

CONCEPT OF LEVERAGE

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QUESTION 1: The balance sheet of Alpha Numeric Company is given below:

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Equity capital ( Rs. 10 per share	90000	Fixed Assets	225000
Retained earnings	30000		
10% debt	120000		
Current Liabilities	60000	Current Assets	75000
Total	=SUM(C6:C9)	Total	=SUM(F6:F9)

The company's total assets are 225,000. The company's total liabilities are 180,000. The company's total equity is 120,000. You are required to: Calculate the different type of leverages for the company and EPS.

SOLUTION

			INCOME STATEMENT		
			PARTICULARS	AMOUNT	
Total asset turnover ratio (Given)	sales/ total assets	3	Sales	=C17	900000
			Less: Variable cost	=C19*G17	450000
			Contribution	=G17-G18	450000
			Less: Fixed cost	=C18	150000
			EBIT	=G19-G20	300000
			Less: Interest	=C8*C21	12000
			EBT	=G21-G22	288000
			Less: Tax	=G23*C20	144000
			EAT	=G23-G24	144000
OPERATING LEVERAGE	CONTRIBUTION/EBIT	=G19/G21	1.5	EPS	Earnings available to equity shareholders/No. of equity shares
FINANCIAL LEVERAGE	EBIT/EBT	=G21/G23	1.0416666666666666	EPS	=G25/C22 16
COMBINED LEVERAGE	CONTRIBUTION/EBT	=G19/G23	1.5625	=F26*F27	1.5625

QUESTION 2

The following data is available for XYZ Ltd.

Particulars	Amount (Rs.)
Sales	200000
Variable Cost (30%)	60000
Contribution	140000
Fixed Cost	100000
EBIT	40000
Interest	5000
EBT	35000

Find Out:

(i) By what percentage will the EPS increases if EBIT increases by 6%

(ii) By what percentage will EBIT increase if there is 10% increase in sales

(iii) By what percentage will EPS increase if the sale increase by 8%

SOLUTION

OPERATING LEVERAGE	CONTRIBUTION/EBIT	%change in operating profit/%change in sales	=B38/B40	3.5
FINANCIAL LEVERAGE	EBIT/EBT	%change in EPS/ %change in EBIT	=B40/B42	1.14285714285
COMBINED LEVERAGE	CONTRIBUTION/EBT	%change in EPS/ %change in sales	=B38/B42	4

CALCULATION OF CHANGES				
EBIT increase by 0.06	EPS increase will be	%change in EBIT*DFL	=H50*B56	0.06857142857
Sales increase by 0.1	EBIT increase will be	%change in sales*DOL	=H49*B57	0.35
Sales increase by 0.08	EPS increase will be	%change in sales*DCL	=H52*B58	0.32

QUESTION 3:

From the following information available for 4 firms, calculate the EBIT, the EPS, the Operating leverage and the Financial leverage:

PARTICULARS	FIRM P	FIRM Q	FIRM R	FIRM S
Sales (in units)	20000	25000	30000	40000
S.P. per unit (in Rs.)	15	20	25	30
Variable cost per unit (in Rs.)	10	15	20	25
Fixed Cost (in Rs.)	15000	40000	50000	60000
Interest (in Rs.)	30000	25000	35000	40000
Tax (%)	30	30	30	30
Number of equity shares	5000	9000	10000	12000

SOLUTION      Try it yourself