LONG TERM FINANCING

Definition:

Required amount of fund collected by a business enterprise for meeting up fund requirement for acquiring important useable items from which there is long term benefit expectation. To make investment for earning expected return over long period of time from different available sources for more than 7/10/15 years' time period is known as long term financing.

Examples of long-term financing include – a 30 year mortgage or a 10-year Treasury note. Equity is another form of long-term financing, such as when a company issues stock to raise capital for a new project.

Features of long term financing:

- **Longer maturity**
- **Larger size of loan-** Normally Larger size
- **Users of loan-** Large Companies
- **Use of fund in capital machineries**
- **Sources-** Equity, Debt, Preferred Stock
- **Repayment method-** Depends on type of security.
- **Security**
- **Cost of financing-** Higher than short and intermediate term financing

Purpose of Long Term Finance:

1. To finance fixed assets.
2. To finance the permanent part of working capital.
3. Expansion of companies.
4. Increasing facilities.
5. Construction projects on a big scale.
6. Provide capital for funding the operations. This helps in adjusting the cash flow.

Sources:

(a) Internal sources- promoter's initial capital, retained earnings, general reserve, dividend equalization fund, sinking fund, workmen's compensation and welfare fund.

(b) External sources- common share capital, preferred share capital, bond/debenture, commercial bank loan, loans from nonbank financial institutions, loans from specialized financial institutions and leasing.

Sources of Long Term Financing (details):

Following are the various sources of long term finance are as follows –

Common stock:

The stock that's holder has ownership claim, management participation right, voting right and residual claim in the distribution of income and liquidation value is known as common stock.

Bond:

A debt instrument issued for a period of more than 5/10 years with the purpose of raising capital by borrowing.

Preferred stock:

The stock that's holder has not ownership claim, management participation right, voting right but has preferential claim in the distribution of income and liquidation value before common stockholders is known as preferred stock.

Debentures:

These are also issued to the general public. The holders of debentures are the creditors of the company.

Retained Earnings:

The company may not distribute the whole of its profits among its shareholders. It may retain a part of the profits and utilize it as capital.

Term Loans from Banks:

Many industrial development banks, cooperative banks and commercial banks grant medium term loans for a period of 7/10 years.

Loan from Financial Institutions:

There are many specialized financial institutions established by the government which give long term loans at reasonable rates of interest.

Common Stock:

Common stock is a security that represents ownership in a corporation. Holders of common stock exercise control by electing a board of directors and voting on corporate policy. Common stockholders are on the bottom of the priority ladder for ownership structure; in the event of liquidation, common shareholders have rights to a company's assets only after bondholders, preferred shareholders and other debtholders are paid in full.

Common Shareholders' Six Main Rights

1. Voting Power on Major Issues
2. Ownership in a Portion of the Company
3. The Right to Transfer Ownership
4. Right to get Dividends
5. Opportunity to Inspect Corporate Books and Records
6. The Right to Sue for Wrongful Acts

Bond:

Bond is a financial assets that represent indebtedness of the bond issuer to the holders. The most common types of bonds include municipal bonds and corporate bonds.

The bond is a debt security, under which the issuer owes the holders a debt and (depending on the terms of the bond) is obliged to pay them interest (the coupon) or to repay the principal at a later date, termed the maturity date.

Interest is usually payable at fixed intervals (semiannual, annual, and sometimes monthly). Very often the bond is negotiable, that is, the ownership of the instrument can be transferred in the secondary market. This means that once the transfer agents at the bank medallion stamp the bond, it is highly liquid on the secondary market.

Features:

Bonds usually have the following features-

- **Face value:** it means the value of a bond at maturity. For example, a 10%, 1000, 10-year bond means that the bond offers $1000 at its maturity. Usually bonds have a face value of 1000
- **Maturity date:** it is the date at which the bond matures. As a bond is a long-term debt instrument, its maturity is often 10 years or more. For example, if a 10-year bond is issued at January 1, 2000, then it will mature at January 1, 2010.
- **Coupon rate:** it is the annualized rate of interest paid on bonds. For example, a 5%, 1000 bond means that the bond provides 5% annual interest on its face value of 1000.

Types of Bond:

1. **Treasury bonds:** Treasury bonds are bonds issued by the govt. in a country to acquire funds from people, including individual and organizations. As govt. can always raise taxes to pay bond payments, these bonds have almost zero default risk and as a result, they show excellent liquidity.
2. **Municipal bonds:** these are bonds issued by local municipality. These are quite similar to govt. bonds in nature, and as municipal authority can also make payments by collecting taxes, these bonds also have almost zero default risk.
3. **Corporate bonds:** these are bonds issued by corporations. Although these bonds provide comparatively higher return than govt. or municipal bonds, they also have a higher default risk.
4. **Junk bonds** or high yield bonds are corporate bonds from companies that have a big chance of defaulting. They offer higher interest rates to compensate for the risk.
5. **Investment-grade corporate bonds**
6. **Foreign bonds**
7. **Mortgage-backed bonds**

Difference between Stock and Bond

BASIS FOR COMPARISON	STOCKS	BONDS
MEANING	Stocks are the financial instrument that carries ownership, issued by the company.	Bonds are the debt instrument issued by the companies or govt. to raise capital with a promise to pay back the money after some time along with interest.
ISSUED BY	Companies	Government institutions, companies and financial institutions, etc.
WHAT IS IT?	Equity instrument	Debt instrument
RETURN	Dividend	Interest
IS THE RETURN GUARANTEED?	No	Yes
OWNERS	Stockholders	Bondholders
STATUS OF HOLDERS	Stockholders are the owners of the company.	Bondholders are the lenders to the company.
RISK	High	Comparatively low
ADD ON BENEFITS	The holders get voting rights.	The holders get preference at the time of repayment.

