

# REAL CASES OF VALUATION



## Lesson 11

*Corporate Finance*

Castellanza, 28<sup>th</sup> November 2018

# COMPANY'S VALUATION TECHNIQUES

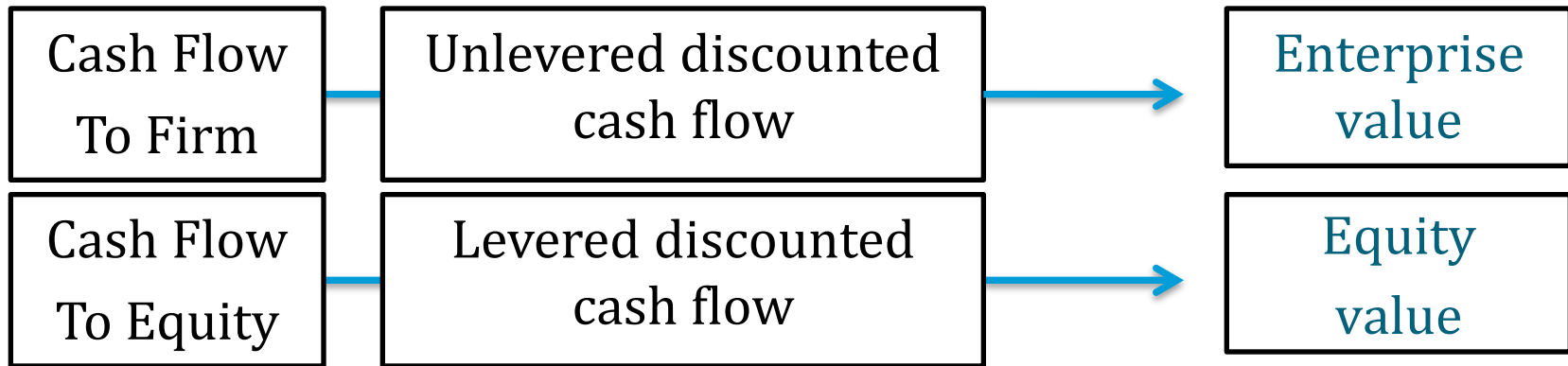
## DIRECT APPROACH

- Adjusted net asset method
- Income method
- Levered discounted cash flow
- Market approach: multiple X net income
- Mixed approach

## INDIRECT APPROACH

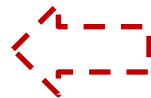
- Unlevered discounted cash flow
- Market approach: multiple X EBIT or EBITDA

# DCF



$$\text{Enterprise value} + / - \text{NFP} = \text{Equity value}$$

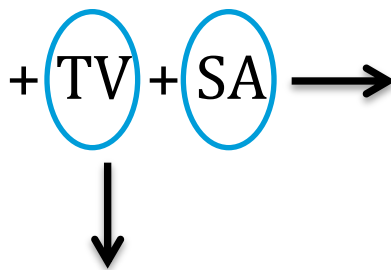
*company's overall debt situation net by cash (liquid assets)*



$$\text{NFP} = - (\text{ST Debt} + \text{LT Debt} - \text{Cash \& Cash Equivalents})$$

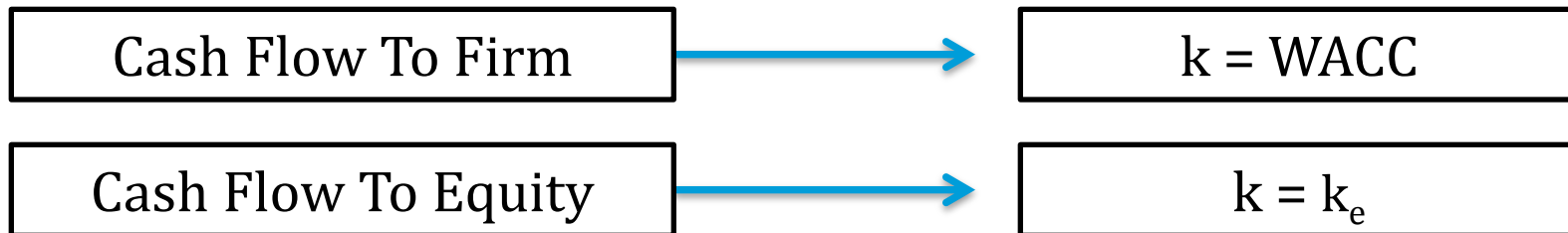
# TERMINAL VALUE

$$W = \sum_{t=1}^n \frac{F_t}{(1+k)^t} + \text{TV} + \text{SA}$$



$$\frac{F_n / (k-g)}{(1+k)^{t+1}}$$

Surplus assets are those assets that are not essential for the operation of the business by a company



## EXERCISE 2 - AT HOME – LESSON 10

- Compute the Equity Value of the firm according to the Unlevered Discounted Cash Flow approach.
- The WACC calculation must be performed on the basis of 2012 figures.

