

NOPAT

□ Nopat is equal to:

Ebit (adjusted) - corporate taxes (without debt) =

or more precisely

profit (adjusted) + interest expenditures(1-t)



Nopat: the formulas

Ebit (+)	100
Interest cost (-)	20
PTP (=)	80
Tax rate = 50%	40
Profit	40

<i>Option 1</i>	
Ebit (+)	100
Interest cost (-)	==
Tax rate = 50%	50
Nopat	50

<i>Option 2: Profit + IC(1-t)</i>	
Profit (+)	40
Interest cost (1-t) (+)	10
Nopat	50

<i>Option 3: Ebit (1-t)</i>	
Ebit (+)	100
(1-t) (-)	50%
Nopat	50



Income statement (basic)

Sales (+)	100
Costs of Goods and Services (-)	20
Labour Costs (-)	10
Earnings before Interests, Taxes & D&A - EBITDA (=)	70
Depreciation & Amortization - D&A (-)	20
Interest costs (-)	10
Pre-tax profit PTP (=)	40
Taxes (t=40%)	16
<i>Profit</i>	24



Adjusted Profit

□ In order to estimate the adjusted profit exceptional costs (i.e. integration costs) should be deducted and R&D costs should be amortised according to the amortisation period considered

Profit	40
Integration costs (+)	5
Research costs capitalised	50
n. of years of capitalisation of R&D costs	10 years
Costs to be added and deducted	+50 and - 5
<i>Adjusted Profit</i>	90



Nopat

- Nopat is not affected by the firm's capital structure choices

	Unlevered firm	levered firm (1)	levered firm (2)
Invested capital	10,000	10,000	10,000
Equity	10,000	5,000	2,000
Debt	0	5,000	8,000
Sales	16,667	16,667	16,667
Cogs	13,000	13,000	13,000
Depreciation	2,000	2,000	2,000
EBIT	1,667	1,667	1,667
Interests (i=5%)	0	250	400
Pre-tax Profit	1,667	1,417	1,267
Tax (0.4 tax rate)	667	567	507
Net Profit	1,000	850	760
Nopat=NP+Int*(1-t)	1,000	1,000	1,000

