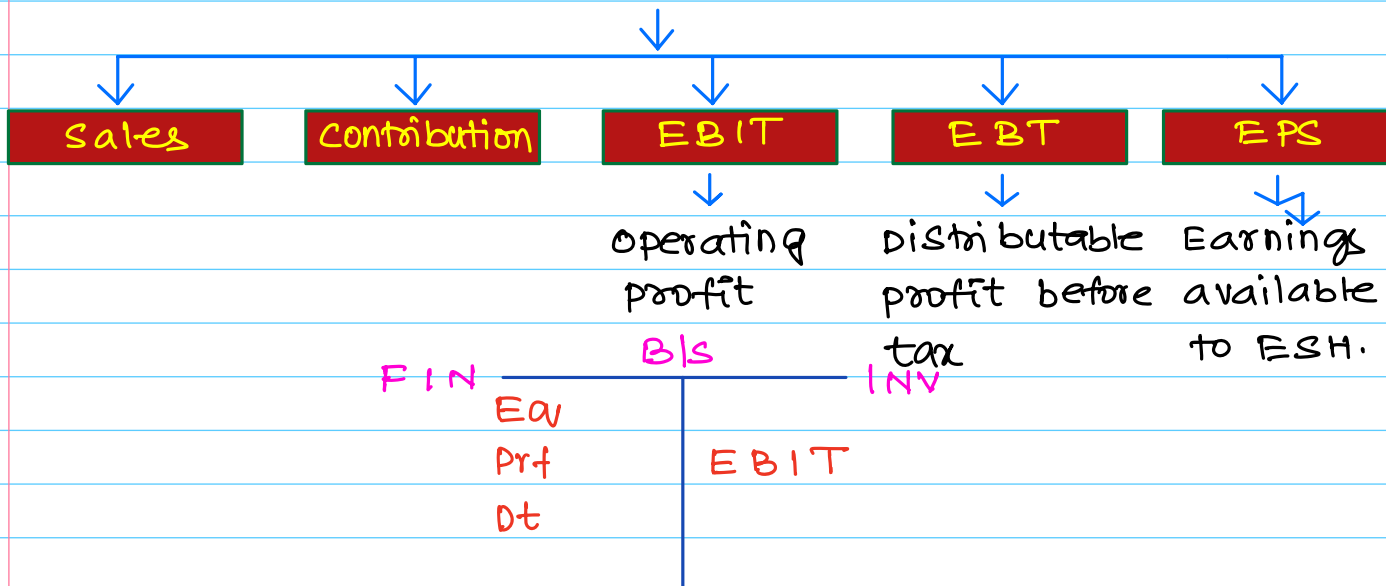


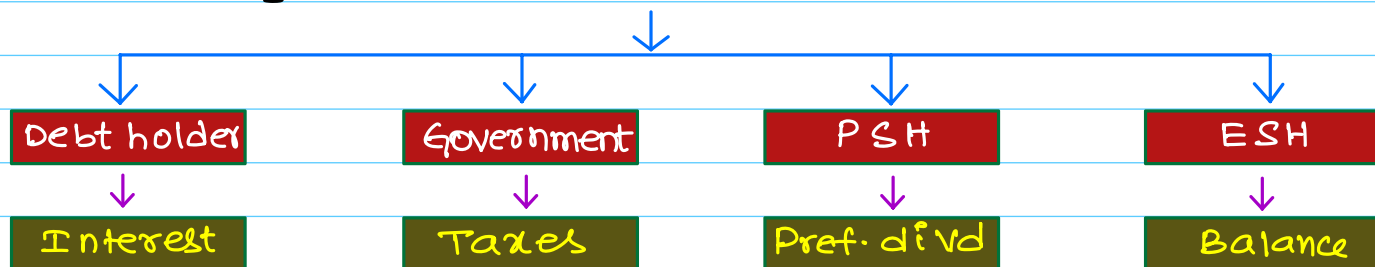
# EBIT - EPS ANALYSIS

## Introduction

- \* A company has to make 2 important decisions w.r.t wealth maximisation, they are ———
  - Financing decision (Equity/Debt/combination)
  - Investment decision (Assets - generating CF)
- \* Cash flows generated can be of various types namely ———



