

# **Valuation of Securities- Debentures, Preference Shares, and Equity Shares**

Valuation of securities is important to decide on the portfolio of an investor. All investment decisions are to be made on a scientific analysis of the right price of a share. Hence, an understanding of the valuation of securities is essential. Investors should buy underpriced shares and sell overpriced shares. Share pricing is thus an important aspect of trading.

Financial Instruments Valuation includes determining the Fair Value of equity instruments, debt instruments, derivatives (option and future contracts) and embedded derivatives (convertible bonds / preference shares). Financial Instruments may require valuation for commercial, financial reporting or regulatory purposes.

We provide Valuation services for valuation of various Financial Instruments, including the following:

1. Bonds/ Debentures
2. Preference shares
3. Equity shares

## **1. Bonds/ Debenture Valuation**

A bond is an instrument of debt issued by a business house or a government unit. The bonds may be issued at par, premium or discount. The par value is the amount stated on the face of the bond. It states the amount the firm borrows and promises to repay at the time of maturity.

The bonds carry a fixed rate of interest payable at fixed intervals of time. The interest is calculated by multiplying the value of bonds with the rate of interest.

Bond valuation is, generally, called debt valuation because the features that distinguish bonds from other debts are primarily non-financial in nature. Since bonds have a promised payment stream, they are less risky as compared to the shares. But it does not mean that they are totally risk free.

Therefore, the required rate of return on a firm's bond will exceed the risk free interest rate but will be less than the required rate of return on shares. The differences in required rates of return among bonds of different companies are caused by differences in 'default risk'. The value of the bond depends upon the discount rate. It will decrease with every increase in the discount rate.

## 2. Valuation of Preference Shares

Preferred shares have the qualities of stocks and bonds, which makes their valuation a little different than that of common shares. The owners of preferred shares are part owners of the company in proportion to the held stocks, just like common shareholders.

If preferred stocks have a fixed dividend, then we can calculate the value by discounting each of these payments to the present day. This fixed dividend is not guaranteed in common shares. If you take these payments and calculate the sum of the present values into perpetuity, you will find the value of the stock.

For example, if ABC Company pays a 25-cent dividend every month and the required rate of return is 6% per year, then the expected value of the stock, using the dividend discount approach, would be \$50. The discount rate was divided by 12 to get 0.005, but you could also use the yearly dividend of \$3 (0.25 x 12) and divide it by the yearly discount rate of 0.06 to get \$50. In other words, you need to discount each dividend payment that's issued in the future back to the present, then add each value together.

$$V = \frac{D_1}{1+r} + \frac{D_2}{(1+r)^2} + \frac{D_3}{(1+r)^3} + \dots + \frac{D_n}{(1+r)^n}$$

Where:

V = the value

D1 = the dividend next period

r = the required rate of return

### **3. Valuation of Equity Shares**

Equity valuation methods can be broadly classified into balance sheet methods, discounted cash flow methods, and relative valuation methods. Balance sheet methods comprise of book value, liquidation value, and replacement value methods. Discounted cash flow methods include dividend discount models and free cash flow models. Lastly, relative valuation methods are a price to earnings ratios, price to book value ratios, price to sales ratios etc

#### **Methods of Valuation of Shares**

##### **1. Asset-Backing Method**

Since the valuation is made on the basis of the assets of the company, it is known as Asset-Basis or Asset- Backing Method. At the same time, the shares are valued on the basis of real internal value of the assets of the company and that is why the method is also termed Intrinsic Value Method or Real Value Basis Method.

**This method may be made either**

- (i) On a going/continuing concern basis; and
- (ii) Break-up value basis.

##### **2. Yield-Basis Method**

Yield is the effective rate of return on investments which is invested by the investors. It is always expressed in terms of percentage. Since the valuation of shares is made on the basis of Yield, it is called Yield-Basis Method. For example, an investor purchases one share of Rs. 100 (face value and paid-up value) at Rs. 150 from a Stock Exchange on which he receives a return (dividend) @ 20%.

**Under Yield-Basis method, valuation of shares is made on;**

- (i) Profit Basis
- (ii) Dividend Basis.

### 3. Fair Value Method

There are some accountants who do not prefer to use Intrinsic Value or Yield Value for ascertaining the correct value of shares. They, however, prescribe the Fair Value Method which is the mean of Intrinsic Value Method and Yield Value Method. The same provides a better indication about the value of shares than the earlier two methods.

### 4. Return on Capital Employed Method

Under this method, valuation of share is made on the basis of rate of a return (after tax) on capital employed. Rates of return are taken on the basis of predetermined/expected rates of return which an investor may expect on the investments. After ascertaining this expected earnings, we are to determine the capital sum for such a return.

### 5. Price-Earnings Ratio Method

We know that it is the ratio which relates the market price of the share to earning per equity share.

It is calculated as:

$$\text{Price-Earning Ratio (PE Ratio)} = \frac{\text{Market Price of a Share (MPS)}}{\text{Earning Per Share (EPS)}}$$

Using PE Ratio, we can ascertain the value of share and value of the business with the help of the following :

$$\text{Value per share} = \text{EPS (Earning per share)} \times \frac{P}{E} \text{ Ratio}$$

$$\text{Valuation of business} = (\text{Total) Earnings} \times \frac{P}{E} \text{ Ratio}$$