# NPTEL

## **Course Name: Security Analysis and Portfolio Management**

## Department: VGSOM, IIT Kharagpur

## Instructors: Dr. Chandra Sekhar Mishra & Dr. Jitendra Mahakud

# Session # 11: Valuation of Equity Shares – I

Q.1: List different methods or techniques of valuing equity share.

Ans.: The different methods of valuing an equity share are as below:

- Asset based Measures
  - Book value of Assets less book value of liabilities (based on values as presented in the latest balance sheet of the company)
  - Adjusted book value (valuation of assets and liabilities done on the basis of market value)
  - Liquidation value (with the assumption that the firm will be liquidated, hence the valuation is done more on piece meal basis)
- Valuation Multiples or Relative Valuation Measures
  - Price/ Earnings Multiple
  - Price/ Book value Multiple
  - Price/ Cash flow Multiple
  - Price/ Sales Multiple
- Discounted Cash Flow based Measures
  - Dividend discount model
  - Free cash flow to equity model
- Valuation in case of Mergers and Acquisitions: based on similar types of companies that went through merger/ acquisition.

Q.2.With the help of the following balance sheet of MNOP Limited find the value of equity share as per book value and adjusted book value basis as on 31 March 2010. Figures are in Rs. Crore.

SOURCES OF FUNDS	2009-10	2008-09	APPLICATION OF FUNDS	2009-10	2008-09
Share Capital (Face Value: Rs.10)	151.25	151.25	Gross Block	1,936.02	1,928.02
Reserves Total	1,094.82	1,032.13	Less: Accumulated Depreciation	1209.66	<u>1121.96</u>
Total Shareholders Funds	1,246.07	<u>1,183.38</u>	Net Block	726.36	806.06
Secured Loans	1,044.07	790.2	Capital Work in Progress	1,615.43	1,143.87
Unsecured Loans	20.00	50.00	Investments	27.10	62.21
Total Debt	1,064.07	840.2	Current Assets, Loans & Advances		
Less: Current Liabilities and Provisions			Inventories	103.55	89.69
Current Liabilities	273.06	240.33	Sundry Debtors	137.26	179.06
Provisions	77.12	<u>68.5</u>	Cash and Bank	1.56	3.43
Total Current Liabilities	<u>350.18</u>	<u>308.83</u>	Loans and Advances	<u>49.06</u>	<u>48.09</u>
			Total Current Assets	<u>291.43</u>	320.27
	2,660.32	2,332.41		2,660.32	2,332.41

Ans. Book value of equity as on 31<sup>st</sup> March 2010 (in Rs. Crore) = Total Assets – Total Debt – Total Current Liabilities = 2,660.32 –1,064.07 – 350.18 = 1236.07 Number of equity shares = 15.125 crore

Value per share = Rs.1236.07 Crore / 15.125 crore = Rs.81.72

Q.3: Refer the question # 2 above. If the comparable companies' average Market to Book Value of equity is 1.3, what is the expected market value per share of MNOP? Ans.: Expected value per share = Book value per share x M/B ratio = Rs.81.72 \* 1.3 = Rs.106.24

Q.4: The shares of Ship limited trades at Rs.85. The average P/E multiple and Price/ Sales per share multiple of companies in the same sector are 14 and 1.3 respectively. With the help of the following information suggest if the shares of Ship Limited are under or over valued.

Particulars	Amount
	(Rs. Crore)
Sales	670
Operating Expenses	520
Profit before interest and	150
tax (PBIT)	
Interest	20
Profit before tax	130
Tax @ 40%	52
Profit after tax	78
Equity Share Capital	120
Reserves and Surplus	350

Ans.: Sales per share = Rs.670 crore / 12 crore = Rs.55.83

Price / Sales per share = 85/55.83 = 1.52 times (>1.3)

Earnings per share = Rs.78 crore / 12 crore = Rs.6.50

P/E ratio = 85/6.50 = 13.08 times (<14)

As per price/sales per share criteria, the share is overvalued where as according to P/E multiple, the share is undervalued.