Chapter Tests of SFM of
CA Ashish Lalaji
9825856155

Solution of Test of Business Valuation & EVA

Q 1
(a)
(i) **Determination of Value of Firm as per FCFF Approach:**

(millions of rupees)

Year	EBITDA	Depreciation	PBT	Taxes @ 50%	PAT	CFAT / FCFF	PVF (20%)	PV
1	266	66	200	100	100	166	.833	138.28
2	75	15	60	30	30	45	.694	31.23
3	105	15	90	45	45	60	.579	34.74
4	151	11	140	70	70	81	.482	39.04
5	210	10	200	100	100	110	.402	44.22
								287.51
5	Continuing Value					7,967.38	.402	3,202.89
							Value of Firm (as a whole)	3,490.40

Continuing Value at end of 5th year = FCFF (at end of 6th year) / ko – g
= 968 (1.07) / 20 % - 7% = Rs.7,967.38 million

(ii) **Computation of value per share:**

Particulars	Amount (Rs. in millions)
Value of Firm (as a whole)	3,490.40
Add: Cash and Bank	256.00
	3,746.40
Less: Outstanding Debt	342.00
Value of Firm (for equity shareholders)	3,404.40
No. of equity shares	15.15
Value per share	224.71

(iii) True worth of the share of company is Rs.224.71. Takeover bid of Rs.190 per share is lower than the real value of the share. It is not a good offer.

Q 2
(a)
(i) **Valuation of XY based on cash flows:**

Year	FCFE	PVF (8%)	PV
2006-07	105	.93	97.65
2007-08	120	.86	103.20
2008-09	125	.79	98.75
2009-10	120	.74	88.80
2010-11	300	.68	204.00
			592.40

Valuation of XY based on Net Assets:

Value of XY = Total Assets – Loans
= 350 – 100
= Rs.250 lakhs

Average value = 592.4 + 250 / 2 = Rs.421.20 lakhs

(ii) MPS for deciding no. of shares to be issued = 570 + 430 / 2
= Rs.500

New shares to be issued by AB Ltd. = 421.20 lakhs / 500
= 84,240 shares

(iii) Determination of Equivalent no. of shares in terms of face value of Rs.10 fully paid-up:

Rs.10 fully paid-up	20,00,000
Rs.10, Rs.5 paid-up (10,00,000 X 5/10)	5,00,000
	25,00,000

Basis of allocation of shares to shareholders of XY –

Rs.10 fully paid-up (84,240 X 20/25)	67,392
Rs.10, Rs.5 paid-up (84,240 X 5/25)	16,848
	84,240

(b)

(i) Determination of Operating Income i.e. EBIT:

$$EBIT = \frac{PAT}{1 - t} + Interest$$

$$= \frac{15}{1 - 0.4} + 15$$

$$= \text{Rs.40 lakhs}$$

(ii) OPAT = EBIT – Taxes = 40 – 40% = Rs.24 lakhs

(iii) EVA is also interpreted as maximum dividend that can be paid before value of the firm starts declining.

$$\text{Dividend per Share} = \frac{EVA}{\text{No. of shares}} = \frac{11.4}{2.5} = Rs.4.56$$

If Delta Ltd. does not pay dividend, one can expect value of firm to increase because it is producing positive EVA.

Solution prepared by CA. Ashish Lalaji

Instagram: https://www.instagram.com/ashishlalaji/
Facebook: https://www.facebook.com/ashish.lalaji.3/
e-mail: ashishlalaji@rediffmail.com
YouTube: Scan: