Module 1: Corporate Finance and the Role of Venture Capital Financing
Financing Principles

TABLE OF CONTENTS

1.0 Financing Principles

1.01 Introduction to Financing Principles

The following principles are useful as a general approach to financing business and/or capital projects:

- a business should be **properly capitalized**;
- the capital structure of a business should have an **appropriate mix of debt and equity**;
- the type of **financing should be matched with the type of asset** being financed. (Generally, current assets should be financed with short term financing and permanent assets should be financed with long term debt and equity.)

Previous Contents Next

1.02 Capitalization of a Business

The probability of success in a business is greatly enhanced when the business is properly capitalized. This means that the business has sufficient funds to operate efficiently and it is able to meet both its short-term and long-term financial obligations.

Operating efficiently might mean being of sufficient size to realize economies of scale or it might mean being able to make necessary capital investments in plant/equipment/technology to be competitive.

A firm must be able to meet its short-term (e.g. payroll and payments to suppliers) and long-term (e.g. loan and mortgage payments) financial obligations; otherwise it could be forced into bankruptcy.

The determination of how much capital a firm needs is a matter of doing a cash flow projection based on the critical assumptions of the business plan.

1.03 Capital Structure

Many businesses employ a combination of **debt** (borrowed money) and **equity** (shareholder's investment) to finance their long-term capital requirements. The optimal mix of debt and equity depends on the nature of the business and the industry in which it competes.

In general, a firm in a stable industry with relatively stable profits and cash flow has greater borrowing capacity than a firm in an unstable industry with volatile profits and cash flow.

The issue of the optimal mix of debt and equity is addressed in the following section on the **theory of optimal capital structure**.

1.04 The Theory of Optimal Capital Structure

The Theory of Optimal Capital Structure states that the value of a firm increases as its debt:equity ratio (i.e. long-term debt divided by shareholder's equity) increases, to a certain point known as the optimal debt:equity ratio, beyond which the value of the firm decreases.

The value of the firm increases as the debt:equity ratio increases up to the optimal capital structure because the cost of debt capital is less than the cost of equity capital.

The value of the firm decreases as the debt:equity ratio exceeds the optimal capital structure because of an increased risk of bankruptcy due to an excessive debt load. In other words, the firm's debt servicing obligations (principal and interest payments) may be excessive relative to its cash flow.
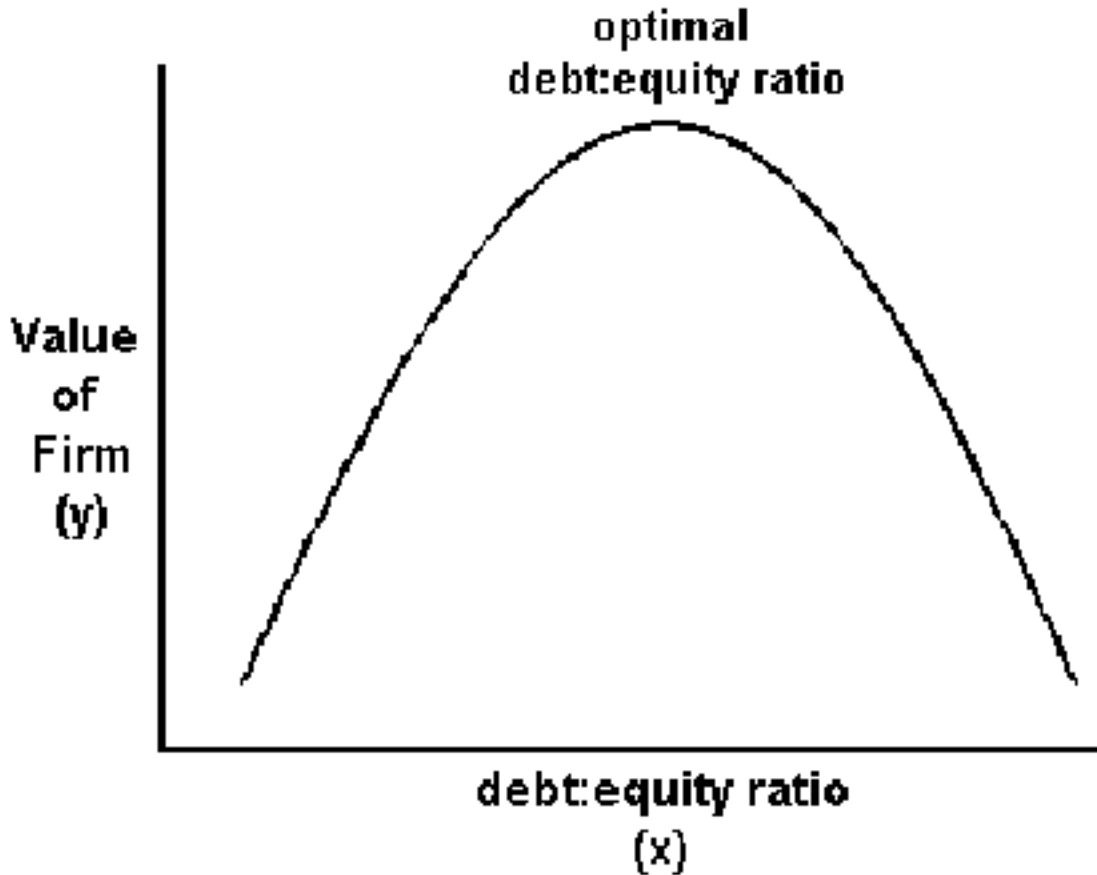
1.05 Cost of Debt Capital

