

Quadrant II – Transcript and Related Materials

Programme: Bachelor of Commerce

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Paper Title: (DSE 5) Financial Management II

Unit: Unit II- Cost of Capital & Its Measurement

Module Name: Cost of Debt & Preference Capital

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Notes

I. COST OF DEBT

The cost of funds raised through debt in the form of debentures or loan from financial institutions can be determined is called as Cost of Debt. the cost of debt is the rate of interest payable on debt. To apply the formula of cost of debt, we need data regarding

1. Net cash proceeds/ inflows (the issue price of debentures / amount of loan minus all floatation costs) from specific source of debt and
2. The net cash outflows in terms of the amount of periodic interest payment and repayment of principal in instalments or in lump sum on maturity. The interest payment made by the firm on debt issues qualify for tax deduction in determining net taxable income.

Therefore, the effective cash outflows is less than the actual payment of interest made by the firm to the debt holders by the amount of tax shield on interest payment. Debt is the cheapest source of long-term funds from the point of view of the company. It is the safest form of investment from the point of view of the creditors because they are the first claimants on the company's assets at the time of its liquidation. Likewise, they are the first to be paid interest before any dividend is paid to the preference and equity shareholders and even if the company suffers a loss. Therefore, the suppliers required rate of return on debt instruments is lower as compared to other financial instruments and hence, lower cost of debt to the firm. The debt can be either perpetual/irredeemable or redeemable.

1. Cost of Perpetual/ Irredeemable Debt

the measurement of the cost of perpetual debt is conceptually relatively easy. It is the rate of return which the lender expects. The debt carries a certain rate of interest. The coupon interest rate or the market yield on debt can be said to represent an approximation of the cost of debt. The nominal/ coupon rate of interest on debt is the before tax cost of debt. Since the effective cost of debt is the tax adjusted rate of interest, the before tax cost of debt should be adjusted for the tax effect. Finally, the bonds and debentures (debt) can be issued at

1. Par

2. Premium
3. Discount

Formula- Before Tax

$$K_d = \frac{I}{NP}$$

Where,

K_d = Cost of Debt

I = Interest

NP = Net Proceeds after adjusting for premium or discount, at the time of issue of Debt.

Formula - After Tax

$$K_d = \frac{I}{NP} (1-t)$$

Where,

K_d = Cost of Debt

I = Interest

NP = Net Proceeds after adjusting for premium or discount, at the time of issue of Debt.

t = tax rate

2. Cost of Redeemable Debt

Usually, the debt is issued to be redeemed after a certain period during the life time of a firm. Such a debt is known as redeemable debt.

Formula - Before Tax

$$K_d = \frac{I + \frac{(RV - NP)}{n}}{\frac{RV + NP}{2}}$$

Where,

K_d = Cost of Debt

I = Interest

NP = Net Proceeds after adjusting for premium or discount, at the time of issue of Debt.

RV = Redeemable Value

n = number of years after which debt will be redeemed.

Formula - After Tax

$$K_d = \frac{I(1-t) + \frac{(RV - NP)}{n}}{\frac{RV + NP}{2}}$$

Where,

K_d = Cost of Debt

I = Interest

NP = Net Proceeds after adjusting for premium or discount, at the time of issue of Debt.

RV = Redeemable Value

n = number of years after which debt will be redeemed.

t = tax rate

II. Cost of Preference Share Capital

The computation of the cost of preference shares is conceptually difficult as compared to the cost of debt. There is no obligation to payment dividend on preference shares every year. But the rate of dividend is fixed. Preference share holders have a preferential right as regards payment of dividend as well as return of principal, as compared to ordinary shareholders. Until dividend is paid to them the company will not be able to pay anything to the ordinary shareholders. But, unlike debt, there is no risk of legal bankruptcy if the firm does not pay the dividends due to them. Nevertheless, firms can be expected to pay the stipulated dividend, if there are sufficient profits.

Preference shares are usually cumulative which means that preference dividend will get accumulated till it is paid. As long as it remains in arrears, nothing can be paid to the equity shareholders. The cost of preference share capital is the dividend expected by the preference shareholders. However, the dividend is not tax deductible because preference dividend is not a charge on earnings or an item of expenditure. It is an appropriation of earnings. They are paid out of the after tax earnings of the company. Therefore, no adjustments is required for taxes while computing the cost of preference share capital. There are 2 types of preference shares:

1. Irredeemable and
2. Redeemable.

The first category is a kind of perpetual security in that the principal is not to be returned for a long time or is likely to be available till the life of the company. The redeemable preference shares are issued with a maturity date so that the principal will be repaid at some future date.

Preference shares can be issued at par, premium or discount.

1. Cost of Irredeemable Preference Capital

Formula

$$K_p = \frac{D}{NP}$$

Where,

K_p = Cost of Preference capital

D= Dividend

NP= Net Proceeds after adjusting for premium or discount, at the time of issue of Preference shares

2. Cost of Redeemable Preference Capital

Formula

$$K_p = \frac{D + \frac{(MV - NP)}{n}}{\frac{MV + NP}{2}}$$

Where,

K_p = Cost of Redeemable Preference Shares

D= Dividend

NP= Net Proceeds after adjusting for premium or discount, at the time of issue.

MV = Maturity Value

n = number of years after which Preference Capital will be redeemed.