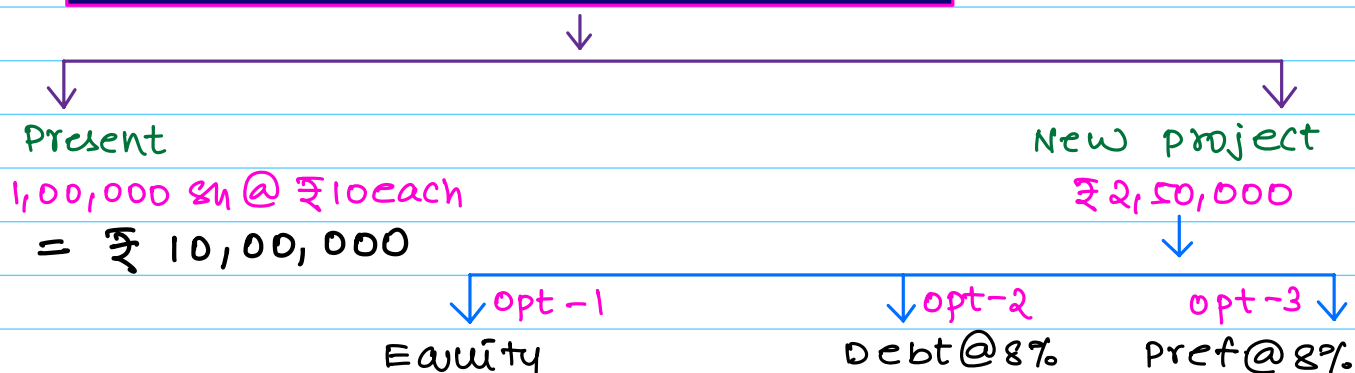
- \* The EBIT generated will belong to 4 persons namely



- \* companies can raise funds from any source but business will be done for the favour of ESH.
- \* But, optimum capital structure will be such a capital structure which gives higher EPS for a given level of EBIT.
- \* If EBIT of a project is very high, it is better to finance the project by debt because same interest shall be paid for increased EBIT.
- \* on the other hand, if EBIT is very low, it is best

to have an all-equity financing because, interest cost may lead to loss.

## 11. Step 1: Understanding the situation.



## Step 2: Calculation of EPS.

Amounts (₹)			
Particulars	Equity	Debt	Preference
EBIT	3,12,500	3,12,500	3,12,500
(-) Interest	—	(20,000)	—
EBT	3,12,500	2,92,500	3,12,500
(-) Tax @ 50%	(1,56,250)	(1,46,250)	(1,56,250)
EAT	1,56,250	1,46,250	1,56,250
(-) Pref. div.	—	—	(20,000)
EAESH	1,56,250	1,46,250	1,36,250
÷ NOS	1,25,000	1,00,000	1,00,000
EPS	1.25	1.46	1.36

## Step 3: Calculation of EPS if EBIT is ₹75,000.

Amounts (₹)			
Particulars	Equity	Debt	Preference
EBIT	75,000	75,000	75,000
(-) Interest	—	(20,000)	—
EBT	75,000	55,000	75,000
(-) Tax @ 50%	(37,500)	(27,500)	(37,500)
EAT	37,500	27,500	37,500
(-) Pref. div.	—	—	(20,000)
EAESH	37,500	27,500	17,500
÷ NOS	1,25,000	1,00,000	1,00,000
EPS	0.30	0.275	0.175

### concept of Indifference point

- \* Indifference point is a EBIT where EPS under any two plans will be same.
  - \* At the IDP, whether it is all equity financed/ debt financed (or) any combination, EPS will be same.
- Note: Students should note that, if a question is given on financing a project with various plans and in which EBIT is not given, it is a question on EBIT - EPS indifference concept.

### concept of financial break-even point

Financial breakeven is a situation where the EPS is exactly '₹0' at a certain level of EBIT. This changes from one plan to another. It is represented by following formula \_\_\_\_\_

$$\frac{FBE P}{I + \frac{PD}{1-t}}$$

I = Interest in ₹ terms  
PD = Preference dividend in ₹ terms  
t = tax rate.

12.

### Step 1: Calculation of no. of new shares to be issued

Particulars	Option 1 Amt (₹)	Option 3
Amount to be raised	₹ 50,00,000	₹ 25,00,000
Issue price	₹ 25	₹ 50
No. of. shares	2,00,000.	50,000.

### Step 2: Calculation of total no. of. shares

Particulars	Option 1 Amt (₹)	Option 3
Existing shares	10,00,000	10,00,000
(+) New issue	2,00,000	50,000
Revised shares	12,00,000	10,50,000

### Step 3: Calculation of interest on debentures

Particulars	Option 2 Amt (₹)	Option 3
Principal	50,00,000	25,00,000
Interest @ 16%	8,00,000	4,00,000

#### Step 4: Calculation of EPS Under all 3 option

Particulars	Amounts (₹)		
	Option - 1 100% equity	Option - 2 100% Debt	Option - 3 50:50
Existing EBIT	60,00,000	60,00,000	60,00,000
(+) Addl EBIT	40,00,000	40,00,000	40,00,000
Total EBIT	1,00,00,000	1,00,00,000	1,00,00,000
(-) Interest	—	(8,00,000)	(4,00,000)
EBT	1,00,00,000	92,00,000	96,00,000
(-) Tax @ 50%	(50,00,000)	(46,00,000)	(48,00,000)
EAT	50,00,000	46,00,000	48,00,000
NOS	12,00,000	10,00,000	10,50,000
EPS	4.167	4.60	4.57

Comment :- Option 2 is recommended since it is giving a higher EPS.

#### 13. Step 1:- Analysing all the 3 alternatives of funding

Particulars	Amounts (₹)		
	Option - 1	Option - 2	Option - 3
Required fund	25,00,000	25,00,000	25,00,000
Debt amount	2,50,000	10,00,000	15,00,000
Equity amount	22,50,000	15,00,000	10,00,000

#### Step 2: mps expected and interest rate in 3 cases

Particulars	Option - 1	Option - 2	Option - 3
Debt amount	2,50,000	10,00,000	15,00,000
Interest rate	10%	10% + 15%	10% + 15% + 20%
Expected mps	₹150	₹150	₹125

#### Step 3: NO. of. shares to be issued.

Particulars	Option - 1	Option - 2	Option - 3
Equity amt	22,50,000	15,00,000	10,00,000
mps	150	150	125
New issue	15,000	10,000	8,000

#### Step 4: calculation of interest cost

	Amt (₹)		
Particulars	option-1	option-2	option-3
Debt amount	2,50,000	10,00,000	15,00,000
Interest cost	25,000 (2,50,000 × 10%)	1,37,500 (2,50,000 × 10%) + (7,50,000 × 15%)	2,37,500 (2,50,000 × 10%) + (7,50,000 × 15%) + (5,00,000 × 20%)

#### Step 5: calculation of EPS

	Amt (₹)		
Particulars	option-1	option-2	option-3
EBIT	5,00,000	5,00,000	5,00,000
(-) Interest	(25,000)	(1,37,500)	(2,37,500)
EBT	4,75,000	3,62,500	2,62,500
(-) Tax @ 50%	(2,37,500)	(1,81,250)	(1,31,250)
EAT	2,37,500	1,81,250	1,31,250
÷ NOS	15,000	10,000	8,000
EPS	₹15.833	₹18.125	₹16.406

Plan II is recommended since EPS is more.