

This worksheet is used for illustrating how to do projections and valuation for Maxwell Shoes
(Red bolded cells require your assumptions)

Historical Ratios 1998		Key Assumptions Forecast Horizon					Terminal Years							
		1998	1999	2000	2001	2002	2003	2004	2005	2006				
23.6%	Sales growth	10%	10%	10%	10%	10%	3.5%	3.5%	3.5%	3.5%				
8.1%	Net operating profits after tax/sales	7%	7%	7%	7%	7%	7%	7%	7%	7%				
0.0%	After tax cost of debt	5%												
25.0%	Beg. net operating working capital/sales	20%												
3.9%	Beg. net operating long-term assets/sales	5%												
-5.6%	Net debt at beginning of year/net capital	10%												
105.6%	Shareholders' equity/net capital	90%												
	Terminal growth rate	3.5%												
	Terminal operating profit after tax/sales	7.0%												
	Cost of equity	12%												
	After tax cost of debt	5%												
	WACC	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%	11.3%					
Calculations							Terminal Years							
Year	1997	1998	Unadjusted 1999	Adjustments to B/S	Forecast Horizon 1999	2000	2001	2002	2003	2004	2005	2006	2007	
(in \$ Million)														
Beginning of the Year Balance Sheet														
Beg Net Working Capital		25.3	41.4	51.3	-14.8	36.5	40.1	44.2	48.6	53.4	55.3	57.2	59.2	61.3
Beg Net Long-Term Assets		6.5	6.4	11.0	-1.9	9.1	10.0	11.0	12.1	13.4	13.8	14.3	14.8	15.3
Total Assets		31.8	47.8	62.3	-16.7	45.6	50.2	55.2	60.7	66.8	69.1	71.6	74.1	76.6
Beg. Net Debt(cash and Cash Equivalent/Lease De		-9.8	-2.7	-18.4	23.0	4.6	5.0	5.5	6.1	6.7	6.9	7.2	7.4	7.7
Beg. Shareholders Equity		41.6	50.6	79.3	-38.2	41.1	45.2	49.7	54.7	60.1	62.2	64.4	66.7	69.0
Total Net Capital		31.8	47.9	60.9	-15.3	45.6	50.2	55.2	60.7	66.8	69.1	71.6	74.1	76.6
Income Statement for the Year														
Sales		134.2	165.9			182.5	200.7	220.8	242.9	267.2	276.5	286.2	296.2	306.6
Net operating profits after tax		9.1	13.4			12.8	14.1	15.5	17.0	18.7	19.4	20.0	20.7	21.5
Net interest after tax		0.1	0.0			0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Net Income		9.1	13.4			12.5	13.8	15.2	16.7	18.4	19.0	19.7	20.4	21.1
Operating ROA		28.7%	28.0%			28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
ROE		21.8%	26.5%			30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%
BV of Assets Growth Rate			50%			10%	10%	10%	10%	10%	3.5%	3.5%	3.5%	3.5%
BV of Equity Growth Rate			22%			10%	10%	10%	10%	10%	3.5%	3.5%	3.5%	3.5%
Free Cash Flow to Capital						8.2	9.0	9.9	10.9	16.4	16.9	17.5	18.1	
Free Cash Flow to Equity						8.4	9.3	10.2	11.2	16.3	16.8	17.4	18.0	
Discount factor - capital						0.90	0.81	0.73	0.65	0.59	0.53	0.47	0.42	
Discount factor - equity						0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	
Growth factor						1.00	1.10	1.21	1.33	1.46	1.52			
Estimating Values														
Year					1999	2000	2001	2002	2003	2004	2005	2006	2007	
Abnormal Earnings Method														
Residual operating income					7.6	8.4	9.2	10.1	11.2	11.5	11.9	12.4		
PV of residual operating income					6.8	6.8	6.7	6.6	6.5	6.1	5.6	5.3		
Beg. book value of assets					45.6									
Terminal value of abnormal NOPAT					86.7									
Value of the firm - Abnormal NOPAT					165.7									
Residual income					7.6	8.4	9.2	10.1	11.2	11.5	11.9	12.4		
Present value of residual income					6.8	6.7	6.6	6.4	6.3	5.8	5.4	5.0		
Beg book value of equity					41.1									
Terminal value of abnormal earnings					77.1									
Value of equity - Abnormal Earnings					151.0									
Abnormal Returns Method														
Present value of abnormal Operating ROA					0.15	0.15	0.15	0.14	0.14					
Terminal abnormal Operating ROA					1.90	3.24								
Value to asset multiple					3.63									
Value of the firm - Abnormal OP. ROA					166									
Present value of abnormal ROE					0.17	0.16	0.16	0.16	0.15					
Terminal abnormal ROE					1.88	3.31								
Value of equity multiple					3.68									
Value of equity - Abnormal ROE					151									
Discounted Cash Flow Method														
Present value of FCF to capital					7.4	7.3	7.2	7.1	9.6					
PV of Terminal Value					127.1									
Value of the firm - Free cash flows to Capital					165.7									
Present value of FCF to equity					7.5	7.4	7.3	7.1	9.2					
Present value of Terminal value of equity					112.4									
Value of equity - Free cash flows to Equity					151.0									
Cash flow at the beginning of year 1 resulting from adjustments made to allow the beginning B/S to confirm to your assumptions														
					15.3									
Total Value of the firm					181.0									
Total Value of the equity					166.2									
Copyright: Krishna Palepu, Harvard Business School, 2000														