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REAL CASES OF VALUATION

Lesson 11

Corporate Finance

Castellanza, 28th November 2018

COMPANY'S VALUATION TECHNIQUES

DIRECT APPROACH	INDIRECT APPROACH
• Adjusted net asset method • Income method • Levered discounted cash flow • Market approach: multiple X net income • Mixed approach	• Unlevered discounted cash flow • Market approach: multiple X EBIT or EBITDA

DCF

Cash Flow To Firm	Unlevered discounted cash flow	Enterprise value
Cash Flow To Equity	Levered discounted cash flow	Equity value

Enterprise value +/- NFP = Equity value

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

NFP = - (ST Debt + LT Debt - Cash & Cash Equivalents)

TERMINAL VALUE

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

$SA \rightarrow$ Surplus assets are those assets that are not essential for the operation of the business by a company

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

Cash Flow To Firm	→	$k = WACC$
Cash Flow To Equity	→	$k = k_e$

Exercise 2 - at home – lesson 10

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

k(e)	7%
k(d)	4%
g	1%

Profit & loss

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

BALANCE SHEET

Balance Sheet				
Assets	*2012*	*2013*	*2014*	*2015*
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
Total	**6.871**	**7.492**	**8.784**	**9.257**
Liabilities	*2012*	*2013*	*2014*	*2015*
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
Total	**6.871**	**7.492**	**8.784**	**9.257**

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)
ΔWorkingCapital	(223)	(729)	(248)
Cash Flow from operations	**1.590**	**1.924**	**2.701**
Invest / Capex	(1.463)	(1.773)	(1.780)
Free cash flow	**127**	**151**	**921**

UNLEVERED DCF

Wacc	k(e)*(Equity + Profit)/(Equity + Profit + total Debts) + k(d)*(total Debts)/(Equity + Profit + 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	discouted flows + TV
NFP	+ cash & cash equivalents - total debts
Eq. value	+ Ent. Value +/- NFP

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

EXERCISE 3

Exercise :

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

k(e)	8%
k(d)	4%
g	1%

PROFIT & LOSS

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

BALANCE SHEET

Balance Sheet				
Assets	*2012*	*2013*	*2014*	*2015*
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
Total	**21.709**	**22.202**	**25.976**	**27.899**
Liabilities	*2012*	*2013*	*2014*	*2015*
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
Total	**21.709**	**22.202**	**25.976**	**27.899**

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)
ΔWorkingCapital	39	(104)	(372)
Cash Flow from operations	**1.812**	**2.253**	**2.798**
Invest / Capex	(803)	(1.596)	(1.609)
Free cash flow	**1.009**	**657**	**1.189**

UNLEVERED DCF

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