




Firm Valuation Models ... FCF Approach Continues



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Special Situations: Valuing a New Firm

South Asian Petrochem Limited			
Times Interest Earned	1.76	take default spread as 5.5%, interest cost = 13.6%	
Market Value of Debt	343.45		
Market Value of Equity	190.00		
Cost of Debt	11.22%	8.57% (second phase)	
Cost of Equity (Beta 1.0)	13.65%	13.65% (second phase)	
Cost of Capital	12.09%	11.62% (assume debt of 40% in second phase)	

FCFF Background Computations	2006	2005	2004	
EBIT X (1 - Tax Rate)	47	45	31	
Capital Spending - Depreciation	14	5		
Working Capital	268	177	92	27.3%
Change in Non-Cash Working Capital	91	85		
Yearly FCFF	2007	2007	2008	2009
Two Stage Growth Assumptions		20%	20%	5%
EBIT X (1 - Tax Rate)	47	56	68	55
Less (Capital Spending - Depreciation)		15	16	2
Less Change in Working Capital		13	16	15
FCFF Estimates		28.83	35.52	37.95
Terminal Value			573.24	
Present Value		26	485	
Value of Operating Assets	510			
Less: Debt	343			
Value of Equity	167			
Value of Equity Per Share	8.73			

Special Situations: Valuing a Loss Making Cyclical Firm

■ Cyclical sectors

- Path 1: Adjust the growth rate to reflect the economic cycle
- Path 2: Use normalized earnings as base year earnings

Moser Baer (I) Limited

Sales CAGR	15.9%		
Growth Estimate	16% for 3 years (first phase) and then 7%		
Cost of Equity	9.99%	11.99%	
Average PAT	162	Sales CAGR	
Normalized EPS	14.53		
(Capital Spending - Depreciation)	7.93	12.01	47.48
DE Ratio	45%	45%	43%
working capital/ revenue ratio	51%		

Special Situations: Valuing a Loss Making Cyclical Firm

Moser Baer (I) Limited	2007	2008	2009	2010
Projected Revenue	2009.02	2330.46	2703.33	2892.56
Estimated EPS	16.85	19.55	22.67	24.26
less (Capital Spending - Depreciation) (1-DE)	4.58	2.64	1.53	0.90
less (Change in working capital)(1-DE)	6.97	8.09	9.38	10.96
FCFE	5.30	8.82	11.77	248.44
Present Value	4.82	7.29	8.84	186.65
Intrinsic Value	207.60			

Valuing a new firm in a cyclical industry!

South Asian Petrochem Limited	2006	2005	2004
EBIT X (1 - Tax Rate)	51	36	27
Capital Spending - Depreciation	0		
Change in Working Capital	91	85	

Special Situations ...

Cyclical sectors

- Path 1: Adjust the growth rate to reflect the economic cycle
- Path 2: Use normalized earnings as base year earnings

Average PAT	162			
Normalized EPS	14.53			
(Capital Spending - Depreciation)	7.93	12.01	47.48	
DE Ratio	45%	45%	43%	
working capital/ revenue ratio	51%			
Moser Baer (I) Limited	2007	2008	2009	2010
Projected Revenue	2078.292	2493.9504	2992.74048	3142.3775
Estimated EPS	17.4309927	20.9171913	25.1006295	26.355661
less (Capital Spending - Depreciation) (1-DE)	4.54660375	2.64251583	1.59107696	1.67063081
less change in working capital	15.8420608	19.010473	22.8125676	15.7642806
FCFE	28.7264498	37.2851484	46.3221201	577.847297
Present Value @ 12%	25.6486159	29.723492	32.9711701	411.300292
Intrinsic Value	499.64357			

Attempting to Unlock Value

- Many ways ...
- Say, using simulation (or heuristics)
- For, example based on Financial Leverage
 - You can give it a try on your assignment ...
- Experiment with different DE ratios
- Compute levered beta
- Compute unlevered beta
- Compute the cost of equity at different levels of leverage
- Similarly, compute the cost of debt at different levels of DE ratios
- Combine and compute WACC
- Note, assume marginal tax rates & be realistic ...