Preferred stock:

A preferred stock is a class of ownership in a corporation that has a higher claim on its assets and earnings than common stock. Preferred shares generally have a dividend that must be paid out before dividends to common shareholders, and **the shares usually do not carry voting rights.**

Preferred Stocks vs. Common Stocks

Feature	Preferred	Common
Ownership of Company	Yes	Yes
Voting Rights	No	Yes
Dividends	Fixed	Varies
Value if Held to Maturity	Full	No maturity

LONG TERM FINANCING

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4. **Sources of Long Term Financing (details)**
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5. **Common Stock:**
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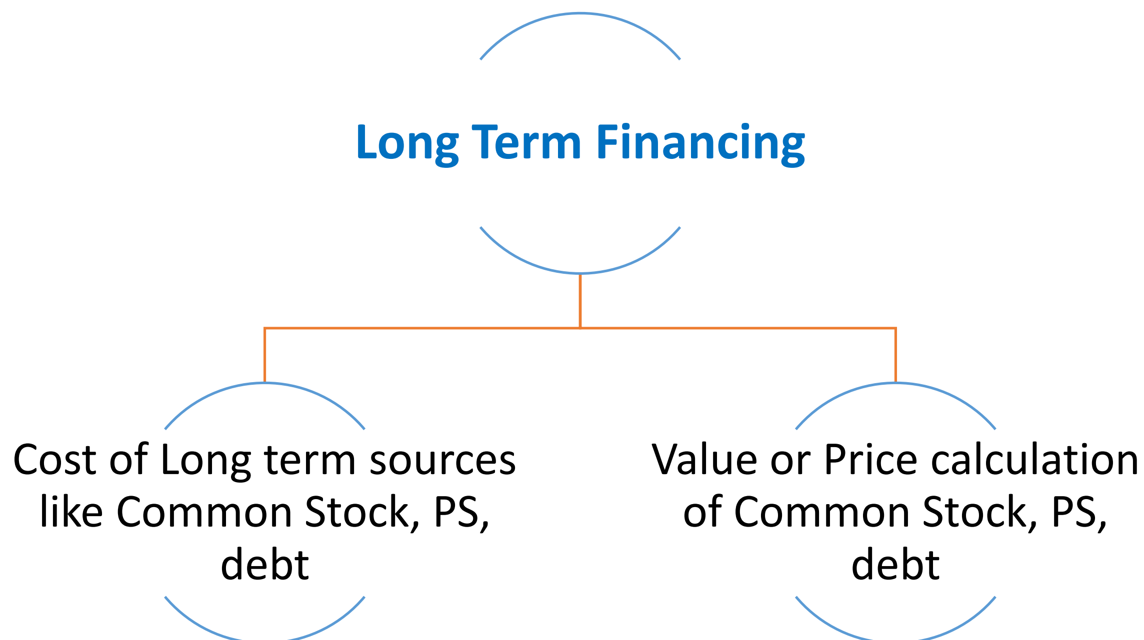
We are going to cover…



COST CALCULATION OF LONG TERM SOURCES LIKE COMMON STOCK, PREFERRED STOCK & DEBT

Some Related Issues

Opportunity Cost: Opportunity costs are cash flows that could be realized from the best alternative use of an owned asset.

Flotation Costs: The total costs of issuing and selling a security. It reduces the net proceeds from the sale. Flotation Costs include two components:

1. Underwriting Costs- Pay to investment bankers.
2. Administrative Costs-Legal, accounting, printing, and other expenses.

***Percentage of Floatation cost will be charged on Face Value if nothing is mentioned.*

Net Proceeds: The net proceeds from the sale of a bond, or any security, are the funds that are actually received from the sale. Net Proceeds mean Net Sale Value (NSV).

Net Proceeds (NSV) = Selling Price (S.P) or Market Price (MP) - Flotation cost (F.C)

Cost calculation of three major sources of long term financing-

Our concern is only with the long-term sources of funds available to a business firm. There are four basic sources of long-term funds for the business firm:

A. **Common Stock**
B. **Preferred Stock**
C. **Debt Capital**

A) The Cost of Common Stock (K_e)

The cost of common stock is the return required on the stock by investors in the market place. The cost of common stock equity, Ke, is the rate at which investors discount the expected dividends of the firm to determine the share value.