<b>k(e)</b>	7%
<b>k(d)</b>	4%
<b>g</b>	1%

# PROFIT & LOSS

<i>Profit &amp; Loss</i>				
	2012	2013	2014	2015
Revenues	7.294	7.795	8.658	10.694
<b>Ebitda</b>	<b>2.078</b>	<b>2.354</b>	<b>3.049</b>	<b>3.567</b>
Depreciation intangible assets	(30)	(26)	(28)	(30)
Depreciation tangible assets	(1.056)	(1.145)	(1.398)	(1.436)
<b>Ebit</b>	<b>992</b>	<b>1.183</b>	<b>1.623</b>	<b>2.101</b>
Financial expenses	(250)	(230)	(190)	(145)
Extraordinary expenses	0	0	0	0
Taxes	(356)	(408)	(468)	(641)
<b>Net income/ (loss)</b>	<b>386</b>	<b>545</b>	<b>965</b>	<b>1.315</b>

# BALANCE SHEET

<i>Balance Sheet</i>				
<i>Assets</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Intangible assets	119	125	128	130
Tangible assets	1.759	2.045	2.389	2.701
Inventories	1.387	1.508	1.709	1.789
Account receivables	2.985	3.195	3.982	4.108
Other receivables	270	295	295	307
Cash & cash equivalents	351	324	281	222
<b>Total</b>	<b>6.871</b>	<b>7.492</b>	<b>8.784</b>	<b>9.257</b>
<i>Liabilities</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Short term financial debts	1.058	1.126	1.040	841
Long term financial debts	2.431	2.361	2.117	1.541
Account payables	1.041	1.158	1.369	1.387
Other payables	645	661	709	661
ETP fund	570	437	509	532
Equity & reserves	740	1.204	2.075	2.980
Profit	386	545	965	1.315
<b>Total</b>	<b>6.871</b>	<b>7.492</b>	<b>8.784</b>	<b>9.257</b>

# CASH FLOW STATEMENT

Cash Flow Statement	2013	2014	2015
EBIT	1.183	1.623	2.101
Depreciation	1.171	1.426	1.466
Δ ETP Fund + other funds	(133)	72	23
Taxes	(408)	(468)	(641)
Δ Working Capital	(223)	(729)	(248)
<b>Cash Flow from operations</b>	<b>1.590</b>	<b>1.924</b>	<b>2.701</b>
Invest / Capex	(1.463)	(1.773)	(1.780)
<b>Free cash flow</b>	<b>127</b>	<b>151</b>	<b>921</b>



# UNLEVERED DCF

Wacc	$k(e) * (\text{Equity} + \text{Profit}) / (\text{Equity} + \text{Profit} + \text{total Debts}) + k(d) * (\text{total Debts}) / (\text{Equity} + \text{Profit} + \text{total Debts})$
Discounted cash flows to firm	$F_1 / (1+WACC)^1 + F_2 / (1+WACC)^2 + F_3 / (1+WACC)^3$
TV	$(F_3 / (WACC - g)) / (1+WACC)^4$
Ent. Value	discounted flows + TV
NFP	+ cash & cash equivalents - total debts
Eq. value	+ Ent. Value +/- NFP

<b>WACC</b>	<b>4,7%</b>
<b>DCF to firm</b>	<b>1.061,50</b>
<b>TV</b>	<b>20.714,34</b>
<b>Enterprise Value</b>	<b>21.775,84</b>
<b>NFP</b>	<b>(3.138)</b>
<b>Equity Value</b>	<b>18.637,84</b>

## EXERCISE 3

Exercise :

- Compute the Equity Value of the firm according to the Unlevered Discounted Cash Flow approach.
- The WACC calculation must be performed on the basis of 2012 figures.

<b>k(e)</b>	8%
<b>k(d)</b>	4%
<b>g</b>	1%

# PROFIT & LOSS

	2012	2013	2014	2015
Revenues	13.418	14.450	19.868	25.524
<b>Ebitda</b>	<b>1.197</b>	<b>2.105</b>	<b>3.004</b>	<b>4.256</b>
Depreciation tang&int assets	(565)	(608)	(772)	(1.001)
<b>Ebit</b>	<b>632</b>	<b>1.497</b>	<b>2.232</b>	<b>3.255</b>
Financial expenses & income	(570)	(570)	(480)	(264)
Taxes	(124)	(440)	(758)	(1.207)
<b>Net income/ (loss)</b>	<b>(62)</b>	<b>487</b>	<b>994</b>	<b>1.784</b>

# BALANCE SHEET

<i>Balance Sheet</i>				
<i>Assets</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Intangible assets	1.412	1.305	1.321	1.292
Tangible assets	9.874	10.176	10.984	11.621
Financial assets	42	42	42	42
Inventories	8.151	8.635	9.602	11.012
Account receivables	1.507	1.292	1.266	1.274
Other receivables	600	658	768	878
Cash & cash equivalents	123	94	1.993	1.780
<b>Total</b>	<b>21.709</b>	<b>22.202</b>	<b>25.976</b>	<b>27.899</b>
<i>Liabilities</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Short term debts	5.561	6.428	1.240	895
Long term debts	5.875	4.540	3.450	2.657
Account payables	2.202	2.210	2.845	3.460
Other payables	750	1.108	1.420	1.961
ETP fund	572	680	791	912
Equity & reserves	6.811	6.749	15.236	16.230
Profit	(62)	487	994	1.784
<b>Total</b>	<b>21.709</b>	<b>22.202</b>	<b>25.976</b>	<b>27.899</b>

# CASH FLOW STATEMENT

Cash Flow Statement	2013	2014	2015
EBIT	1.497	2.232	3.255
Depreciation	608	772	1.001
Δ ETP Fund + other funds	108	111	121
Taxes	(440)	(758)	(1.207)
Δ Working Capital	39	(104)	(372)
<b>Cash Flow from operations</b>	<b>1.812</b>	<b>2.253</b>	<b>2.798</b>
Invest / Capex	(803)	(1.596)	(1.609)
<b>Free cash flow</b>	<b>1.009</b>	<b>657</b>	<b>1.189</b>

# UNLEVERED DCF

<b>WACC</b>	<b>5,5%</b>
<b>DCF to firm</b>	<b>2.559,25</b>
<b>TV</b>	<b>21.328,46</b>
<b>Enterprise Value</b>	<b>23.887,71</b>
<b>NFP</b>	<b>(11.313)</b>
<b>Equity Value</b>	<b>12.574,71</b>