

Chapter Tests of SFM of CA Ashish Lalaji 9825856155

SFM Test of Business Valuation & EVA

Maximum Marks: 30

Time Allowed: 1 hour

All questions are compulsory

Q 1

- (a) An analyst intends to value an IT company in terms of the future cash generating capacity. He has projected following after-tax cash flows:

(millions of rupees)

| Year | 1 | 2 | 3 | 4 | 5 |
|--------------|------|------|------|------|------|
| EBITDA | 266 | 75 | 105 | 151 | 210 |
| Depreciation | 66 | 15 | 15 | 11 | 10 |
| Interest | 17.1 | 17.1 | 17.1 | 17.1 | 17.1 |

It is further estimated that beyond the 5th year, cash flows will perpetuate at a constant growth rate of 7% p.a. mainly on account of inflation. The perpetual cash flow is estimated to be Rs.968 million at the end of 5th year. Tax rate is 50%.

- i. What is the value of the company based on expected future cash flows? You may assume cost of capital to be 20% and CFAT of each year to be FCF.
- ii. The company has outstanding 5 % debt of Rs.342 million and cash / bank balance of Rs.256 million. Calculate value of one equity share, if number of equity shares is 15.15 million.
- iii. The company has received takeover bid of Rs.190 per share. Is it a good offer?

(9 Marks)

- (b) Constant Engineering Ltd. has developed a high-tech product which has reduced the Carbon emission from the burning of the fossil fuel. The product is in high demand. The product has been patented and has a market value of Rs. 100 Crore, which is not recorded in the books. The Net Worth (NW) of Constant Engineering Ltd. is Rs.200 Crore. Long term debt is Rs. 400 Crore. The product generates a revenue of Rs. 84 Crore. The rate on 365 days Government bond is 10 percent per annum. Bond portfolio generates a return of 12 percent per annum. The stock of the company moves in tandem with the market. Calculate Economic Value added of the company.

(5 Marks)

Q 2

- (a) AB Ltd., is planning to acquire and absorb the running business of XY Ltd. The valuation is to be based on the recommendation of merchant bankers and the consideration is to be discharged in the form of equity shares to be issued by AB Ltd. As on 31.3.2006, the paid-up capital of AB Ltd. consists of 80 lakhs shares of Rs. 10 each. The highest and the lowest market quotation during the last 6 months were Rs. 570 and Rs. 430. For the purpose of the exchange, the price per share is to be reckoned as the average of the highest and lowest market price during the last 6 months ended on 31.3.06.

XY Ltd.'s Balance Sheet as at 31.3.2006 is summarised below:

| | Rs. in lakhs |
|---|--------------|
| Sources | |
| Share Capital | |
| 20 lakhs equity shares of Rs.10 each fully paid | 200 |
| 10 lakhs equity shares of Rs.10 each, Rs.5 paid | 50 |
| Loans | 100 |
| Total | 350 |
| Uses | |
| Fixed Assets (Net) | 150 |
| Net Current Assets | 200 |
| Total | 350 |

An independent firm of merchant bankers engaged for the negotiation, have produced the following estimates of cash flows from the business of XY Ltd.:

| Year ended | | Rs. in lakhs |
|-------------------------|---|--------------|
| 31.3.07 | By way of after-tax earnings for equity | 105 |
| 31.3.08 | Do | 120 |
| 31.3.09 | Do | 125 |
| 31.3.10 | Do | 120 |
| 31.3.11 | Do | 100 |
| Terminal Value estimate | | 200 |

It is the recommendation of the merchant banker that business of XY Ltd. be valued on the basis of the average of (i) Aggregate of discounted cash flows at 8% and (ii) Net assets value. PVF at 8% for years

1-5: 0.93 0.86 0.79 0.74 0.68

You are required to:

- (i) Calculate total value of business of XY Ltd.
- (ii) Number of shares to be issued by AB Ltd.; and
- (iii) Basis of allocation of shares amongst the shareholders of XY Ltd.

(9 Marks)

- (b)** Delta Ltd.'s current financial year's income statement reports its net income as Rs. 15,00,000. Delta's marginal tax rate is 40% and its interest expense for the year was Rs. 15,00,000. The company has Rs. 1,00,00,000 of invested capital, of which 60% is debt. In addition, Delta Ltd. tries to maintain a Weighted Average Cost of Capital (WACC) of 12.6%.

- (i) Compute the operating income or EBIT earned by Delta Ltd. in the current year.
- (ii) What is Delta Ltd.'s Economic Value Added (EVA) for the current year?
- (iii) Delta Ltd. has 2,50,000 equity shares outstanding. According to the EVA you computed in (ii), how much can Delta pay in dividend per share before the value of the company would start to decrease? If Delta does not pay any dividends, what would you expect to happen to the value of the company?

(7 Marks)