Debt capital is less costly than equity capital for two primary reasons:

1. interest rates paid to lenders (i.e. the cost of debt capital) are generally lower that the rate of return sought by equity investors (i.e. the cost of equity capital) because lenders are exposed to less risk than investors. Typically, lenders are protected by a legal contract (e.g. loan agreement, debenture, mortgage), which specify regular payments of principal and interest. Furthermore, the debt is usually secured by the assets being financed and possibly other types of security. Investors, however, are not contractually entitled to re-payment of their investment and their investment is typically unsecured.

2. interest paid on borrowed money is a tax-deductible expense of the business. Dividends paid to shareholders are not tax deductible. Hence, the effective cost of debt capital is the after-tax cost calculated by the formula:

kd = (interest rate (i)) x (1 minus corporate tax rate (T))

kd = (i) x (1 - T)

Example
What is the after tax cost of debt on a long term loan bearing interest at 7% compounded annually if the effective corporate tax rate of the firm is 20%?   **kd = (i) x (1 - T)**   **kd = (0.07) x (1 - 0.2)**   **kd = 0.056 = 5.6 %**

1.06 Cost of Equity Capital

The cost of equity capital is the rate of return that a shareholder expects on the capital invested to acquire shares of a company. The investor's return can be received in the form of dividends (dividend yield) and/or appreciation in the value of the shares owned (capital gain).

Note: Many companies do not pay dividends to shareholders, in which case the entire return has to be derived from capital gain.

Example
If you bought 1000 common shares of a company for $10 each, held them for one year, received a dividend of $1.00 per share, and then sold the shares for $13 each, your rate of return would be as follows: **Dividend yield = $1.00/$10 = 10%** **Capital gain = ($13 - $10)/$10 = 30%** Therefore, the total return on this investment was 40%.

The rate of return to the shareholder is also the cost of equity capital of the firm that was the beneficiary of the shareholder's investment.

Previous Contents Next

1.07 Capital Asset Pricing Model (CAPM)

Another widely used method for determining a firm's cost of equity capital is the Capital Asset Pricing Model. This method takes into account, the rate of return on risk-free securities, unsystematic firm-specific risk and systematic market-related risk.

1.08 Weighted Average Cost of Capital (WACC)

The weighted average cost of capital of a firm is the average of the after-tax cost of debt and the cost of equity weighted by their respective proportions in an optimal capital structure.

Example
If the after-tax cost of debt is 6% and the cost of equity is 18%, the weighted average cost of capital for a firm with an optimal capital structure of 40% debt and 60% equity is: **WACC = 0.4(6) + 0.6(18)**   **= 2.4 + 10.8 = 13.2%**

The WACC is also sometimes referred to as the hurdle rate or discount rate or minimum acceptable rate of return (MARR).