Ways of determining the Cost of Common Stock:

1. Capital Asset pricing Model (CAPM) :

The CAPM describes the relationship between the required return, Ke, and the non-diversifiable risk of the firm as measured by the beta coefficient, β. The basic CAPM is --

$$Ke = Rf + (Rm - Rf)\ \beta_j$$

Where,

K_e = Cost of Common Stock Capital

Rf = Risk-free return

Rm = Average Return from market portfolio

β_j = Amount of Risk for a particular company

Example: Mr. Iqbal is interested to buy the shares of Brac Bank. At present the Risk free rate 8%. The rate of return of Market is 12% and if the beta of Brac bank is 0.98 what is the cost equity capital?

B) The Cost of Preferred Stock (K_p)

It gives preferred stockholders the right to receive their stated dividends before any earnings can be distributed to common stockholders. <u>Preferred dividend is not tax deductible like interest of bond.</u>

Cost of Preferred Stock (with specific maturity like for 5 years/ 10 years etc):

$$Kp = \frac{D + (FV - NSV)/N}{(FV - NSV)/2} * 100$$

Where,

Kp = Cost of Preferred stock

D = Dividend per share

FV = Face value Per share

NSV = Selling Price or Market Price (SP/MP) - Flotation Cost

N = No of Years (Maturity Period)

Example: A company's 14% preferred stock of Tk. 1000 par value, currently sold for Tk. 960 per share. The stock is sold for 10 years. Floatation cost is Tk. 10 per share. What is the cost of preferred stock?

C. The cost of debt Capital (K_d)

The debt can be either perpetual/irredeemable or redeemable.

Cost of Debt (with specific maturity like for 5 years/ 10 years etc):

$$Kd = \frac{I + (FV - NSV)/N}{(FV + NSV)/2} *(1-T)*100$$

Where,

Kd = Cost of Bond (Debt Capital)

I = Interest Amount

FV = Face value Per Bond

NSV = Net Sale Value per Bond

N = No of Years (Maturity Period)

Example: A company wants to manage capital by selling debentures of Tk. 1000 at 15 % interest rate, which will be redeemed (sold for) after 10 years.

a) If the debentures are sold at 940 tk and floatation cost is 4o tk

b) If the debentures are sold at 1100tk and floatation cost is 40 tk.

If tax rate for the company is 50%, what is the cost of debt capital?

VALUE OR PRICE CALCULATION OF COMMON STOCK, PREFERRED STOCK AND DEBT

COMMON STOCK

- A company paid 22 taka dividend in last year and the expected dividend growth rate is 10%. If cost of common stock is 16% then what will be the price of common stock in the market?
  - Formula: $Po = \frac{D1}{Ke - G}$
- In one year from now a share of common stock will be a worth of tk 700. During this year, investor will receive 80 tk dividend. If rate of return is 14% then what will be the price of common stock?
  - Formula: $Po = \frac{D1 + P1}{(1+K)^1}$
- Beximco Pharma paid 5 taka dividend in last year and the dividend will expected to grow at 15% for next 2 years and 10% for next 2 years and then 5% forever. If cost of common stock is 12% then what will be the price of common stock in the market?
  - Formula: $Po = \frac{D1}{(1+K)^1} + \frac{D2}{(1+K)^2} + \frac{D3}{(1+K)^3} + \frac{D4+P4}{(1+K)^4}$

PREFERRED STOCK

1. A firms wants to sell 100 tk preferred stock for 5 years and will provide 15 tk Fixed dividend per year for next 5 years. If cost of preferred stock is 12% then what should be the price of preferred stock?

    - Formula: $\text{Po} = \frac{\text{D1}}{(1+\text{K})^1} + \frac{\text{D2}}{(1+\text{K})^2} + \frac{\text{D3}}{(1+\text{K})^3} + \frac{\text{D4}}{(1+\text{K})^4} + \frac{\text{D5+P5}}{(1+\text{K})^5}$

DEBT (BOND OR DEBENTURE)

1. Eastern Housing Ltd has a 1000 TK par value debenture with 15% coupon rate of interest. The debenture has 5 years remaining to its maturity date. If require rate of return is 16% then what is the value of debenture.

    i. Formula: $\text{Po} = \frac{\text{I1}}{(1+\text{K})^1} + \frac{\text{I2}}{(1+\text{K})^2} + \frac{\text{I3}}{(1+\text{K})^3} + \frac{\text{I4}}{(1+\text{K})^4} + \frac{\text{I5+FV}}{(1+\text{K})^5}$

More Examples of Valuation:

- ACI paid 7.5 taka dividend in 2017 and the dividend will expected to grow at 10% for next 2 years and 15% for next 3 years and then 8% forever. If cost of common stock is 18% then what will be the price of common stock in the market?
- BRAC Bank sold 100 tk preferred stock for 5 years in 2016 and company planned to provide 14% Fixed dividend per year for next 5 years. If cost of preferred stock is 12% then what should be the price of preferred stock?
- IBBL has a 1000 TK par value bond with 12% coupon rate of interest. The bond has 5 years remaining to its maturity date. If require rate of return is 11% then what is the value of bond?
- Following information for a bond-
    a. Face value 3000 TK
    b. Coupon rate 10%
    c. Discounting rate 12% (Cost of debt)
    d. Maturity 5 years

    What will be the price of bond?