of financing the business. Instead, they should concentrate their efforts on evaluating and managing the investments of the business.

(c) The MM (including tax effects) approach recognizes that the tax shield on debt benefits the common shareholders and the higher the level of interest payments, the greater the benefits. The implications of this approach are that there is an optimal capital structure (and in that sense it is similar to the traditional approach), and that the optimal structure is a leverage ratio of 100%.

10.5 From lowest to highest cost of capital, the ranking is: debt; preferred shares; common shares.

Debt has the least expensive cost of capital because of the tax-deductibility of interest payments. Preferred shares are more expensive than debt because the dividends paid on preferred shares are not tax-deductible. Common shares are the most expensive component of cost of capital because of the higher required rate of return demanded for the risk of owning common shares by investors, who fully participate in the earnings of the company, as opposed to preferred shareholders whose returns are limited to the stated preferred share dividend.